FINANCIAL STABILITY BOARD

Thematic Review on the Implementation of the FSB Policy Framework for Shadow Banking Entities

Peer Review Report

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Table of Contents

Foreword

Financial Stability Board (FSB) member jurisdictions have committed, under the FSB Charter and in the *FSB Framework for Strengthening Adherence to International Standards,*[1] to undergo periodic peer reviews. To fulfil this responsibility, the FSB has established a regular programme of country and thematic peer reviews of its member jurisdictions.

Thematic reviews focus on the implementation and effectiveness across the FSB membership of international financial standards developed by standard-setting bodies and policies agreed within the FSB in a particular area important for global financial stability. Thematic reviews may also analyse other areas important for global financial stability where international standards or policies do not yet exist. The objectives of the reviews are to encourage consistent cross-country and cross-sector implementation; to evaluate (where possible) the extent to which standards and policies have had their intended results; and to identify gaps and weaknesses in reviewed areas and to make recommendations for potential follow-up (including through the development of new standards) by FSB members.

This report describes the findings of the peer review on the implementation of the FSB Policy Framework for Other Shadow Banking entities, including the key elements of the discussion in the FSB Standing Committee on Standards Implementation (SCSI). It is the twelfth thematic review conducted by the FSB, and it is based on the objectives and guidelines for the conduct of peer reviews set forth in the *Handbook for FSB Peer Reviews*.[2]

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1 See http://www.fsb.org/2010/01/r_100109a/.

2 See http://www.fsb.org/2015/03/handbook-for-fsb-peer-reviews/.

Abbreviations

ABCP	Asset backed commercial paper
ABS	Asset backed securities
AIF	Alternative Investment Funds (EU)
AIFMD	Alternative Investment Fund Managers Directive (EU)
BCBS	Basel Committee on Banking Supervision
CRA	Credit rating agency
CRR/CRDIV	Capital Requirements Regulation and Directive IV (EU)
EF	Economic function
ELTIF	European Long Term Investment Funds
EuSEF	European Social Entrepreneurship Funds
EuVECA	European Venture Capital Funds
EMEs	Emerging market economies
ETF	Exchange traded fund
EU	European Union
FAQs	Frequently Asked Questions
FSB	Financial Stability Board
FSR	Financial Stability Report
GDP	Gross domestic product
HFC	Housing finance company (India)
IOSCO	International Organization of Securities Commissions
MIC	Mortgage Investment Corporation (Canada)
MMF	Money market fund
MoU	Memorandum of Understanding
MUNFI	Monitoring Universe of Non-bank Financial Intermediation
NAV	Net asset value
NBFC	Non-banking financial company (India)
NBFE	Non-bank financial entity (India)
NHA MBS	National Housing Act mortgage-backed securities (Canada)
OFI	Other Financial Intermediary
OTC	Over-the-counter
REIT	Real estate investment trust
RWA	Risk weighted assets
SCSI	Standing Committee on Standards Implementation
SFTs	Securities financing transactions
SME	Small and medium-sized enterprise
SSB	Standard-setting body
SPV	Special Purpose Vehicle
UCITS	Undertakings for Collective Investments in Transferable Securities (EU)
VNAV	Variable net asset value

Executive Summary

Background and objectives

The objective of this peer review is to evaluate the progress made by FSB jurisdictions in implementing the FSB's Policy Framework for the oversight and regulation of shadow banking entities. In particular, the review evaluated jurisdictions' adherence to the overarching principles set out in the Framework, including their efforts to assess these entities based on economic functions (EFs)[3] and participate in the FSB information-sharing exercise.

Main findings

The FSB undertook important steps in 2015 to enhance its assessment of non-bank financial entities and activities that may give rise to potential financial stability risks. For the first time, all FSB jurisdictions participated in the information-sharing exercise as part of their implementation of the Policy Framework. The exercise resulted in the narrowing down of the focus of the analysis – as shown in the FSB's Global Shadow Banking Monitoring Report 2015[4] – to those parts of non-bank credit intermediation where shadow banking risks (i.e. maturity/liquidity transformation, imperfect credit risk transfer and/or leverage) may occur. It was also an opportunity for participating jurisdictions to share information and engage in discussions with their peers about the assessment of shadow banking risks and adoption of policy tools to address them, thereby helping to promote international consistency in approach.

Notwithstanding the progress made, the peer review findings indicate that implementation of the Policy Framework remains at a relatively early stage. More work is needed to ensure that the Framework's application is rigorous enough for jurisdictions to comprehensively assess and respond to potential financial stability risks posed by non-bank financial entities, and to support FSB risk assessments and policy discussions. The rest of the Executive Summary sets out high-level findings, organised according to the four overarching principles of the Policy Framework.

Principle 1: Definition and update of the regulatory perimeter (see recommendations 1A and 1C): There is a broad range of institutional arrangements for the regulation and supervision of non-bank financial entities. Most entities classified under EFs 1, 3 and 5 (mostly investment funds, broker-dealers, and securitisation vehicles respectively) fall within the perimeter of securities regulators. Entities classified under EF1 represent more than 50% of the assets of all entities classified into EFs and have experienced the fastest growth in recent years (in terms of assets under management) compared to entities categorised in the other EFs. This underscores the growing importance that securities regulators play in promoting financial system stability.

In most cases, arrangements for monitoring and assessing the financial stability risks posed by non-bank financial entities form part of broader coordination mechanisms (e.g. financial stability committees), although in some cases jurisdictions have also created inter-agency coordinating bodies or working groups specifically on shadow banking. However, only a few FSB jurisdictions currently have a systematic process involving all relevant domestic

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3 The five EFs in the Policy Framework are: (i) management of collective investment vehicles with features that make them susceptible to runs (EF1); (ii) loan provision that is dependent on short-term funding (EF2); (iii) intermediation of market activities that is dependent on short-term funding or on secured funding of client assets (EF3); (iv) facilitation of credit creation (EF4); and (v) securitisation-based credit intermediation and funding of financial entities (EF5).

4 See http://www.fsb.org/2015/11/global-shadow-banking-monitoring-report-2015/.

authorities to review the regulatory perimeter in order to ensure that it encompasses non-bank financial entities and activities that could pose financial stability risks. In most cases, reviews of the regulatory perimeter appear to be *ad hoc* in nature and undertaken in response to concerns arising about a particular activity or entity type. It is also not clear to what extent existing processes to assess financial stability risks posed by non-bank financial entities involve an assessment of related regulatory gaps or the adequacy of the regulatory framework.

The need for a systematic process becomes even more apparent in light of the common challenges identified by jurisdictions (data gaps, resource constraints, timing issues, cross-border coordination, insufficient mandates) in bringing non-bank financial entities that could pose financial stability risks within the regulatory and supervisory perimeter in a timely manner. Where it does not already exist, there may therefore be merit for jurisdictions to establish such a process, building on guidance provided by standard-setting bodies (SSBs), which would involve: (i) a regular and specific focus on the adequacy of the regulatory perimeter, informed by assessments of financial stability risks; and (ii) the participation of all relevant regulatory authorities (and not just those involved in financial stability analysis), thereby contributing to a coordinated policy response.

Principle 2: Collection of information needed to assess shadow banking risks (see recommendations 1B, 1C and 2D): National authorities generally use data from existing reporting and disclosure arrangements for regulated non-bank financial entities to assess shadow banking risks. Since these arrangements were not usually designed for collecting shadow banking-specific information, the data may not be adequate or granular enough to assess related risks. This is illustrated to some extent by the fact that many jurisdictions did not supply all of the relevant data to calculate a common set of risk metrics for assessing shadow banking risks in the 2015 FSB information-sharing exercise. The identified gaps in some cases may reflect a lack of adequate or granular data needed to respond to that exercise, but may also reflect other factors such as cost-benefit considerations, resource constraints, and challenges to information sharing within and across jurisdictions.

Gaps in the availability of data were particularly pronounced for non-regulated entities, given that authorities' data collection powers often do not extend to such entities. A number of jurisdictions identified areas to improve data availability and granularity, although only a few of them actually reported initiatives to enhance data collection from regulated non-bank financial entities or to expand powers to enable data collection from non-regulated entities.

Institutional constraints were identified in the sharing of information within and across borders in several jurisdictions. On the domestic side, a few jurisdictions and authorities highlighted the challenges of sharing confidential information at an entity level, and initiatives are underway in some jurisdictions to address these challenges. Internationally, it is not clear whether existing mechanisms to share information with overseas counterparts, which were mostly designed for cooperation in enforcement or supervisory matters, are adequate to share information about risks to financial stability from non-bank financial entities.

These findings are supported by the results of the 2015 information-sharing exercise. Some jurisdictions provided only partial submissions, while in a few other cases the responses did not reflect a joint submission representing a coordinated response from all the relevant authorities in that jurisdiction. The constraints in participating in this exercise were reported to be particularly pronounced in the case of authorities that are not members of the FSB. Some of these issues may reflect the early stage of implementation of the Policy Framework, with several jurisdictions participating in the information-sharing exercise for the first time. However, they also suggest that there is scope to improve cooperation and information sharing arrangements domestically and on a cross-border basis.

Jurisdictions also noted difficulties in assessing shadow banking risks arising from non-bank financial entities' interconnectedness with the rest of the domestic financial system and from cross-border activities and exposures. Some estimates of interconnectedness were included in the FSB's Global Shadow Banking Monitoring Report 2015, but the available data did not shed light on credit quality and maturity profiles or related potential credit, liquidity and funding risks. Improved assessments of the risks from interconnectedness will require the availability of more granular data and the development of more robust analytical frameworks. Some jurisdictions also noted that their ability to respond to the risks posed by non-bank financial entities may be complicated by data constraints and limits on their regulatory reach given the cross-border nature of some activities. More work is needed by the FSB, in consultation with relevant SSBs as appropriate, to develop approaches to help jurisdictions better monitor and assess these types of risks.

Principle 3: Public disclosure of information about risks posed by shadow banking entities (see recommendations 1D and 2F): It is unclear whether authorities have adequately evaluated the extent to which existing disclosure requirements for non-bank financial entities enable market participants to assess shadow banking risks posed by these entities on an ongoing and systematic basis. Similarly, while financial stability and other such reports published by central banks and other authorities provide a wide range of information about financial system conditions, it is not clear to what extent such reporting makes a sufficient contribution to enable market participants to fully gauge related shadow banking risks. While most jurisdictions stress the need for continuous monitoring of disclosure requirements and identify room for improvement, only a few of them are planning reviews that could lead to changes in such requirements for non-bank financial entities.

Concerted efforts by jurisdictions are necessary to ensure disclosure requirements are adequate to help market participants better monitor non-bank financial entities, absorb any news or developments in a timely manner and make informed investment decisions, hence reducing the chance of a sudden loss of confidence that may lead to runs. In order to facilitate this process, the FSB, in consultation with relevant SSBs, will promote the sharing of approaches used by jurisdictions to identify and resolve gaps in public disclosures that help market participants assess shadow banking risks.

Principle 4: Assessment of shadow banking risks and adoption of policy tools (see recommendations 1C and 2A-E):

The 2015 information-sharing exercise included classification of non-bank financial entities into EFs and a risk mapping tool to help jurisdictions prioritise risks of these entities.[5] Both of these involved a degree of judgement by authorities to determine where shadow banking risks might arise, highlighting the importance of having a consistent approach to classification so as to make meaningful comparisons and arrive at robust conclusions to inform policy discussions.

[5] Risk mapping sought to capture authorities' assessment of the level of shadow banking risks (leverage, liquidity transformation, maturity transformation, and credit risk transfer) associated with the largest entity types classified in each EF. This assessment was meant to reflect both the data collected for the various risk metrics and expert judgement.

While most jurisdictions classified non-bank financial entities into the five EFs broadly in line with the Policy Framework, there were some differences in approach and inconsistencies in classification. These arose from factors such as: limitations in the availability or granularity of data; the varying nature of non-bank financial entities across jurisdictions; and different interpretations and judgements by jurisdictions on the risks associated with these entities. The 2015 exercise took a conservative approach, including entity types into the narrow measure of shadow banking for all jurisdictions if their activities could give rise to shadow banking risks in at least one jurisdiction. As a result, this measure may currently overestimate the degree to which non-bank credit intermediation gives rise to systemic risks.

Most jurisdictions were able to complete the risk mapping exercise, albeit some of them did so only partially. The challenges faced by jurisdictions in completing the risk mapping may have in part reflected gaps in the data needed to form a basis for assessing risks and the relatively large role played by expert judgement. However, some jurisdictions also flagged perceived conceptual and practical difficulties with using a common set of risk parameters across all entity types within an economic function given differences in business models and activities.

The experience from the 2015 information-sharing exercise illustrates the need for further work by the FSB to resolve material differences of view and thereby promote greater consistency in the classification of non-bank financial entities. The need for transparent, consistent and well-documented classification is particularly important given the expected use of this information in risk assessments and policy discussions by the FSB. The FSB will assist this process by issuing additional implementation guidance that encapsulates agreed enhancements and by supplementing the process of discussion and review among jurisdictions with additional approaches aimed at enhancing consistency in economic classification and risk assessments. Another way to strengthen the exercise would be to expand the sample of participating jurisdictions. This could be done by encouraging additional non-FSB jurisdictions (particularly those with potentially significant non-bank financial sectors or cross-border shadow banking links) to join the exercise in order to obtain a more comprehensive perspective on global shadow banking activities and associated risks, taking due account of confidentiality arrangements among member jurisdictions.

As part of the information-sharing exercise, jurisdictions also shared information about the range of tools available to address shadow banking risks posed by non-bank financial entities. While most of those tools were drawn from the toolkit set out in the Policy Framework, some jurisdictions reported additional tools, including some tools (especially for entities classified under EF 1) that are discretionary in nature.[6] Most jurisdictions reported no planned initiatives to expand or change their policy toolkit. As noted in the Policy Framework, effective implementation could be facilitated by the sharing of information on members' experiences with the development and adoption of policy tools to address shadow banking risks. The FSB, in consultation with relevant SSBs, will support this process to enable jurisdictions to discuss how policy tools not found in the Framework could be considered for addressing shadow banking risks, with a view to enhancing the policy toolkit in the Framework.

[6] Discretionary tools are those whose deployment lies at the discretion of the entities themselves, although regulatory authorisation may also be required or the regulator can also exercise them (e.g. suspension of redemptions) in some cases.

Recommendations

Based on the above findings, there are two sets of recommendations: the first is addressed to FSB member jurisdictions, while the second involves actions to be carried out by the FSB itself.

1. Full implementation of the Policy Framework by FSB jurisdictions

Jurisdictions should undertake the following actions to implement fully the Policy Framework:

1A. Establish a systematic process involving all relevant domestic authorities to assess the shadow banking risks posed by non-bank financial entities or activities, and ensure that any entities or activities that could pose material risks to financial stability are brought within the regulatory perimeter in a timely manner.

1B. Address identified gaps in the availability of data, including by having sufficient information-collection powers, to assess financial stability risks posed by non-bank financial entities or activities, taking into account the potential materiality of those risks.

1C. Remove impediments to cooperation and information-sharing between authorities, including on a cross-border basis, in order to:

- monitor and assess shadow banking risks arising from non-bank financial entities or activities;
- support the application of appropriate policy tools where necessary to mitigate financial stability risks; and
- participate effectively in the FSB information-sharing exercise

1D. Review the extent to which existing public disclosures by non-bank financial entities are adequate to help market participants understand the shadow banking risks posed by such entities, and enhance those disclosures as necessary to address identified material gaps.

The FSB will continue to monitor jurisdictions' implementation of the Policy Framework, including with respect to the above recommendations. This monitoring will take place through the annual information-sharing exercise, potentially complemented by a follow-up peer review in 3-5 years' time.

2. Additional FSB actions to facilitate effective implementation of the Policy Framework

In order to enhance effective implementation of the Policy Framework, including of the information-sharing exercise, the FSB will:

2A. Starting with the 2016 information-sharing exercise, prepare additional implementation guidance setting out agreed methodological enhancements to definitions, the approach to economic classification (including on the scope and terminology used to describe the entities and activities meant to be captured), the risk mapping approach, and the reporting of policy tools.

2B. Starting with the 2016 information-sharing exercise, strengthen the process of discussion and review as part of the information-sharing exercise (e.g. via deep-dives for specific sectors/functions, country case studies etc.) for jurisdictions to learn from each other and to enhance consistency in economic classification and risk assessment.

2C. Encourage additional non-FSB jurisdictions with significant non-bank financial sectors or cross-border shadow banking links to participate in future information-sharing exercises, in order to obtain a more comprehensive perspective on global shadow banking activities and associated risks.

2D. Develop approaches, in consultation with relevant SSBs as appropriate, to help jurisdictions better monitor and assess risks from non-bank financial entities' interconnectedness with the rest of the financial system and from cross-border activities.

2E. Encourage, in consultation with relevant SSBs, information sharing in relation to members' experiences with the development and adoption of policy tools to address financial stability risks, with a view to enhancing the policy toolkit in the FSB Policy Framework.

2F. Promote, in collaboration with relevant SSBs, the sharing of approaches used to identify and resolve gaps in public disclosures by non-bank financial entities that help market participants assess shadow banking risks (e.g. through workshops or stocktakes of good practices).

The above actions by the FSB are presented in a rough order of priority. All of these actions are important and several of them can be pursued concurrently and independently of each other, although their implementation horizons and resource implications will vary.

1. Introduction

1.1 Background

Non-bank financing provides a valuable alternative to bank funding and helps support financial inclusion and real economic activity. It is also a welcome source of diversification of credit supply from the banking system, and it provides healthy competition for banks. As demonstrated by the recent global financial crisis, however, if non-bank financing is involved in bank-like activities, transforming maturity/liquidity and creating leverage like banks, it can become a source of systemic risk, both directly and through its interconnectedness with the banking system. To address these risks, and to build more sustainable sources of non-bank financing for the real economy, the FSB has been working on transforming shadow banking into resilient market-based finance as a core element of regulatory reforms.[7, 8]

In response to the G20 Leaders' request, the FSB has adopted a two-pronged strategy to transform shadow banking into resilient market-based finance. First, it has created a system-wide monitoring framework to track financial sector developments outside the banking system with a view to identifying the build-up of systemic risks and initiating corrective actions where necessary. Second, it is coordinating and contributing to the development of policy measures in a number of areas where oversight and regulation need to be strengthened to reduce excessive build-up of leverage, as well as maturity and liquidity mismatch, in the system.

One of these areas is assessing and mitigating systemic risks posed by non-bank financial entities and activities other than money market funds (MMFs) (i.e. other shadow banking entities and activities). The FSB developed a high-level policy framework in this area in August 2013,[9] and its implementation formed part of the G20 Roadmap agreed at the 2013 St Petersburg Summit. The framework sets forth key overarching principles that authorities should adhere to in their oversight of non-bank financial entities that are identified as posing shadow banking risks that threaten financial stability. These four principles call on authorities to: (1) have the ability to define, and keep up to date, the regulatory perimeter if necessary to ensure financial stability; (2) collect information needed to assess shadow banking risks for entities identified as having the potential to pose risks to the financial system; (3) enhance disclosure of shadow banking entities' risks; and (4) assess shadow banking entities based on economic functions and apply policy tools if necessary to mitigate identified financial stability risks. By focusing on the underlying economic functions (i.e. activities) rather than legal forms, this framework allows authorities to assess shadow banking activity in non-bank financial entities in a consistent manner and be forward-looking in capturing new structures and innovations.

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[7] Some authorities or market participants prefer to use other terms such as "market-based financing" instead of "shadow banking." The use of the term "shadow banking" is not intended to cast a pejorative tone on this system of credit intermediation. However, the FSB is using the term "shadow banking" as this is the most commonly employed and, in particular, has been used in G20 communications.

[8] For details, see "Transforming Shadow Banking into Resilient Market-based Finance; An Overview of Progress" by the FSB (November 2015, http://www.fsb.org/2015/11/transforming-shadow-banking-into-resilient-market-based-finance-an-overview-of-progress/).

[9] See "Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities", August 2013 (http://www.fsb.org/2013/08/r_130829c/).

1.2 Objectives and scope of the review

The FSB has identified shadow banking as a priority area for implementation monitoring. This is the first thematic peer review that the FSB has conducted in this area. Its objective is to evaluate the progress made by FSB jurisdictions in implementing the FSB's high-level Policy Framework for the oversight and regulation of other shadow banking entities. In particular, the review evaluates jurisdictions' adherence to the overarching principles set out in the FSB Policy Framework, including their efforts to assess shadow banking entities based on the five economic functions, to adopt policy tools if necessary to mitigate any identified financial stability risks, and to participate in the FSB information-sharing exercise.

As part of its work, the peer review examined the structures and processes established (or planned) by jurisdictions to implement the Framework, including their participation in the FSB information-sharing exercise. Given the early stage of implementation, the review focused on identifying gaps and recommending improvements to the way in which the Framework is applied by FSB jurisdictions. The review also took stock of the range of policy tools available to deal with financial stability risks emanating from shadow banking, although it did not assess the appropriateness of those tools to address identified risks.

The peer review is one of three inter-related exercises that were conducted by the FSB in 2015, based on the 2015 G20 Shadow Banking Roadmap:

(i) The FSB annual shadow banking monitoring exercise;[10]

(ii) An information-sharing exercise on implementation of the Policy Framework;[11] and

(iii) The peer review to evaluate progress in implementing the Policy Framework, including the functioning of the information-sharing exercise.

Although exercise (i) has been conducted annually since 2011, exercise (ii) was for the first time undertaken in 2015 across all FSB jurisdictions.[12] The three exercises have been carried out in close coordination with each other, with the peer review drawing from the submissions to, and FSB Secretariat analysis of, exercises (i) and (ii). These exercises form part of the broader work in this area by the FSB and SSBs (see Box 1).

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[10] The FSB's Global Shadow Banking Monitoring Report 2015, which incorporates some of the main findings from the information-sharing exercise, is available at http://www.fsb.org/2015/11/global-shadow-banking-monitoring-report-2015/. See Annex B for relevant highlights from that report.

[11] The 2015 information-sharing exercise involved all FSB member jurisdictions: (a) classifying non-bank financial entities into one or more of the five economic functions; (b) collecting risk metrics associated with these economic functions (e.g. liquidity and maturity transformation and leverage); and (c) identifying relevant authorities with oversight of such entities, as well as reviewing the availability of policy tools to address the identified risks.

[12] An initial information-sharing exercise took place in 2014. Fourteen jurisdictions (Australia, Brazil, Canada, China, France, Germany, Hong Kong, Italy, Japan, Korea, Mexico, Switzerland, UK and the US), representing over 80% of non-bank financial assets of FSB jurisdictions, participated in that exercise.

Box 1: Ongoing work on transforming shadow banking into resilient market-based finance by the FSB and SSBs

The FSB has been coordinating and contributing to the development of policies to strengthen oversight and regulation of shadow banking, with a focus on measures that seek to: (i) mitigate risks in banks' interactions with shadow banking entities; (ii) reduce the susceptibility of MMFs to "runs"; (iii) improve transparency and align the incentives in securitisation; (iv) dampen procyclicality and other financial stability risks in securities financing transactions (SFTs) such as repos and securities lending; and (v) assess and mitigate financial stability risks posed by other shadow banking entities and activities.

The FSB, through this peer review, is monitoring the implementation of the Policy Framework in FSB jurisdictions to address item (v). Based on the findings from the review and the FSB's information-sharing exercise, the FSB will evaluate the case for developing further policy recommendations for the relevant shadow banking entities and report the results to the G20. To address the financial stability risks associated with SFTs (item iv), the FSB developed in August 2013 policy recommendations for enhanced transparency, regulation of SFTs and improvement of market structure. In addition, it finalised the "Regulatory Framework for Haircuts on Non-Centrally Cleared SFTs" in October 2014 and a revised Framework in November 2015 that extended the scope of numerical haircut floors to also cover SFTs between non-banks. FSB members are currently implementing these recommendations based on the agreed timelines. The FSB has also published standards and processes for global securities financing data collection and aggregation that are relevant for financial stability monitoring and policy responses with an implementation timeline for launching the global data collection and aggregation in 2018. The FSB is currently examining the possible harmonisation of regulatory approaches to re-hypothecation of client assets and reviewing possible financial stability issues related to collateral re-use.

The FSB also launched in March 2015 new work to assess potential structural vulnerabilities associated with asset management activities and develop policy measures to mitigate these vulnerabilities as necessary. Working in cooperation with IOSCO, the FSB is currently developing proposed policy recommendations to address risks posed by: (i) funds' liquidity mismatch; (ii) leverage within funds; (iii) operational risk and challenges in transferring investment mandates in a stressed situation; and (iv) securities lending activities of asset managers and funds. These proposed policy recommendations will be issued for public consultation in mid-2016 and will be finalised by the end of 2016.

The Basel Committee on Banking Supervision (BCBS) is reviewing the scope of consolidation for prudential regulatory purposes to ensure that all banking activities, including banks' on- and off-balance sheet interactions with the shadow banking system, are appropriately captured in prudential regimes (item i). The BCBS published in December 2015, for public consultation, a conceptual framework that could form the basis of an approach for identifying, assessing and addressing step-in risk potentially embedded in banks' relationships with shadow banking entities. Meanwhile, BCBS members are in the process of implementing the finalised policy measures relating to risk-sensitive capital requirements for banks' investments in the equity of funds, and the supervisory framework for measuring and controlling banks' large exposures. The BCBS, together with IOSCO, also published criteria for identifying simple, transparent and comparable securitisations in July 2015, as one of the initiatives under item (iii). The BCBS issued in November 2015 a consultative proposal on incorporating the criteria in the securitisation capital framework.

IOSCO issued policy recommendations in October 2012 that provide the basis for common standards of regulation and management of MMFs across jurisdictions (item ii), and its members are currently in the process of implementing those recommendations. With regard to securitisation (item iii), IOSCO issued policy recommendations related to transparency, standardisation and incentive alignment in November 2012. "Level one" peer reviews (i.e. reviews on timeliness of adoption) were undertaken in 2014-15 by IOSCO in both areas. IOSCO will launch updated "level one" peer reviews on the implementation of these recommendations in 2016. It will also consider developing a plan for regular monitoring and reporting on the consistency and effectiveness of these reforms. In December 2015, IOSCO published a report on "Liquidity Management Tools in Collective Investment Schemes", which presented the findings of a survey of existing liquidity management frameworks in 27 member jurisdictions with a particular focus on tools to help deal with exceptional situations (e.g. significant redemption pressure). IOSCO is currently focusing its efforts in three areas of the asset management industry: liquidity mismatch in collective investment scheme vehicles, identifying data gaps in policymakers' knowledge of the industry, and better understanding loan origination funds (a recent industry innovation).

The November 2015 FSB shadow banking progress report (ibid) provides an overview of progress to date and next steps by the FSB and its members in some of these areas.

The primary sources of information for the review were the responses by national authorities in FSB member jurisdictions, the European Commission (EC) and the European Central Bank (ECB) to a questionnaire. The review team analysed the responses and followed up with individual jurisdictions for clarifications or additional information, including through a series of bilateral calls. The review also made use of the responses by FSB jurisdictions to the 2015 information-sharing exercise and of the FSB Secretariat's analysis of those responses, which were shared with the review team on a confidential basis.

In addition, the FSB invited feedback from the public in July 2015 on the areas covered by the review. Feedback was received from a number of private sector entities, particularly industry associations. Most comments expressed broad support for the FSB's Policy Framework, appreciated the granular approach adopted by the FSB to identify shadow banking risks, and highlighted the need for consistent implementation of the Framework. Some of the comments, however, did not directly address the areas covered by the peer review, but focused instead on other entity/jurisdiction/region-specific issues. Several comments stressed the need for the peer review to take into account the implications of the implementation of the Policy Framework for resilient market-based finance. Some comments also called for a review of the Framework based on activities rather than entities, which may indicate some confusion about the nature of the Policy Framework (which is based on economic functions/activities).

The remainder of this report is structured as follows:

- Sections 2-5 describe the status of implementation by FSB jurisdictions of each of the four overarching principles of the FSB Policy Framework, including on the functioning of the information-sharing exercise; and
- Section 6 presents the main conclusions and recommendations to address identified challenges in the implementation of the Framework.

Annex A provides a list of abbreviations of financial authorities in FSB jurisdictions; Annex B includes some highlights from the FSB's Global Shadow Bank Monitoring Report 2015 as background information about the size and structure of the shadow banking sector; Annex C provides a high-level description of the approach taken to address inconsistencies in the reporting of non-bank financial entities by economic function in the 2015 information-sharing exercise; Annexes D-H consist of tables providing jurisdiction-specific details on implementation of the principles of the Framework; and Annex I comprises a set of jurisdiction-specific summaries on implementation of the Policy Framework in FSB jurisdictions.

2. Definition and update of the regulatory perimeter

2.1 Introduction

The FSB Policy Framework's first overarching principle states that, in order to effectively address the shadow banking risks arising from the activities of certain non-bank financial entities, especially where strict policy measures (e.g. capital and liquidity buffers) are required, the relevant authorities should bring the relevant entities into regulatory and supervisory oversight in their jurisdiction, if necessary, to ensure financial stability. In this regard, as a key prerequisite to addressing the systemic risks of those entities through policy tools, authorities should have a regime to define, expand, and keep up to date the regulatory perimeter where necessary to ensure financial stability.

2.2 Institutional arrangements for the regulation and supervision of non-bank financial entities[13]

Jurisdictions reported a range of institutional arrangements for the regulation and supervision of non-bank financial entities (see Annex D). Most jurisdictions have multiple authorities with responsibilities for the regulation and supervision of these entities based on different mandates (prudential, market conduct, consumer protection etc.). In four jurisdictions (Germany, Singapore, Switzerland and Russia), a single integrated authority is responsible for regulating and supervising all or most of these entities. In several jurisdictions, multiple authorities are responsible for different aspects of the oversight or regulation of the same entity. In Canada, the regulation of some entities takes place at a sub-national (provincial) level.

Most non-bank financial entities classified under economic functions (EFs) 1, 3 and 5 (mostly investment funds, broker-dealers and securitisation vehicles respectively) fall within the regulatory perimeter of securities regulators. Entities classified under EF1, in particular, represent more than 50% of the assets of all entities classified into EFs and have experienced the fastest growth in recent years (in terms of assets under management) compared to the entities categorised in the other EFs.[14] This underscores the growing importance that securities regulators play in promoting financial system stability, a point emphasised by IOSCO with the incorporation of principles 6 and 7 on monitoring for systemic risks and reviewing the regulatory perimeter respectively, in its revised *Objectives and Principles of Securities Regulation* issued in June 2010.[15]

Responses from jurisdictions indicate an increasing focus on systemic risks by securities regulators, as evidenced by the establishment in a number of cases of internal systemic risk or emerging risk committees and the participation of securities regulators in domestic and international financial stability bodies. This is consistent with the findings of IOSCO's September 2013 thematic peer review on the implementation of principles 6 and 7, which found that good progress had been made but that further work was needed by IOSCO members in many jurisdictions to develop processes to identify, manage and mitigate systemic risks.[16]

Jurisdictions indicated that their regulatory and supervisory perimeter generally covers most non-bank financial entities, with no jurisdiction identifying entities that may pose financial stability risks but that are outside the perimeter. However, some jurisdictions (Australia, Germany, Netherlands, South Africa, UK and US) identified entities or activities that they are in the process of examining more closely, potentially with a view to strengthening regulatory requirements. Examples of such entities include wholesale investment funds, including hedge funds; non-bank-owned finance companies or mortgage providers; money market corporations that act like broker-dealers; private equity funds; and peer-to-peer lenders.

While there is little evidence of non-bank financial entities operating in a jurisdiction without being subject to at least some form of regulation, the nature and intensity of that regulation and its supervision can vary significantly across entity types, in part based on the perceived level of

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[13] See Annex A for the abbreviations of financial authorities in FSB jurisdictions.

[14] See the FSB's Global Shadow Banking Monitoring Report 2015 (ibid).

[15] The two principles added were: 'Principle 6: The regulator should have or contribute to a process to monitor, mitigate and manage systemic risk, appropriate to its mandate' and 'Principle 7: The regulator should have or contribute to a process to review the perimeter of regulation regularly.' See https://www.iosco.org/library/pubdocs/pdf/IOSCOPD323.pdf.

[16] See https://www.iosco.org/library/pubdocs/pdf/IOSCOPD424.pdf.

risks posed. Nevertheless, such variations, in the absence of more detailed information, make it difficult to assess unambiguously the effectiveness of regulatory frameworks in addressing potential shadow banking risks. The possibility that certain types of non-bank financial entities remain outside the regulatory perimeter may not be a concern *per se* insofar as such entities do not pose significant risks and the authorities are able to broadly monitor their activities and extend the regulatory perimeter if necessary to promote financial stability. Few authorities, however, seem to have a systematic process involving all relevant domestic authorities to ensure that the regulatory perimeter encompasses non-bank financial entities where necessary to ensure financial stability (see section 2.iv below) or the ability to collect sufficiently detailed information from entities that they do not already supervise (see section 3).

Only a few jurisdictions report planned changes in the regulation and supervision of non-bank financial entities, and these changes generally relate to institutional arrangements aimed at improving the efficiency and effectiveness of their regulatory frameworks. Examples include the merging of the commodities markets regulator into the securities regulator (India) and moving to a ‘twin peaks’ structure of prudential and market conduct regulators (South Africa). Hong Kong is planning to set up in 2016 an independent insurance authority and a statutory licensing regime for insurance intermediaries.

2.3 Institutional arrangements for monitoring and assessing financial stability risks

The institutional arrangements for monitoring and assessing the financial stability risks posed by non-bank financial entities differ across jurisdictions and largely reflect the regulatory structure. In most cases, these arrangements are not specific to such entities but form part of mechanisms serving a broader purpose, typically related to financial stability. In particular, a central bank or an inter-agency body often has a mandate in relation to overall financial stability and would take the lead in monitoring and assessing financial stability risks, usually with input from relevant regulators. Where more than one authority is mandated to monitor financial stability risks posed by non-bank financial entities, most jurisdictions report a clearly identified lead or some form of coordination arrangement between the relevant authorities.

Several jurisdictions with multiple regulators have an inter-agency coordinating body, typically in the form of a council of financial regulators or financial stability committee. In some cases these bodies are formally established under legislation (e.g. Brazil, France, Germany, Mexico, Turkey, UK and US), while in other cases they are non-statutory (as in Italy and Australia). Some bodies have more of an advisory and coordination role with few (if any) powers that are distinct from those of their members. The typical mandates of these bodies include identifying trends in the financial system that may impact overall financial stability, coordinating policy responses, and advising the government on changes that may be needed to the regulatory perimeter. Such arrangements are also enhanced in some jurisdictions through Memoranda of Understanding (MoUs) between domestic authorities aimed at promoting cooperation and the sharing of information. At the working level, some jurisdictions have also set up committees or working groups under the central bank or a coordinating body to regularly assess shadow banking risks (India, Italy, Switzerland and UK).[17]

[17] In the EU, the European Systemic Risk Board (ESRB) has established a Joint Expert Group on Shadow Banking.

2.4 Reviewing and updating the regulatory perimeter

The questionnaire responses indicate that few jurisdictions have a systematic process involving all relevant domestic authorities to review the regulatory perimeter in order to ensure that it encompasses non-bank financial entities and activities that could pose financial stability risks (Box 2 provides illustrative examples of such processes in some jurisdictions). In most cases, reviews of the regulatory perimeter appear to be *ad hoc* in nature and undertaken in response to concerns arising about a particular activity or entity type.[18] While jurisdictions report having processes in place to assess financial stability risks (including those posed by non-bank financial entities), it is not clear to what extent such processes extend to the assessment of related regulatory gaps or the adequacy of the regulatory framework.

Box 2: Examples of systematic processes to review the regulatory perimeter

In the UK, the Bank of England's Financial Policy Committee (FPC) has a statutory responsibility to identify, monitor and address systemic risk with a view to protecting and enhancing the resilience of the UK financial system. To support this, the FPC can make written recommendations to the Treasury on legislative changes to the regulatory perimeter. Over the past few years, the FPC has assessed systemic risk arising from activities outside the core banking system and recently undertook a high-level review of thirty types of non-bank institutions and markets using a risk assessment framework that considered sources of fragility, transmission channels and the adequacy of existing risk mitigants and regulations.[19] At its June 2015 meeting, the FPC decided to conduct further deep-dives of the potential systemic risks associated with five activities, and it has committed to holding a dedicated discussion on the adequacy of the regulatory perimeter at least annually.

In Australia, the Reserve Bank of Australia coordinates an annual update to the Council of Financial Regulators (CFR) on developments in, and risks arising from, Australia's shadow banking system, which provides the basis for a CFR discussion. If risks arising from a sector or activity are seen to be inadequately addressed by existing regulation, the CFR could provide advice to the Australian Government to enhance the powers/resources of the relevant regulator(s) so as to maintain the adequacy of the regulatory perimeter. Outside of this process, individual CFR members can also raise concerns with the CFR if they identify risks in the shadow banking sector that they believe are being inadequately addressed.

In the US, the Financial Stability Oversight Council (FSOC) has a statutory responsibility to analyse and identify in its annual report any emerging threats to US financial stability from the activities of non-bank financial entities and make recommendations to US regulators or the Congress on actions that could be taken to address those risks, including potential changes to the regulatory perimeter. The FSOC has the authority to designate, and has designated, certain US nonbank financial companies for enhanced prudential standards and supervision by the Federal Reserve if it determines that material financial distress at the company, or the nature, scope, size, scale, concentration, interconnectedness, or mix of its activities could pose a threat to the financial stability of the US.

In Italy, the Consolidated Laws on Banking and on Finance provide the Bank of Italy and CONSOB with an explicit requirement to review the contents of their regulations at least every three years in order to take account of market developments. These reviews take into consideration whether there is a need to expand the perimeter of regulation to unregulated products, markets, market participants or activities.

Where it does not already exist, there may be merit for jurisdictions to establish a systematic process to ensure that non-bank financial entities that could pose financial stability risks are

[18] This finding is broadly consistent with IOSCO's 2013 thematic review of the implementation of principle 7 (ibid), which found that securities regulators in many jurisdictions had only informal and reactive processes to review the regulatory perimeter and that there was scope for jurisdictions to better articulate their responsibilities, powers and objectives in relation to reviewing the regulatory perimeter.

[19] See Box 5 on 'Financial stability risk and regulation beyond the core banking sector' in the Bank of England's July 2015 *Financial Stability Report* (http://www.bankofengland.co.uk/publications/Documents/fsr/2015/fsrfull1507.pdf).

brought within the regulatory perimeter in a timely and proactive manner. Such a process, which could build on guidance provided by SSBs, would involve: (i) a regular and specific focus on the adequacy of the jurisdiction's regulatory perimeter, informed by assessments of financial stability risks; and (ii) the participation of all relevant regulatory authorities (and not just those involved in financial stability analysis), thereby contributing to a coordinated policy response.

Most jurisdictions indicated that legislative changes would be necessary to expand the regulatory perimeter, and these can involve a lengthy process of data gathering, policy design and research, cost-benefit analysis, as well as industry and public consultation. A few jurisdictions (e.g. India, South Africa) noted that they have arrangements in place that would allow in limited circumstances the widening of the regulatory perimeter without requiring a legislative process (e.g. in a systemic risk event). The existing legislative mandates of regulators in some other jurisdictions may allow them to expand their regulatory scope, at least to some degree, without further legislative changes. Recent examples include Italy's amendment of the Consolidated Laws on Banking, and Germany's administrative practice to mitigate potential risks arising from loan origination by investment funds.

Jurisdictions identified a number of challenges associated with bringing entities and activities that may pose risks to financial stability within the regulatory and supervisory perimeter. The most commonly cited challenges were:

a) *Data/information gaps*: Difficulties in identifying and assessing entities and activities that may pose risks to financial stability due to non-existent, insufficient or poor quality data was the most commonly cited challenge (see section 3).

b) *Resource constraints*: A number of jurisdictions highlighted resource constraints faced by relevant authorities to properly enforce a widened regulatory and supervisory perimeter. In a few cases, current resource pressures were cited as forcing regulators to prioritize and cut-back on some of their activities, including capacity building activities, which could undermine regulatory effectiveness if sustained.

c) *Time needed to revise the regulatory perimeter*: As noted above, a number of jurisdictions acknowledged that it may not always be possible to respond to fast-growing or innovative shadow banking entities and activities in a timely manner. An expansion of the perimeter typically requires changes to legislation, which is a time-consuming process often subject to political considerations and public consultation.

d) *Cross-border coordination*: Some jurisdictions noted that their ability to respond to the risks posed by non-bank financial entities may be complicated by limits on their regulatory reach given the cross-border nature of some of these activities.

e) *Lack of financial stability mandate*: Some authorities also indicated that they may face challenges in relation to certain entities that are already within their regulatory perimeter if they do not have a sufficiently broad regulatory mandate vis-à-vis such entities. For example, authorities may be constrained from imposing regulatory measures that are solely motivated by financial stability concerns.

These challenges are further elaborated in the rest of the report, which discusses progress with regard to implementation of the other aspects of the Policy Framework. The challenges highlight the need for jurisdictions to improve data collection and to ensure that adequate resources are available to monitor shadow banking risks. They also underscore the importance of having a clearly defined financial stability mandate with associated powers vested in one or more authorities to regularly monitor and respond to risks outside the regulatory perimeter and to help ensure that procedures to change relevant legislation are well-established. Moreover, these challenges require strong communication and close regulatory cooperation within and across jurisdictions to ensure that any adverse spill-over effects from cross-sectoral and cross-jurisdictional activities are addressed.

3. Collection of information needed to assess shadow banking risks

3.1 Introduction

The FSB Policy Framework's second overarching principle states that, once an entity is identified as having the potential to pose risks to the financial system arising from its involvement in shadow banking, information should be collected for authorities to be able to assess the degree of maturity and liquidity transformation and use of leverage by that entity and to decide on the appropriate rectification measures. Authorities should put in place the systems, processes and resources to collect and analyse such information. Authorities should also exchange appropriate information both within and across the relevant jurisdictions on a regular basis to be able to assess the risks posed by shadow banking entities.

3.2 Information collection about shadow banking risks

National authorities generally use data sourced from existing reporting and disclosure requirements applicable to regulated non-bank financial entities to assess shadow banking risks. In most cases, such data come from statistical and regulatory returns (e.g. flow of funds statistics and supervisory data) collected on a monthly or quarterly basis. Other data sources include periodic surveys (e.g. for hedge funds and other funds), publicly available information (commercial databases, data from professional associations etc.) and other *ad hoc* surveys, information requests and interviews with financial entities (see Annex F).

Since existing reporting requirements were not usually designed for collecting shadow banking-specific information from these entities, the data may not be adequate or granular enough to assess shadow banking risks. This is illustrated to some extent by the fact that many jurisdictions did not supply all of the relevant data required to calculate the common set of risk metrics for assessing shadow banking risks in the 2015 information-sharing exercise, even for the largest entity types (see Table 1 and Annex G).[20] The gaps in the jurisdictions' submission of risk metrics data in some cases may reflect lack of adequate or granular data needed to respond to that exercise, but may also reflect other factors, such as cost-benefit considerations (i.e. prompted by the small share of financial sector assets and potentially limited shadow banking risks associated with some entity types), resource constraints related to manual aggregation of data, and challenges to information sharing within and across jurisdictions (see Sections 2, 3.iv and 5). In a few cases, jurisdictions identified alternative metrics (and associated data) they use for assessing shadow banking risks.

[20] This data included assets under management and gross notional exposures for entities classified under EF1, as well as credit, liquid and total balance sheet assets for other types of classified entities.

Table 1: Percentage of jurisdictions with data gaps for calculating risk metrics in the FSB's 2015 information-sharing exercise

		Shadow Banking Risk Metrics[21]									
		Credit Intermediation			Maturity Transformation			Liquidity Transformation	Credit Risk Transfer	Leverage	
EF	**Data gaps**	**CI1**	**CI2**	**CI3**	**MT1**	**MT2a**	**MT2b**	**LT**	**CRT**	**L1**	**L2**
EF1	None	57	43	5	10	5	5	5	5	52	10
	Partial	10	5	0	5	0	0	0	0	14	0
	Full	33	52	95	86	95	95	95	95	33	90
EF2	None	73	73	13	53	20	13	13	13	53	20
	Partial	0	7	7	13	7	13	13	7	20	20
	Full	27	20	80	33	73	73	73	80	27	60
EF3	None	63	75	13	50	25	25	25	13	75	13
	Partial	0	0	0	0	0	0	0	0	0	0
	Full	38	25	88	50	75	75	75	88	25	88
EF4	None	100	0	0	0	0	0	0	0	100	100
	Partial	0	0	0	0	0	0	0	0	0	0
	Full	0	100	100	100	100	100	100	100	0	0
EF5	None	30	30	10	30	10	0	10	10	30	20
	Partial	0	0	0	0	0	0	0	0	0	0
	Full	70	70	90	70	90	100	90	90	70	80

Note: Based on the risk metrics data submitted by the jurisdictions, specified risk metrics could be calculated for all entity types classified into an EF by a jurisdiction (no data gaps – None); some entity types (partial data gaps – Partial) or for none of the entity types (complete data gap – Full). The cells in the table indicate the percentage of jurisdictions for which data gaps were None, Partial or Full with respect to the entities classified into the specified economic function (in the row) and for calculating the specified risk metric (in the column). See Annex G for details.

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[21] CI1 = credit assets/total financial assets

CI2 = lending/total financial assets

CI3 = (credit assets + off balance sheet exposures (credit risk transfer type)) / (total financial assets + total off balance sheet)

MT1 = (long term assets - (long term liabilities + non-redeemable equity (equity or shareholders equity))) / total financial assets

MT2a = for EF1 short term liabilities + redeemable equity (> 30 days, <= 1 year + > 7 days, <= 1 year) / short term assets (> 3 months, <= 6 months + > 6 months, <= 1 year), for non-EF1 short term liabilities (> 30 days, <= 1 year) / short term assets (> 3 months ,<= 6 months + > 6 months, <= 1 year)

MT2b = for EF1 (short term liabilities + redeemable equity) (<= 30 days + <= 7 days) / short term assets (<= 3 months), for non-EF1 short term liabilities (<= 30 days) / short term assets (<= 3 months)

LT = for EF1 (very short-term liabilities (< 30 days) + redeemable equity (< 7 days)) / liquid assets, for non-EF1 very short-term liabilities (< 30 days) / liquid assets

CRT = off balance sheet exposures (credit risk transfer type) / (total financial assets + off balance sheet total)

L1 = for EF1 total financial assets / NAV, for non-EF1 total financial assets / equity

L2 = for EF1 (total financial assets + off balance sheet total) / NAV, for non-EF1 (total financial assets + off balance sheet total) / equity.

Gaps in the availability of data were particularly pronounced for non-regulated entities, given that authorities' data collection powers often do not extend to such entities.[22] Only a few jurisdictions (Australia, Mexico, Netherlands, UK and US) reported broad powers that give authorities the ability to collect data, for financial stability purposes, from financial sector entities that they otherwise do not regulate or collect data from.

Compared to the gaps in the availability of data to calculate risk metrics, relatively few jurisdictions reported initiatives (see Annex F) to enhance the availability and granularity of data from regulated non-bank financial entities (e.g. Canada, EU, Switzerland and US) or to expand regulatory powers to enable the collection of data from non-regulated entities (e.g. South Africa). A few jurisdictions (e.g. Hong Kong, Russia, Singapore and South Africa) reported that they are currently reviewing their existing data availability to assess any gaps. More work is necessary in this area to enable jurisdictions to effectively assess shadow banking risks posed by non-bank financial entities as per the Policy Framework, taking into account the potential materiality of those risks.

3.3 Information analysis about shadow banking risks

The approach taken for assessing shadow banking risks posed by the non-bank financial sector varies across jurisdictions and is largely dependent on the institutional set-up, i.e. based on mandates for financial stability and the existence of inter-agency bodies (see section 2.iii).

The extent and frequency with which risks associated with non-bank financial entities are assessed varies across jurisdictions, with some assessments taking place on a quarterly or semi-annual basis and others on a less frequent (e.g. annual) or *ad hoc* basis. Most jurisdictions, however, indicate that they actively monitor financial stability risks emanating from non-bank financial entities. In most cases, the assessment of those risks is subsumed within the broader financial stability analysis. The outputs of such work are included in regular financial stability or other reports by central banks and regulatory authorities, *ad hoc* risk analyses or working papers as well as internal updates to inter-agency coordination bodies.

Most jurisdictions do not indicate planned changes to their existing arrangements for assessing shadow banking risks posed by the non-bank financial sector. Some jurisdictions and authorities, however, plan to: develop additional metrics or enhance their analytical framework for assessing shadow banking risks as better data becomes available (Canada, Germany, Indonesia, Italy and South Africa); deepen the analysis in areas such as interconnectedness between sectors, counterparties and markets (ECB and UK); or put in place a more structured process to collect and analyse data for shadow banking risk assessment purposes (Netherlands).

The assessment of risks involved in new and innovative shadow banking activities/entities was highlighted as particularly challenging by some jurisdictions (e.g. Canada and Germany). Given that some jurisdictions (e.g. Canada and UK) noted that market intelligence is a useful supplementary information source for monitoring and assessing relevant developments and risks from less regulated sectors, innovation and regulatory arbitrage. These jurisdictions note that new and innovative shadow banking activities and entities tend not to have systemic implications initially and that relevant data are usually scarce; that risk analysis consequently involves a large degree of judgement; and that conversations with market participants and other

[22] In some cases, information collected from regulated entities may capture some information on non-regulated entities (e.g. information collected from registered fund advisors may include information on non-regulated funds that they manage).

forms of market intelligence are important in filling data gaps, identifying trends and understanding business models in the shadow banking sector.

Several jurisdictions highlighted the importance of measuring and monitoring interconnectedness in the financial system. Some indicated that more metrics on interconnectedness between shadow banking entities and the rest of the financial system would add to the understanding of financial stability risks posed by shadow banking entities and activities. Significant data limitations are evident in this area. Some estimates of interconnectedness were found in the FSB's Global Shadow Banking Monitoring Report 2015. The available data, however, did not shed light on credit quality and maturity profiles and related potential credit, liquidity and funding risks. As noted in that report, the establishment of a network analysis that includes banks and the different shadow banking sectors on an aggregate basis could facilitate an assessment of the key factors that can contribute to interconnectedness risks and better map potential negative feedback loops between the bank and non-bank sectors, and also identify pockets of credit and funding concentrations. This will require the availability of granular data as well as the development of robust analytical frameworks to assess interconnectedness risks.

3.4 Shadow banking information-sharing arrangements

Domestically, jurisdictions mainly use existing mechanisms for information exchange between relevant authorities to exchange information relevant to assessing risks posed by shadow banking entities and activities (see section 2.iii). A few jurisdictions (Australia and Canada) and the ECB highlighted the challenge of sharing confidential information at an entity level in certain cases, e.g. with non-regulatory authorities (such as the government) or between supervisors and macroprudential authorities. Institutional constraints on sharing information relating to shadow banking risks were also evidenced in the information-sharing exercise, in which some authorities referred to challenges in sharing relevant data with other authorities within the jurisdiction, especially when the latter are not FSB members. Such constraints could pose challenges to the assessment of risks to financial stability from shadow banking entities and to the comprehensive review of the regulatory perimeter. Initiatives are underway in some jurisdictions (Australia, Brazil, Canada, Switzerland, Saudi Arabia, South Africa and Turkey) and by the ECB to enhance existing information-sharing arrangements between authorities. These include, for example, enhancing institutional arrangements via the creation of an inter-agency financial stability committee and entering into multilateral MoUs to improve information exchange between relevant domestic authorities (including the government).

Similarly, jurisdictions mainly rely on existing mechanisms with overseas counterparts (e.g. bilateral/multilateral MoUs) to share information on shadow banking. It is not clear, however, the extent to which arrangements that were mostly designed for cooperation in enforcement or supervisory matters are adequate to share information about risks to financial stability from non-bank financial entities and activities. For example, these arrangements may restrict the types or granularity of data that can be shared among jurisdictions. Jurisdictions note that participation in international working groups or fora on shadow banking and systemic risk can also facilitate information-sharing with overseas counterparts (e.g. FSB shadow banking exercises, European Systemic Risk Board (ESRB) shadow banking exercise for the EU and IOSCO systemic risk data collection exercise). Nonetheless, the FSB information-sharing exercise revealed constraints in cross-border information sharing faced by some authorities that may need to be addressed (see section 5.ii).

3.5 Data availability and granularity for assessing shadow banking risks

Balance sheet and other relevant data are collected from EF-classified non-bank financial entities in most cases under jurisdictions' existing regulatory or statistical reporting requirements, but the level of granularity of such data varies across entity types within and across jurisdictions. For example, sectoral balance sheet statistics or flow of funds data in many jurisdictions do not provide specific breakdowns with respect to maturity and liquidity transformation. As a result, the data currently collected for some entities may not provide the level of granularity needed for shadow banking risk assessment purposes. In some cases, these data gaps are filled through the use of other publicly available data, commercial or trade association data and *ad hoc* voluntary surveys (e.g. in the case of some investment funds as well as finance companies).

Risk metrics used for assessing the extent of shadow banking risks (i.e. maturity transformation, liquidity transformation, leverage and credit risk transfer) also vary depending on the types and granularity of data collected for a particular non-bank financial entity type. Most jurisdictions did not supply some or most of the relevant data in the FSB shadow banking information-sharing template (see Annex G and section 3.ii).[23] Moreover, the typical business model of a particular entity type may differ somewhat across jurisdictions, and hence the nature and extent of the risks posed could vary. These factors may make it difficult to compare shadow banking risks for the same type of entity across jurisdictions.

Many jurisdictions identified areas to improve data availability and granularity for EF 1 entities, particularly in relation to the tenor of assets and liabilities of investment funds for assessing maturity/liquidity transformation risk. Other identified potential enhancements included more detailed breakdown of data by fund type, more data on wholesale funds, more frequent reporting, improving the information technology system for collecting and analysing data, and extending current regulatory reporting requirements to all fund types so as to provide a more comprehensive view of the asset management industry. A number of jurisdictions are currently considering potential enhancements to the availability of data on investment funds (China, EU, South Africa, Switzerland and US).

In general, data on repo and securities lending are limited in most jurisdictions, which may be due to differences in market structure and size. Nonetheless, initiatives are underway in some jurisdictions – notably in Canada, the EU and the US – to enhance data collection in this area. Some jurisdictions also note that they will utilise data reported to trade repositories on over-the-counter (OTC) derivatives transactions to help assess shadow banking risks posed by

[23] To reduce the reporting burden for authorities, a "reporting threshold" below which jurisdictions did not need to report detailed risk metrics for any entity type was introduced. Such reporting threshold was set for each economic function and defined as 1% of total national financial assets, below which detailed risk metrics for all entity types classified into that economic function need not be reported. As a result, on an average (equal weighting) basis, jurisdictions received a relief of around 13% in terms of the number of entities classified but not required to report. This amounted to around 5% of the total assets classified into the five economic functions. However, the amount of reporting relief varied widely across jurisdictions, ranging from 0% to 100% of entity types' classified assets. In addition to the reporting threshold, further reporting relief was provided to authorities by not requiring jurisdictions to report detailed risk metrics for any entity type classified in an economic function that was not one of the largest three entity types, by assets, in that economic function.

various non-bank financial entities when the quality enhancements to these databases are completed. As discussed in Box 1, a number of other initiatives are underway globally to address gaps in global securities financing data collection and aggregation.

A number of jurisdictions (Australia, Canada, Hong Kong, Netherlands, Indonesia, Singapore, South Africa and US) and the ECB identified areas where the granularity and timeliness of data collected from other non-bank financial entity types could be improved for shadow banking risk assessment purposes. However, some jurisdictions also stressed the importance of undertaking cost-benefit analysis to ensure that any additional reporting burden imposed on entities is outweighed by the benefits resulting from the augmented data collection (Australia, France, Russia, Singapore and UK). Some jurisdictions also highlighted budget, resource and technological constraints to enhanced data collection. Due in part to data constraints, shadow banking risks associated with interconnectedness as well as with cross-border activities and exposures (e.g. non-bank financial entities headquartered in other jurisdictions that operate domestically) remain largely unassessed.

4. Public disclosure of information about risks posed by shadow banking entities

4.1 Introduction

The FSB Policy Framework's third overarching principle states that authorities should enhance disclosure by other shadow banking entities as necessary so as to help market participants understand the extent of shadow banking risks posed by such entities. To achieve this goal, the principle notes that enhanced market disclosure and transparency (e.g. on overall firm risk exposures, interconnectedness, funding concentration and aggregated maturity profiles of asset and liabilities) by non-bank financial entities will help market participants to better monitor those entities, absorb any news or developments in a timely manner, and make informed decisions, hence avoiding a sudden loss of confidence that may lead to runs.

4.2 Disclosures by non-bank financial entities

Existing requirements for market disclosures by non-bank financial entities vary across jurisdictions and entity types. Examples include corporate reporting requirements for listed or regulated firms; disclosure requirements for publicly issued securities; and disclosure requirements imposed on some types of regulated entities (e.g. insurance companies). In general, authorities in more developed markets tend to have broader and more detailed disclosure requirements than those in other countries (see Box 3 for examples in the EU and US), although there are significant differences in requirements even within the former category.

Box 3: Examples of disclosure requirements related to assessing risks from fund activities

European Union (EU): The European Parliament and EU Council adopted the Alternative Investment Fund Managers Directive (AIFMD). The directive encompasses extensive reporting obligations at the level of the fund and fund manager. Reporting is broadly harmonised across the EU, i.e. the European Securities and Markets Authority (ESMA) provides uniform reporting templates and guidelines on relevant questions.

In general, the fund manager has to provide information on total assets under management and the main markets and instruments traded. The reporting obligations for individual funds are more detailed. Important information to be provided is the breakdown of the respective investment strategy (i.e. hedge fund, private equity, real estate etc.); top five instruments and top three markets traded; top 10 exposures; and the monthly value traded by different asset classes and the total long and short value of exposures.

In addition, the AIFMD requests data on re-hypothecation, securities lending, derivatives exposure and leverage. With respect to investor disclosure requirements, the directive requires that fund managers periodically disclose to investors: 1) the percentage of the fund's assets subject to special arrangements (e.g. side pockets); 2) any new arrangements for managing fund liquidity; and 3) the fund's current risk profile. For funds that employ leverage, the fund must also disclose: 1) any changes to the maximum level of leverage which the manager may employ on behalf of the fund as well as any right of the reuse of collateral or any guarantee granted under the leveraging arrangement; and 2) the total amount of leverage employed by that fund.

The AIFMD reporting obligations provide the regulator with relevant data to better identify overarching risks associated with investment funds. As well, the reporting allows investors to better gauge the risks associated with investing in funds.

United States: The U.S. Securities and Exchange Commission (SEC) recently proposed rule reforms to enhance effective liquidity risk management by open-end funds, including mutual funds and exchange-traded funds (ETFs).[i] Under these proposals, mutual funds and ETFs would be required to enhance disclosure regarding fund liquidity and redemption practices. While the proposed disclosure- and reporting-related amendments are primarily designed to reduce the risk that open-end funds will be unable to meet redemption obligations and to reduce dilution of fund shareholders, the proposed requirements may also increase investors' and others' (e.g. researchers, financial analysts) understanding of funds' liquidity-related risks and redemption policies, which in turn could assist investors in making investment choices that better match their risk tolerances.

The proposed disclosure- and reporting-related amendments include amendments to require disclosure regarding swing pricing, if applicable, and to improve disclosure regarding how funds meet redemptions of fund shares. In particular, under the proposed amendments, a fund would be permitted, under certain circumstances, to use swing pricing to adjust its current net asset value (NAV) as an additional tool to lessen dilution of the value of outstanding redeemable securities through shareholder purchase and redemption activity. The proposed amendments would account for this pricing procedure by requiring that a fund that uses swing pricing explain the circumstances under which swing pricing would be required to be used as well as the effects of using swing pricing. In addition, the SEC proposed to require a fund to disclose the number of days in which the fund will pay redemption proceeds to redeeming shareholders as well as the methods that the fund uses to meet redemption requests, which may include (for example) sales of portfolio assets, holdings of cash or cash equivalents, lines of credit, inter-fund lending, and ability to make in-kind redemptions.

The SEC also proposed amendments to provide detailed information, both to the Commission and the public, regarding a fund's liquidity-related holdings data and liquidity risk management practices. Specifically, the SEC proposed requiring mutual funds and ETFs, other than registered MMFs, to electronically file with the Commission monthly portfolio investment information. Under this proposal, a fund would be required to indicate the liquidity classification of each of the fund's positions in a portfolio asset using six categories corresponding to the number of days in which the asset is convertible to cash. Under the proposed amendments, this information would be made available to the public quarterly. In addition, the SEC proposed to require a fund to determine and disclose the minimum percentage of the fund's net assets to be invested in three-day liquid assets, after assessing its liquidity risk considering a number of factors, including an assessment of short-term and long-term cash flow projections, the investment strategy and liquidity of the fund's portfolio assets, the use of borrowings and derivatives for investment purposes (e.g. to enhance returns), and holdings of cash and cash equivalents, as well as borrowing arrangements and other funding sources. The proposed amendments would further require a fund to report, for each portfolio asset, whether the asset may not be sold or disposed of in the ordinary course of business within 7 calendar days at approximately the value ascribed to it by the fund.

[i] See Open-End Fund Liquidity Risk Management Programs, Investment Company Act Release No. 31835 (Sept. 22, 2015), available at http://www.sec.gov/rules/proposed/2015/33-9922.pdf.

In general, disclosure requirements especially for entities in EF1 focus on adequate information for investors, particularly retail investors (e.g. prospectuses). Entity-specific disclosures can sometimes include information on sector-wide developments that may pose risks, and market participants can aggregate such information in order to make a sector-wide assessment. Disclosure requirements are significantly more limited in the case of private funds (i.e. funds making investments on behalf of a restricted set of investors, e.g. high net worth individuals), with some exceptions.[24] For EF3 entities, disclosure requirements are largely based on financial statements and other periodic public reports. For EF5 entities, recent initiatives have led to enhanced disclosures for securitisations.[25] It is not clear from the responses whether authorities have adequately evaluated the extent to which these disclosure requirements also enable market participants to assess shadow banking risks posed by these entities on an ongoing and systematic basis.

4.3 Disclosures by the authorities

In their responses, a number of jurisdictions highlighted the important role played by authorities' disclosures in providing information to market participants about shadow banking risks posed by non-bank financial entities or activities. National authorities disseminate such information through financial stability reports and other reports by the central bank, regulatory authorities or inter-agency bodies; sector-wide balance sheet information; and participation in international surveys and initiatives (e.g. FSB Global Shadow Banking Monitoring Report, IOSCO Hedge Funds survey). Some jurisdictions made reference to recently published articles and reports on shadow banking in this context (e.g. Australia, Canada, Netherlands and Singapore).

Financial stability and other such reports provide a wide range of information about economic and financial market conditions, including in some cases specific analyses (e.g. dedicated chapters or articles) on shadow banking-related entities and activities, trends and risks. It is not, however, clear to what extent such reporting makes a sufficient contribution to enable market participants to gauge the shadow banking risks posed by non-bank financial entities or activities on an ongoing and systematic basis. Additionally, disclosures on possible risks associated with non-bank financial activities outside of the jurisdiction are noted in some financial stability reports, though limitations in data and the interconnectedness and complexities of such activities across jurisdictions limit a full assessment of cross-border risks.

4.4 Ongoing or planned changes to public disclosure requirements

Only a few jurisdictions noted that they are planning reviews that could lead to changes in public disclosure requirements for non-bank financial entities (even if this may not be the primary objective of those reviews). These include: improvement of communication of shadow banking risks (Australia); further investment fund disclosures on stress tests and sensitivity analysis (Brazil); increased transparency on wealth management (China); reporting improvements for broker-dealers (Russia); enhanced disclosures by insurance companies under

[24] For example, the Alternative Investment Fund Manager Directive in the EU (see Box 3) includes disclosure requirements relating to portfolio composition, leverage and risk/liquidity management for various types of funds.

[25] For example, at the EU level, the CRA III Regulation provides for detailed disclosure requirements for the issuer, the originator and the sponsor of a structured financial product on an ongoing basis.

a proposal to establish a risk-based capital framework for them (Hong Kong); and a data modernization and liquidity disclosure rule proposal for registered funds (US). Legislative initiatives in the EU are also expected to increase transparency in relation to securities financing transactions and provide better information to retail investors for packaged products in the securities and insurance sector.

Most jurisdictions, nevertheless, stressed the need for regular monitoring of disclosure requirements and identified potential areas for improvement, especially with regard to information on liquidity, leverage, and maturity transformation risks of non-bank financial entities. For example, Australia reported no direct requirements for such entities to disclose specific metrics on risk exposures, funding concentration or maturity profiles although these entities are required to disclose any material information needed by retail investors to make investment decisions, while the UK reported that disclosures pertaining to FPC 'deep dives' (focused analysis of non-banking financial sectors and activities) may enhance transparency around shadow banking risks. A few jurisdictions indicated that they were considering broader data disclosures to enhance transparency, especially regarding non-regulated non-bank entities or areas that currently benefit from disclosure exemptions.[26]

A few jurisdictions suggested that enhancing public disclosures by non-bank financial entities beyond a certain point may not always be desirable. Their concerns centre around disclosures of potentially sensitive firm-level information such as capital add-ons or business strategies that may lead to market participants taking positions that weaken the entity or exacerbate market stress (Australia, Brazil, Germany, Switzerland and UK); or where costs may exceed the potential benefit given the relatively small proportion of financial activity associated with the entities (Australia and Japan). There were also some concerns that further disclosure, especially of more complicated on/off-balance sheet positions or transactions, may be difficult for some retail investors to properly assess and hence will offer limited additional benefit.

Jurisdictions' focus on the robustness of existing disclosure requirements and the limited plans to review and revise such requirements raises the question of the adequacy of efforts in this area. Effective implementation of the Policy Framework may require: (1) a review by relevant authorities of existing public disclosures by non-bank financial entities vis-à-vis their identified shadow banking risks, so as to be able to assess the extent to which such disclosures are sufficient to help market participants understand the risks posed by such entities; and (2) actions by those authorities to address any identified material gaps in existing disclosure requirements. In order to facilitate this process, the FSB, in consultation with relevant SSBs, will promote the sharing of experiences and approaches (e.g. through workshops involving both authorities and market participants, or stocktakes of good practices) in identifying and resolving gaps in public disclosures that help market participants assess shadow banking risks.

[26] For example, Saudi Arabia is considering enhanced financial reporting disclosures by all entities licensed by its Capital Markets Authority; and South Africa is considering enhanced financial reporting disclosures by all entities registered as credit providers with the National Credit Regulator.

5. Assessment of shadow banking risks and adoption of policy tools

5.1 Introduction

The FSB Policy Framework's fourth overarching principle states that authorities should put in place the high-level policy framework for other shadow banking entities that consists of: (i) regular assessment of non-bank financial entities' involvement in credit intermediation that may pose systemic risks or in regulatory arbitrage based on the five economic functions; (ii) adoption of policy tool(s) from the policy toolkit, if necessary, to mitigate the financial stability risks identified; and (iii) sharing of information with other authorities to provide for a level of international consistency. Implementation of this principle will allow authorities to identify sources of shadow banking risks in the non-bank financial space; mitigate the risks identified; and minimise any "gaps" in regulatory approaches.

5.2 Cooperation and information sharing among relevant authorities to implement the FSB Policy Framework

The elements covered by the fourth overarching principle of the FSB Policy Framework require effective and efficient cooperation amongst relevant authorities. Given that the Policy Framework was formulated relatively recently (August 2013), most jurisdictions are in the early stages of implementation. Several jurisdictions have set up informal arrangements to cooperate and share information among relevant authorities, including for the completion of the 2015 FSB shadow banking monitoring and information-sharing exercise template. Such arrangements usually involved the setting up of an inter-agency group that meets on an *ad hoc* basis and shares information needed to fill in the template. Notably, some jurisdictions (Australia, India, Italy, Netherlands, Spain and Switzerland) have recently established working-level groups that are specifically tasked with reviewing the application of the Policy Framework or coordinating their contributions to the FSB's shadow banking work streams in their jurisdiction.

The peer review questionnaire responses in a few cases (Argentina, China and Turkey) did not reflect a joint submission representing a coordinated response from all the relevant authorities in that jurisdiction. To some extent, these issues may reflect the early stage of implementation of the FSB Policy Framework, with several jurisdictions participating in the information-sharing exercise for the first time. However, they may also suggest that there is scope to improve cooperation and information sharing arrangements for the monitoring and assessment of shadow banking risks within a jurisdiction. The difficulties faced by some jurisdictions in classifying non-bank financial entities into economic functions (see below) and the fact that some jurisdictions (e.g. Argentina, China and Saudi Arabia) provided only partial submissions in the 2015 information-sharing exercise, suggests that more joint analytical work as well as quality assurance and internal control processes to support the judgements made may be needed.

The Policy Framework also encourages the sharing of information amongst jurisdictions to provide for a level of international consistency, and the FSB information-sharing exercise is an important means to achieve this goal. Some jurisdictions, however, reported constraints in sharing information on a cross-border basis, including as part of the information-sharing exercise. Constraints were reported to be particularly pronounced in the case of authorities that are not members of the FSB.[27] For effective implementation of the Policy Framework and to promote international consistency, further progress is needed in removing impediments to cooperation and information-sharing on a cross-border basis (see 3.iv). This would also enhance jurisdictions' effective participation in the FSB information-sharing exercise.

5.3 Classification into economic functions

The FSB's Global Shadow Banking Monitoring Report 2015, adopted the activity-based "economic function" measure of shadow banking set out in the FSB Policy Framework. The new measure is intended to help narrow down the focus of monitoring efforts to those parts of the non-bank financial sector that give rise to shadow banking risks. In the information-sharing exercise, jurisdictions were asked to share the classification of their non-bank financial entities into economic functions. Besides the five EFs, there was also an additional category of 'shadow banking not classified into economic functions'. The use of this category in most cases was a consequence of jurisdictions having insufficient granular flow of funds data (thereby leaving a residual OFI category), and captured non-bank financial entities whose activities were assessed to at least partly give rise to shadow banking risks, or for which it was not possible to provide sufficient evidence to warrant their exclusion from the newly defined activities-based measure of shadow banking.[28]

The adoption of the activity-based "economic function" measure of shadow banking allows policymakers to focus more explicitly on the potential risks that activities of shadow banking entities may give rise to. It also better integrates the Policy Framework with the FSB's shadow banking monitoring work. In doing so, however, the narrowing in focus included a degree of judgment by authorities to determine where shadow banking risks may arise, highlighting the importance of having a consistent approach to the classification of entities into EFs across jurisdictions in order to be able to make meaningful comparisons and arrive at robust conclusions to inform policy discussions.

The 2015 information-sharing exercise, follow-up discussions among jurisdictions (including in a workshop) and guidance from the FSB Secretariat via frequently asked questions (FAQs) helped to enhance jurisdictions' understanding of shadow banking entities and activities, the risks they may present and the policy tools that are available to address these risks. This was particularly the case for some jurisdictions participating in the information-sharing exercise for the first time that were initially uncertain how to classify some non-bank financial entities.

Most jurisdictions classified non-bank financial entities into the five economic functions broadly in line with the Policy Framework. For some jurisdictions, however, the information-sharing exercise revealed different approaches and some inconsistencies in classification. These arose from limitations in the availability or granularity of data, the varying nature of the non-banking financial sector across jurisdictions. Differences and inconsistencies also arose from different interpretations and judgements by jurisdictions on the risks associated with these

[27] This issue was discussed in the context of the information-sharing exercise, and participating FSB member authorities agreed to invite non-FSB authorities contributing relevant data/information to the information-sharing workshops in 2016 under the same confidentiality arrangements as participating FSB member authorities.

[28] The Global Shadow Banking Monitoring Report 2015 notes that, in many jurisdictions with this residual category, a significant proportion of the residual is unlikely to reflect shadow banking activities. For these jurisdictions, the overall narrow measure of shadow banking is thus likely to be an overestimate.

entities, including more fundamental questions such as whether oversight frameworks, the degree of systemic risk or the availability of policy tools should be taken into consideration when classifying entities into economic functions.[29] Annex C describes the main inconsistencies in classification that arose during the 2015 information-sharing exercise and the approach taken to address them.

In the 2015 information-sharing exercise, these inconsistencies were sought to be addressed through the aforementioned FAQs, template instructions as well as workshops and conference calls involving jurisdictions and the FSB Secretariat. These approaches appear to have resolved several of the initial inconsistencies in the classification of non-bank financial entities. In addition, the 2015 exercise took a conservative approach of including entity types in the narrow measure of shadow banking for all jurisdictions if the activities associated with non-bank credit intermediation could give rise to shadow banking risks in at least one jurisdiction. The FSB's Global Shadow Banking Monitoring Report 2015 notes that this activity-based 'narrow measure' may overestimate the degree to which non-bank credit intermediation gives rise to systemic risks. This remains work in progress and is expected to improve over time with increased data availability, a deeper understanding of the shadow banking system and more consistency in the assessments.

A common understanding of the scope of the shadow banking information-sharing exercise, definition and terminology used to describe economic entities and activities, and the consistent classification of entities into EFs are preconditions for effective implementation of the Policy Framework, necessitating that any material differences of view or approach with respect to these issues are appropriately resolved. The need for transparent, consistent and well-documented classification is particularly important given the expected use of this information in risk assessments and policy discussions by the FSB.[30] The 2015 information-sharing exercise showed that there is an ongoing need to review and agree upon methodological enhancements to definitions and economic classification (including on the scope and terminology used to describe the economic entities and activities meant to be captured), which can then be used for future exercises. The FSB will assist this process by issuing implementation guidance (in addition to FAQs and template instructions) that encapsulates agreed enhancements and ensuring that it is widely-understood, both within and outside the FSB membership. This may also help mitigate the time and resource constraints cited by some jurisdictions as limiting their ability to become adequately involved in the information-sharing exercise.

In addition, the process of discussion and review as part of the information-sharing exercise will be supplemented by additional approaches that enhance consistency in the implementation

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[29] For example, some jurisdictions initially classified open-ended fixed income and other funds outside of economic functions, noting that these funds were not susceptible to runs (EF1 definition). A consensus decision was taken that these entities should fall under EF1 because the combination of offering short-term redemptions to investors while investing in longer-dated and potentially illiquid assets makes these funds susceptible to runs. By contrast, it was determined that closed-ended fixed income and other funds should only fall under EF1 if they were significantly leveraged or involved material maturity and/or liquidity transformation that could generate redemption pressures. This example illustrates that the classification decision still involves an element of judgement about the extent of shadow banking risks present, leaving scope for some inconsistency. Similarly, initial submissions revealed differences in the assessment of certain non-bank financial entities based on the type of prudential regulation applied to them. Data limitations also led to inconsistencies in the classification of the newly introduced category of 'shadow banking not classified into economic functions', with some jurisdictions being unable to provide sufficient evidence that shadow banking risks could not arise.

[30] For example, the Global Shadow Banking Monitoring Report 2015 (ibid) has shifted focus to the narrow measure of shadow banking based on economic function classification. If jurisdictions' approach is inconsistent, conclusions drawn from the information sharing exercise – including findings of the report – will be less robust.

of the FSB Policy Framework. Such approaches could, for example, include in-depth analyses ('deep-dives') of specific sectors or functions across jurisdictions as well as country case studies aimed at enhancing the understanding of the structure, functioning and shadow banking risks of the non-bank financial sector in particular jurisdictions.

5.4 Risk mapping and assessing adaptations and innovations

In order to support implementation of the Policy Framework – particularly in terms of enabling a more comprehensive and structured assessment of shadow banking risks as well as providing greater comparability across EFs and jurisdictions – the FSB Secretariat developed a set of analytical approaches in the form of mapping exercises.

a) Risk mapping

Risk mapping was developed as a means to: (i) help authorities to more comprehensively assess shadow banking risks within and across EFs in a structured, consistent manner; (ii) compare the results to available policy tools, so that areas that may benefit from greater availability or use of policy tools can be identified; and (iii) prioritise risks in a comparable way across jurisdictions. In particular, the risk mapping sought to capture authorities' assessment of the level of shadow banking risks (leverage, liquidity transformation, maturity transformation, and credit risk transfer) associated with the largest entity types classified in each economic function. This assessment was meant to reflect both the data collected on various risk metrics and expert judgement.[31] The risk mapping was developed in response to the experience of the initial (2014) information-sharing exercise, with a view to creating a basic and flexible tool to help jurisdictions prioritise risks from non-bank financial entities.

Most jurisdictions (the exceptions being Argentina and India) were able to complete the risk mapping exercise by scoring some of the entity types classified into economic functions, albeit some of them did so only partially (Saudi Arabia, Spain, Turkey, UK and US). Some jurisdictions that completed the risk mapping scored risks low across all EFs even in the absence of sufficient data on risk metrics. For those jurisdictions that completed the risk mapping, maturity transformation and leverage were the most commonly identified 'top' risks (highest rated risks, irrespective of the actual scores), while liquidity transformation was on average scored as the highest concern.

The challenges faced by jurisdictions in completing the risk mapping may in part reflect gaps in the data needed to form a basis for assessing risks – for example, risk metrics data on liquidity mismatch and some aspects of leverage (e.g. synthetic leverage in funds obtained via derivatives) are very limited. While it is not expected that there would be uniform risk assessments across jurisdictions, similar risks could be assessed differently due to the lack of relevant data and the relatively large role played by expert judgement. The need to arrive at a consistent view across authorities within a jurisdiction may have also played a role, illustrating the need for enhanced cooperation between authorities. However, some jurisdictions also flagged perceived conceptual and practical difficulties with using a common set of risk

[31] In the 2015 information-sharing exercise, authorities were asked to provide an assessment grade of the relative level of risk on a scale from 1 (low) to 5 (high), and to explain this grade based on: (a) the various risk metrics collected as part of the shadow banking information-sharing exercise; and (b) their interpretation of such risks based on supervisory judgement and other expertise. Authorities were asked to explain the key factors supporting their assessment and to identify key policy tools that they believe can reduce shadow banking risks that may pose financial stability concerns.

parameters across all entity types within an economic function given differences in business models and activities.

There have also been some concerns around the robustness of comparing risk scores across jurisdictions, both because of the above-discussed inconsistencies in approach to classifying entities into EFs, but also because of potential differences in the extent to which the availability of policy tools and oversight frameworks or the relative size of the entities was taken into account when deciding the risk score (i.e. whether the assessment was done on a pre-mitigation or post-mitigation basis). These challenges are also reflected in the Global Shadow Banking Monitoring Report 2015.[32] They illustrate the need for further work by the FSB to refine the risk mapping exercise, including by integrating it into or coordinating it closely with existing FSB vulnerability assessment processes, in order to promote a more consistent and robust assessment of risks from which authorities can evaluate the adequacy of their policy tools.

b) Innovations and adaptations risk mapping

The FSB Policy Framework states that the information-sharing exercise serves to promote consistency in application across jurisdictions and "to detect new adaptations and innovations in financial markets." Several jurisdictions, however, noted that the assessment of risks from new innovations and adaptations is particularly challenging. The 2015 information-sharing exercise included an innovations and adaptations risk mapping component where jurisdictions were asked to identify examples of financial entities engaging in new activities that are not considered core to their business models and that may give rise to shadow banking risks.[33]

Only seven of the twenty-four FSB jurisdictions participating in the 2015 exercise reported some form of innovation or adaptation in their markets, possibly because such reporting was voluntary in nature. The examples reported by jurisdictions included: defined contribution pension funds investing in less liquid assets and using derivatives contracts; pension funds that have leveraged investment strategies based on extensive use of repo markets; non-bank mortgage originators that have started investment funds that invest primarily in lower-rated residential mortgage-backed securities, often based on loans they originated; credit derivatives businesses of insurance monolines and guarantors; broker-dealer credit enhancements to support structured vehicles; and securitisation of peer-to-peer lending receivables.

In their responses, some jurisdictions also explained how their policy tools address shadow banking risks associated with the identified innovations or adaptations. In most cases, the relatively small size of these activities suggests financial stability risks are not present, while ongoing monitoring (including through participation in future FSB information-sharing

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32 The report sought to capture risks associated with each of the EFs through the collection of data on maturity transformation, liquidity transformation, credit risk transfer, and leverage. As noted in the report, "Where sufficient data granularity exists across at least some jurisdictions, data are provided to illustrate potential risks associated with some of the economic functions. However, some jurisdictions continue to face significant challenges collecting risk-oriented data, in part because regulatory data collection of various non-bank institutions is not granular, and Flow of Funds in many jurisdictions do not provide specific breakdowns with respect to maturity and liquidity factors. Due to data limitations, some of the exhibits and results… come from a subsample of jurisdictions and may therefore not be extrapolated to describe the entire sample of participating jurisdictions. More specifically, any conclusion from the data related to the subsample may not apply to all of the jurisdictions that participated in this report."

33 In the information-sharing exercise, authorities were asked to identify and explain non-core activities that give rise to particular shadow banking risks and the economic functions they relate to. This mapping was intended to provide a structured process to understand and compare innovations across jurisdictions, helping authorities better assess the extent to which they may need to update their regulatory perimeter and the adequacy of policy tools to address potential stability risks.

exercises) will help to ensure that any growth in these activities that gives rise to financial stability concerns is proactively addressed through regulation and oversight.

5.5 Availability of policy tools

The Policy Framework presents a menu of policy tools from which the authorities can draw if necessary to mitigate the shadow banking risks inherent in each of the economic functions. This provides for a certain degree of consistency across jurisdictions but also gives jurisdictions sufficient flexibility to ensure that adopted tools are appropriate for the non-bank financial entities concerned, the structure of the markets in which they operate and the degree of financial stability risks posed.

Jurisdictions reported a broad range of tools available to address shadow banking risks posed by their non-bank financial entities (see Annex H and Table 2 below). The reported availability of those tools varies across jurisdictions, with most jurisdictions reporting available tools for all classified entity types, while one jurisdiction (Argentina) provided information on tools only for entities classified into one economic function. Table 2 presents the tools most commonly reported as being available across jurisdictions and the shadow banking risks posed by different kinds of entities that authorities in those jurisdictions seek to address using these tools.

Table 2: Most commonly reported policy tools to address shadow banking risks (by EF)

Economic function	Entity type(s)	Most material risk	Policy tools available
EF1	Open-ended investment funds	Liquidity transformation	Redemption gates; suspension of redemptions; redemption fees or other redemption restrictions ; side pockets; limits on investments in illiquid assets; liquidity buffers; limits on asset concentration; limits on leverage; restrictions on maturity of portfolio assets
EF1	Alternative investment funds / hedge funds	Maturity transformation and leverage	Redemption gates; suspension of redemptions; redemption fees or other redemption restrictions ; side pockets; limits on investments in illiquid assets; liquidity buffers; limits on asset concentration; restrictions on maturity of portfolio assets; lock-up periods
EF2	Finance companies	Leverage	Bank prudential regulatory regimes; capital requirements; liquidity buffers; leverage limits; limits on asset concentration/large exposures; restrictions on types of liabilities
EF3	Broker-dealers	Leverage	Prudential regime; capital requirements; limiting re-hypothecation of client assets
EF4	Insurance / mortgage guarantee companies	Imperfect credit risk transfer	Capital requirements; size/scope of business restrictions; enhanced risk management, risk sharing; consolidation rules and risk retention
EF5	Securitisation entities	Leverage, liquidity and maturity transformation	Restrictions on eligible collateral; restrictions on exposures to/from banks; restrictions on liquidity and maturity transformation

While most of the tools reported were drawn from the policy toolkit set out in the FSB Policy Framework, some jurisdictions mentioned additional tools in their response – for example, laws, rules and guidance around corporate governance for trust and loan companies (Canada) and designation of certain non-bank financial companies for heightened supervision and prudential standards (US). Some of the tools reported by jurisdictions, especially for entities classified under EF 1, are discretionary in nature (e.g. redemption gates; suspension of redemptions; imposition of redemption fees).[34, 35] In the case of entities classified under EF 2, some jurisdictions (e.g. Australia, Canada and South Africa) rely primarily on firms' disclosures or market conduct rules. Several jurisdictions did not report having explicit tools to address shadow banking risks arising from entities classified into EF 5 (Mexico, Singapore and South Africa), although some of them noted that they rely on business conduct or prospectus requirements.

A few jurisdictions (Mexico, Netherlands, Indonesia, Russia and Saudi Arabia) suggested potential enhancements to their toolkit – such as liquidity risk management tools and leverage rules for investment funds – in order to enhance the ability of the authorities to address financial stability risks posed by non-bank financial entities. Most jurisdictions, however, reported no planned initiatives to expand or change their policy toolkit.

As noted in the Policy Framework,[36] effective implementation can be facilitated by the sharing of information on members' experiences with the development and use of policy tools to address shadow banking risks. This will enable jurisdictions to discuss how additional tools not found in the Framework could be considered for addressing shadow banking risks. The FSB will support this process with a view to enhancing the policy toolkit in the Framework.

5.6 Implementation challenges and suggestions for improvement

Jurisdictions identified a number of common challenges in participating in the FSB shadow banking information-sharing exercise. Some of the main challenges cited were: (i) unavailability or insufficient granularity of relevant data, or the inability in some cases to share data (particularly supervisory returns) with foreign authorities; (ii) time and resource constraints around cooperation and information sharing among authorities; and (iii) difficulties in assessing shadow banking risks arising from non-bank financial entities' interconnectedness with the rest of the domestic financial system[37] and on a cross-border basis. Some of these challenges were especially pronounced for smaller jurisdictions and for jurisdictions that did not participate in the initial information-sharing exercise.

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[34] Discretionary tools are those whose deployment lies at the discretion of the entities themselves, although regulatory authorisation may also be required or the regulator can also exercise them (e.g. suspension of redemptions) in some cases.

[35] IOSCO published a report in December 2015 (https://www.iosco.org/library/pubdocs/pdf/IOSCOPD517.pdf) on liquidity management tools available to collective investment schemes, which included the findings of a survey into existing liquidity management frameworks with a particular focus on tools to help deal with exceptional situations (e.g. significant redemption pressure). Twenty-seven jurisdictions responded to the survey, which covered topics such as tool availability, use, outcomes, as well as who has the right to activate such tools.

[36] The Framework document states that "Another important prerequisite for the implementation of the framework is the need to review… the effectiveness of policy tools in the policy toolkits. Over time, the FSB will review each of the economic functions and the policy tools as necessary to reflect new financial innovations and adaptations".

[37] The FSB has been working to assess risks from interconnectedness in the financial sector and has presented its findings in its Global Shadow Banking Monitoring Report 2015. The report highlights continued data constraints that prevent a further improvement of such assessment at this time.

In terms of the ways in which the FSB's Policy Framework could be strengthened or improved, some jurisdictions put forward the following suggestions (aligned with the challenges above): (i) national initiatives aimed at improving data availability and quality; (ii) formalising domestic cooperation and information sharing arrangements to ensure implementation of the Framework on an ongoing basis; and (iii) more effectively assessing shadow banking risks by taking into account factors such as cross-border shadow banking activities and interconnectedness across types of entities and activities.

Suggestions (i) and (ii) above fall largely within the responsibility of jurisdictions. While the learning process from participating in information-sharing exercises is helpful and is expected to address some elements, relevant authorities will also need to invest the necessary time and resources to be able to effectively participate on an annual basis. More work can also be done by the FSB within the ambit of the Policy Framework, especially on issue (iii). One such way would be for the FSB to consider inviting additional non-FSB jurisdictions to join the shadow bank monitoring and information-sharing exercise (particularly those with significant non-bank financial sectors or cross-border shadow banking links) in order to obtain a more comprehensive perspective of global shadow banking activities and associated risks, taking due account of confidentiality arrangements among member jurisdictions. Another way would be for the FSB to build on its ongoing work by developing approaches, in consultation with relevant SSBs as appropriate, to enable jurisdictions to better monitor and assess risks from non-bank financial entities' interconnectedness with the rest of the financial system and from cross-border activities.

6. Conclusions and recommendations

The FSB undertook important steps in 2015 to enhance its assessment of non-bank financial entities and activities that may give rise to financial stability risks. For the first time, all FSB jurisdictions participated in the information-sharing exercise as part of their implementation of the FSB Policy Framework. The exercise resulted in the classification of non-bank financial entities into a new activity-based "economic function" measure of shadow banking. This helped narrow down the focus of the analysis – as shown in the FSB's Global Shadow Banking Monitoring Report 2015 – to those parts of non-bank credit intermediation where maturity/liquidity transformation, imperfect credit risk transfer and/or leverage may occur. It was also an opportunity for participating jurisdictions to share information and engage in discussions with their peers about the assessment of shadow banking risks and adoption of policy tools to address them, thereby helping to promote international consistency in approach.

Notwithstanding the progress that has been made, the peer review findings indicate that implementation of the FSB Policy Framework remains at a relatively early stage across its four overarching principles. From the perspective of jurisdictions, more work is needed to review the regulatory perimeter; enhance data collection and remove impediments to cooperation and information-sharing for the assessment of shadow banking risks; and ensure the adequacy of public disclosures by non-bank financial entities. The FSB also needs to enhance the functioning of the information-sharing exercise and strengthen analytical approaches to promote consistent classification of non-bank financial entities into economic functions and assessment of related shadow banking risks. Against this backdrop, the peer review makes a number of recommendations to ensure effective and consistent implementation of the Policy Framework. Addressing these recommendations will ensure that the Framework's application is rigorous enough for jurisdictions to comprehensively assess and respond to potential financial stability risks posed by non-bank financial entities, and also to support FSB risk assessments and policy discussions.

6.1 Actions by FSB jurisdictions

The first set of recommendations involves actions that should be taken by FSB jurisdictions to implement fully the Policy Framework. These actions, and their motivation, are summarised below by topic. The FSB will continue to monitor jurisdictions' implementation of the framework, including with respect to these recommendations. This monitoring will take place through the annual information-sharing exercise, potentially complemented by a follow-up peer review in 3-5 years' time.

Regulatory perimeter: Only a few FSB jurisdictions currently have a systematic process involving all relevant domestic authorities to review the regulatory perimeter in order to ensure that it encompasses non-bank financial entities and activities that could pose financial stability risks. In most cases, reviews of the regulatory perimeter appear to be *ad hoc* in nature and undertaken in response to concerns arising about a particular activity or entity type. In addition, it is not clear to what extent existing processes to assess financial stability risks (including those posed by non-bank financial entities) involve an assessment of related regulatory gaps or the adequacy of the regulatory framework.

The need for a systematic process becomes even more apparent in light of the common challenges identified by jurisdictions (data gaps, resource constraints, timing issues, cross-border coordination, insufficient mandates) in bringing non-bank financial entities that could pose financial stability risks within the regulatory and supervisory perimeter in a timely manner. Where it does not already exist, there may therefore be merit for jurisdictions to establish such a process, building on guidance provided by SSBs, which would involve: (i) a regular and specific focus on the adequacy of the regulatory perimeter, informed by assessments of financial stability risks; and (ii) the participation of all relevant regulatory authorities (and not just those involved in financial stability analysis), thereby contributing to a coordinated policy response.

Recommendation

1A. FSB jurisdictions should establish a systematic process involving all relevant domestic authorities to assess the shadow banking risks posed by non-bank financial entities or activities, and ensure that any entities or activities that could pose material risks to financial stability are brought within the regulatory perimeter in a timely manner.

Collection of information about shadow banking risks: Since existing reporting requirements were not usually designed for collecting shadow banking-specific information from regulated non-bank financial entities, the data may not be adequate or granular enough to assess related risks. This is illustrated to some extent by the fact that many jurisdictions did not supply all of the relevant data required to calculate risk metrics for assessing shadow banking risks in the information-sharing exercise. Gaps in the availability of data were particularly pronounced for non-regulated entities, given that authorities' data collection powers often do not extend to such entities. In some cases, identified gaps may be due to budget, resource and technological constraints, and may also reflect concerns that the perceived benefits of enhanced data collection are outweighed by the additional reporting burden imposed on entities.

A number of jurisdictions identified areas to improve data availability and granularity, although only a few of them actually reported initiatives to enhance data collection from regulated non-bank financial entities or to expand powers to enable data collection from non-regulated entities. More work is therefore needed to enhance the availability and granularity of data in order to effectively assess shadow banking risks. Jurisdictions should ensure that they have the necessary powers to collect relevant information and to address identified data gaps, focusing particularly on entities or activities that may give rise to material financial stability risks.

Recommendation

1B. FSB jurisdictions should address identified gaps in the availability of data, including by having sufficient information-collection powers, to assess financial stability risks posed by non-bank financial entities or activities, taking into account the potential materiality of those risks.

Cooperation and information-sharing: The Policy Framework highlights the importance of cooperation and information sharing between relevant authorities on a regular basis to be able to assess the risks posed by shadow banking entities and to provide for a level of international consistency. However, institutional constraints have been identified in the sharing of such information within and across borders in several jurisdictions. On the domestic side, a few jurisdictions and authorities highlighted the challenges of sharing confidential information at an entity level – for example, with non-regulatory authorities (such as the government) or between supervisors and macroprudential authorities – and initiatives are underway in some jurisdictions to address these challenges. Internationally, it is not clear whether existing mechanisms to share information with overseas counterparts (e.g. MoUs) that were mostly designed for cooperation in enforcement or supervisory matters are adequate to share information about risks to financial stability from non-bank financial entities and activities.

These findings are supported by the results of the 2015 information-sharing exercise. Some jurisdictions provided only partial submissions, while in a few other cases the responses did not reflect a joint submission representing a coordinated response from all the relevant authorities in that jurisdiction. The constraints were reported to be particularly pronounced in the case of authorities that are not members of the FSB. Some of these issues may reflect the early stage of implementation of the Policy Framework, with several jurisdictions participating in the information-sharing exercise for the first time. However, they also suggest that there is scope to improve cooperation and information sharing arrangements domestically and on a cross-border basis to fulfil the objectives of the fourth overarching principle of the Policy Framework.

Recommendation

1C. FSB jurisdictions should remove impediments to cooperation and information-sharing between authorities, including on a cross-border basis, in order to:

- ***monitor and assess shadow banking risks arising from non-bank financial entities or activities;***
- ***support the application of appropriate policy tools where necessary to mitigate financial stability risks; and***
- ***participate effectively in the FSB information-sharing exercise.***

Public disclosures: It is unclear from the peer review responses whether authorities have adequately evaluated the extent to which existing disclosure requirements for non-bank financial entities enable market participants to assess shadow banking risks posed by these entities on an ongoing and systematic basis. Moreover, while financial stability and other such reports published by central banks and other authorities provide a wide range of information about financial system conditions, it is not clear to what extent such reporting makes a sufficient contribution to enable market participants to fully gauge shadow banking risks. While most jurisdictions stress the need for continuous monitoring of disclosure requirements and identify room for improvement, only a few of them are planning reviews that could lead to changes in such requirements for non-bank financial entities.

These findings raise the question of the adequacy of efforts in this area. Concerted efforts are necessary to ensure effective implementation of the Policy Framework's third overarching principle that enhanced market disclosure and transparency will help market participants to better monitor the entities, absorb any news or developments in a timely manner, and make informed decisions, hence reducing the chance a sudden loss of confidence that may lead to runs. Effective implementation by FSB jurisdictions would therefore require: (1) a review by relevant authorities of existing public disclosures by non-bank financial entities vis-à-vis their identified shadow banking risks; and (2) actions by those authorities to address any identified material gaps in existing disclosure requirements.

Recommendation

1D. FSB jurisdictions should review the extent to which existing public disclosures by non-bank financial entities are adequate to help market participants understand the shadow banking risks posed by such entities, and enhance those disclosures as necessary to address identified material gaps.

6.2 Actions by the FSB

The second set of recommendations involves actions by the FSB itself to enhance effective implementation of the Policy Framework, including by facilitating jurisdictions' participation in the information-sharing exercise. These actions, and their motivation, are summarised below by topic and are presented in a rough order of priority – starting with actions that pertain to the functioning of the information-sharing exercise. Prioritisation is not the same as relative importance or sequencing: all of the topics below are important and a number of actions can be pursued concurrently and independently of each other, although their implementation horizons and resource implications vary. Where appropriate, the actions include timing considerations.

Information-sharing exercise: The peer review evaluated the functioning of the information-sharing exercise, which is an important part of the FSB Policy Framework since it is the means by which information on shadow banking risks can be shared between authorities and with the FSB to provide for a level of international consistency and arrive at global measures of such risks. The exercise included classification of non-bank financial entities into EFs and a risk mapping tool to help jurisdictions prioritise risks from these entities. Both of these involved a degree of judgement by authorities to determine where shadow banking risks may arise, highlighting the importance of having a consistent approach to classification in order to be able to make meaningful comparisons and arrive at robust conclusions to inform policy discussions.

While most jurisdictions classified non-bank financial entities into the five economic functions broadly in line with the Policy Framework, there were some differences in approach and inconsistencies in classification. These arose from factors such as: limitations in the availability or granularity of data; the varying nature of non-bank financial entities across jurisdictions; and different interpretations and judgements by jurisdictions on the risks associated with these entities. The 2015 exercise took a conservative approach of including entity types into the narrow measure of shadow banking for all jurisdictions if the activities associated with non-bank credit intermediation could give rise to shadow banking risks in at least one jurisdiction. As a result, this measure may currently overestimate the degree to which non-bank credit intermediation gives rise to systemic risks.

Most jurisdictions were able to complete the risk mapping exercise, albeit some of them did so only partially. The challenges faced by jurisdictions in completing the risk mapping may in part reflect gaps in the data needed to form a basis for assessing risks. While it is not expected that there would be uniform risk assessments across jurisdictions, similar risks could be assessed differently due to the lack of relevant data and the relatively large role played by expert judgement. However, some jurisdictions also flagged perceived conceptual and practical difficulties with using a common set of risk parameters across all entity types within an economic function given differences in business models and activities.

The experience from the 2015 information-sharing exercise illustrates the need for further work by the FSB to resolve material differences of view and thereby promote greater consistency in the classification of non-bank financial entities. The need for transparent, consistent and well-documented classification is particularly important given the expected use of this information in risk assessments and policy discussions by the FSB. At present, these inconsistencies are sought to be addressed through FAQs, template instructions as well as workshops and conference calls involving jurisdictions and the FSB Secretariat. The FSB will assist this process by issuing additional implementation guidance, starting with the 2016 exercise, that encapsulates agreed enhancements and by supplementing the process of discussion and review among jurisdictions with additional approaches. These could include in-depth analyses ('deep-dives') of specific sectors or functions across jurisdictions as well as country case studies aimed at enhancing the understanding of the structure, functioning and shadow banking risks of the non-bank financial sector in particular jurisdictions.

Another way to strengthen the information-sharing exercise is to expand the sample of participating jurisdictions. This can be done by encouraging additional non-FSB jurisdictions (particularly those with potentially significant non-bank financial sectors or cross-border shadow banking links) to join the shadow banking monitoring and information-sharing exercise in order to obtain a more comprehensive perspective of global shadow banking activities and associated risks, taking due account of confidentiality arrangements among member jurisdictions.

Recommendations

2A. The FSB will, starting with the 2016 information-sharing exercise, prepare additional implementation guidance setting out agreed methodological enhancements to definitions, the approach to economic classification (including on the scope and terminology used to describe the entities and activities meant to be captured), the risk mapping approach, and the reporting of policy tools.

2B. The FSB will, starting with the 2016 information-sharing exercise, strengthen the process of discussion and review as part of the information-sharing exercise (e.g. via deep-dives for specific sectors/functions, country case studies etc.) for jurisdictions to learn from each other and to enhance consistency in economic classification and risk assessment.

2C. The FSB will encourage additional non-FSB jurisdictions with significant non-bank financial sectors or cross-border shadow banking links to participate in the information-sharing exercise, in order to obtain a more comprehensive perspective on global shadow banking activities and associated risks.

Assessment of shadow banking risks: Jurisdictions identified a number of common challenges in participating in the FSB information-sharing exercise, including difficulties in assessing shadow banking risks arising from non-bank financial entities' interconnectedness with the rest of the domestic financial system and on a cross-border basis.

Several jurisdictions highlighted the importance of measuring and monitoring interconnectedness in the financial system. Some indicated that more metrics on the interconnectedness between shadow banking entities and the rest of the financial system would add to the understanding of financial stability risks posed by shadow banking entities and activities. Some estimates of interconnectedness were found in the FSB's Global Shadow Banking Monitoring Report 2015, but the available data did not shed light on credit quality and maturity profiles or related potential credit, liquidity and funding risks. This will require the availability of granular data as well as the development of more robust analytical frameworks to assess interconnectedness risks.

Some jurisdictions also noted that their ability to respond to the risks posed by non-bank financial entities may be complicated by limits on their regulatory reach given the cross-border nature of some these activities. Due in part to data constraints, shadow banking risks associated with cross-border activities and exposures (e.g. non-bank financial entities based in other jurisdictions that operate domestically) remain largely unassessed.

More work will be done by the FSB to improve the approaches to assessing shadow banking risks within the ambit of the Policy Framework. One such way would be to develop approaches, in consultation with relevant SSBs as appropriate, to enable jurisdictions to better monitor and assess risks from non-bank financial entities' interconnectedness with the rest of the financial system (building on FSB work already underway) and from cross-border activities.

Recommendation

2D. The FSB will develop approaches, in consultation with relevant SSBs as appropriate, to help jurisdictions better monitor and assess risks from non-bank financial entities' interconnectedness with the rest of the financial system and from cross-border activities.

Policy tools: As part of the information-sharing exercise, jurisdictions also shared information about the range of tools available to address shadow banking risks posed by non-bank financial entities. While most of those tools were drawn from the policy toolkit set out in the Policy Framework, some jurisdictions reported additional tools such as laws, rules and guidance around corporate governance; bank-equivalent regulation for finance companies; and designation of certain non-bank financial companies for heightened supervision and prudential standards. Some of the tools reported by jurisdictions, especially for entities classified under EF 1, are discretionary in nature. In the case of entities classified under EF 2, some jurisdictions rely primarily on firms' disclosures or market conduct rules. Several jurisdictions did not report having explicit tools to address shadow banking risks arising from entities classified into EF 5, although some of them noted that they rely on business conduct or prospectus requirements. Most jurisdictions reported no planned initiatives to expand or change their policy toolkit.

As noted in the Policy Framework, effective implementation can be facilitated by the sharing of information on members' experiences with the development and adoption of policy tools to address shadow banking risks. This will enable jurisdictions to discuss how additional tools not found in the Framework could be considered for addressing shadow banking risks. The FSB will, in consultation with relevant SSBs, support this process by encouraging this type of information sharing.

Recommendation

2E. The FSB, in consultation with relevant SSBs, will encourage information sharing in relation to members' experiences with the development and adoption of policy tools to address financial stability risks, with a view to enhancing the policy toolkit in the FSB Policy Framework.

Public disclosures: As previously noted, concerted efforts are necessary to ensure effective implementation of the Policy Framework's third overarching principle that authorities should enhance disclosure by non-bank financial entities as necessary to help market participants understand the extent of shadow banking risks posed by such entities. In order to facilitate this process, the FSB, in consultation with relevant SSBs will promote the sharing of approaches used to identify and resolve gaps in public disclosures that help market participants assess shadow banking risks. The sharing of experiences on these issues can take place through dedicated workshops involving both authorities and market participants, as well as through stocktakes of good practices if deemed appropriate.

Recommendation

2F. The FSB will promote, in collaboration with relevant SSBs, the sharing of approaches used to identify and resolve gaps in public disclosures by non-bank financial entities that help market participants assess shadow banking risks (e.g. through workshops or stocktakes of good practices).

Annex A: Abbreviations for financial authorities in FSB jurisdictions

Argentina	
BCRA	Central Bank of Argentina (central bank)
CNV	National Securities Commission (securities regulator)
SSN	National Insurance Superintendency (insurance regulator)
Australia	
APRA	Australian Prudential Regulation Authority (prudential regulator)
ASIC	Australian Securities and Investments Commission (securities regulator)
RBA	Reserve Bank of Australia (central bank)
CFR	Council of Financial Regulators
Brazil	
BCB	Central Bank of Brazil (central bank and banking supervisor)
CMN	National Monetary Council
CNPC	National Council of the Complementary Pension
CNSP	National Council of Private Insurance
CVM	Securities and Exchange Commission (securities regulator)
COREMEC	Committee on the Regulation and Supervision of Financial, Capital, Insurance, Pension Fund and Capitalization Markets
PREVIC	National Superintendence of Complementary Pensions (pension regulator)
SUSEP	Superintendence of Private Insurance (insurance regulator)
Canada	
OSFI	Office of the Superintendent of Financial Institutions (prudential supervisor)
BOC	Bank of Canada (central bank)
IIROC	Investment Industry Regulatory Organization of Canada
CMHC	Canada Mortgage and Housing Corporation
CSA	Canadian Securities Administrators (umbrella organisation of Canadian Provincial/Territorial securities regulators) (securities regulators)
China	
PBC	People's Bank of China (central bank)
CBRC	China Banking Regulatory Commission (banking regulator)
CSRC	China Securities Regulatory Commission (securities regulator)
CIRC	China Insurance Regulatory Commission (insurance regulator)
France	
BdF	Banque de France (central bank)
AMF	Autorité des Marchés Financiers (securities regulator)
ACPR	Autorité de Contrôle Prudentiel et de Résolution (banking and insurance supervisor and resolution authority)
HCSF	Haut Conseil de Stabilité Financière (High Council for Financial Stability)
Germany	
BaFin	Bundesanstalt für Finanzdienstleistungsaufsicht (Federal Financial Supervisory Authority) (prudential / securities regulator)
FMSA	Bundesanstalt für Finanzmarktstabilisierung (Federal Agency for Financial Market Stabilisation)
FSC	Ausschuss für Finanzstabilität (Financial Stability Committee)
Bundesbank	Deutsche Bundesbank (central bank)
Hong Kong	
HKMA	Hong Kong Monetary Authority (monetary authority and banking supervisor)
SFC	Securities and Futures Commission (securities regulator)

IA	Insurance Authority (insurance regulator)
MPFA	Mandatory Provident Fund Schemes Authority (pension funds regulator)
FSTB	Financial Services and Treasury Bureau
CFR	Council of Financial Regulators
FSC	Financial Stability Committee

India

RBI	Reserve Bank of India (central bank and regulator of banks and NBFCs)
SEBI	Securities and Exchange Board of India (securities and commodity market regulator)
NHB	National Housing Bank (regulator of housing finance companies)
IRDA	Insurance Regulatory and Development Authority (insurance regulator)
PFRDA	Pension Fund Regulatory and Development Authority (pension regulator)
FSDC	Financial Stability and Development Council
MCA	Ministry of Corporate Affairs
MoF	Ministry of Finance

Indonesia

BI	Bank Indonesia (central bank and banking supervisor)
LPS	Lembaga Penjamin Simpanan (Indonesian Deposit Insurance Corporation)
OJK	Otoritas Jasa Keuangan (Indonesian Financial Services Authority) (securities regulator)
FKSSK	Forum Koordinasi Stabilitas Sistem Keuangan (Financial System Stability Coordination Forum)

Italy

BoI	Bank of Italy (Central bank and banking supervisor)
CONSOB	Commissione Nazionale per le Società e la Borsa (Italian Securities and Exchange Commission) (securities regulator)
COVIP	Commissione Vigilanza sui Fondi Pensione (pension funds regulator)
IVASS	Istituto per la Vigilanza sulle Assicurazioni (insurance supervisory authority)

Japan

JFSA	Japan Financial Services Agency (banking, insurance and securities regulator)
BOJ	Bank of Japan (central bank)
SESC	Securities and Exchange Surveillance Commission (securities regulator)
DICJ	Deposit Insurance Corporation of Japan

Korea

FSC	Financial Services Commission (prudential regulator (with FSS))
KDIC	Korea Deposit Insurance Corporation (deposit insurance and bank resolution agency)
BOK	Bank of Korea (central bank)
FSS	Financial Supervisory Services

Mexico

BANXICO	Bank of Mexico (central bank)
CNBV	National Banking and Securities Commission (prudential supervisor)
FSSC	Financial System Stability Council
CNSF	National Insurance and Surety Commission (insurance supervisor)
SHCP	Ministry of Finance
Consar	National Commission of Savings for Retirement (pension supervisor)
IPAB	Institute for the Protection of Bank Savings
CONDUSEF	National Commission for the Protection of Users of Financial Services

Netherlands

DNB	De Nederlandsche Bank (central bank and prudential regulator)
AFM	Netherlands Authority for the Financial Markets (securities regulator)

Russia	
CBR	Central Bank of Russia (central bank and banking, insurance and securities regulator)
NFSC	National Financial Stability Council
Saudi Arabia	
SAMA	Saudi Arabian Monetary Agency (central bank and prudential regulator)
CMA	Capital Market Authority (securities regulator)
Singapore	
MAS	Monetary Authority of Singapore (central bank and banking, insurance and securities regulator)
South Africa	
SARB	South African Reserve Bank (central bank)
FSB	Financial Services Board of South Africa (securities regulator)
NCR	National Credit Regulator (market conduct regulator)
FSC	Financial Stability Committee
Spain	
BdE	Banco de España (central bank)
DGS	Directorate General of Insurance and Pension Funds (insurance and pension regulator)
CNMV	Spanish Securities and Market Authority (securities regulator)
Switzerland	
SNB	Swiss National Bank (central bank)
FINMA	Financial Market Supervisory Authority (integrated financial regulator)
FDF	Federal Department of Finance
Turkey	
CMB	Capital Markets Board of Turkey (securities regulator)
BRSA	Banking Regulation and Supervision Agency (banking regulator)
CBRT	Central Bank of the Republic of Turkey (central bank)
United Kingdom	
BoE	Bank of England (central bank, prudential supervisor and resolution authority)
PRA	Prudential Regulation Authority (subsidiary of the Bank of England)
HMT	Her Majesty's Treasury (economic and finance ministry)
FCA	Financial Conduct Authority (securities regulator)
TPR	The Pensions Regulator
FPC	Financial Policy Committee
United States	
SEC	Securities and Exchange Commission (securities regulator)
FRB	Federal Reserve Board (central bank and prudential supervisor)
OCC	Office of Comptroller of the Currency (banking supervisor)
CFTC	Commodity Futures Trading Commission (commodities and futures regulator)
FSOC	Financial Stability Oversight Council (macroprudential authority)
OFR	Office of Financial Research (macroprudential and financial data standards authority)
European Union	
EBA	European Banking Authority
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
EC	European Commission
ECB	European Central Bank
EIOPA	European Insurance and Occupational Pensions Authority

Annex B: Highlights of the FSB's Global Shadow Banking Monitoring Report 2015

The Global Shadow Banking Monitoring Report 2015 presents the results of the fifth annual monitoring exercise using data as of end-2014 for 26 jurisdictions (including Ireland for the first time and the euro area as a whole), which together account for about 80% of global GDP and 90% of global financial system assets.

This report introduces an enhancement to the monitoring methodology as a further step towards narrowing the focus to those parts of non-bank credit intermediation where shadow banking risks such as maturity transformation, liquidity transformation or leverage may occur. For this purpose, the report used a new activity-based "economic function" measure of shadow banking, based on the high-level policy framework published by the FSB in August 2013. In order to ensure a certain degree of consistency in reporting, a conservative approach was adopted and all authorities were guided to report non-bank credit intermediation if such activity was considered to give rise to shadow banking risks in at least some jurisdictions.[38] As a result, the Report indicates that the narrow measure its presents may overestimate the degree to which non-bank credit intermediation gives rise to systemic risks. Since this was the first time that many jurisdictions took part in the assessment and this remains a work in progress, FSB members will continue to deepen their understanding of shadow banking and any potential risks through greater data availability, more consistency in assessments and information-sharing. As such, the narrow measure of shadow banking may be subject to some degree of change in future reports.

The Report highlights that the aggregate "MUNFI" measure of the assets of other financial intermediaries (OFIs), pension funds and insurance companies grew by 9% to $137 trillion over the past year, and now represents about 40% of total financial system assets in 20 jurisdictions and the euro area.[39, 40] Based on assets of OFIs alone, (i.e. excluding pension funds and insurance companies), non-bank financial intermediation of the 20 jurisdictions and the euro area rose $1.6 trillion to $80 trillion in 2014. OFI assets in the 20 jurisdictions and the euro area reached 128% of GDP in 2014, up 6 percentage points from 2013 and 15 percentage points from 2011. It is nearing the previous high-point of 130% prior to the financial crisis. Among OFI sub-sectors that showed the most rapid growth in 2014 are trust companies, MMFs, and fixed income and other funds. Emerging market economies (EMEs) showed the most rapid increases in OFI assets. In 2014, 8 EMEs had OFI growth rates above 10%, including two that grew over 30%. However, this rapid growth is generally from a relatively small base.

Based on the new methodology for assessing non-bank financial entities and activities by "economic functions", the narrow measure of global shadow banking that may pose financial stability risks amounted to $36 trillion in 2014 for the 26 participating jurisdictions. This is

[38] There were also cases in which authorities considered types of financial intermediation in their jurisdictions to be sufficiently distinct to warrant exclusion from the narrow measure. Annex 1 of the Report provides a review of the material exclusions made by authorities and authorities' rationale for such exclusions.

[39] The FSB's Monitoring Universe of Non-bank Financial Intermediation (MUNFI) includes OFIs, pension funds and insurance companies.

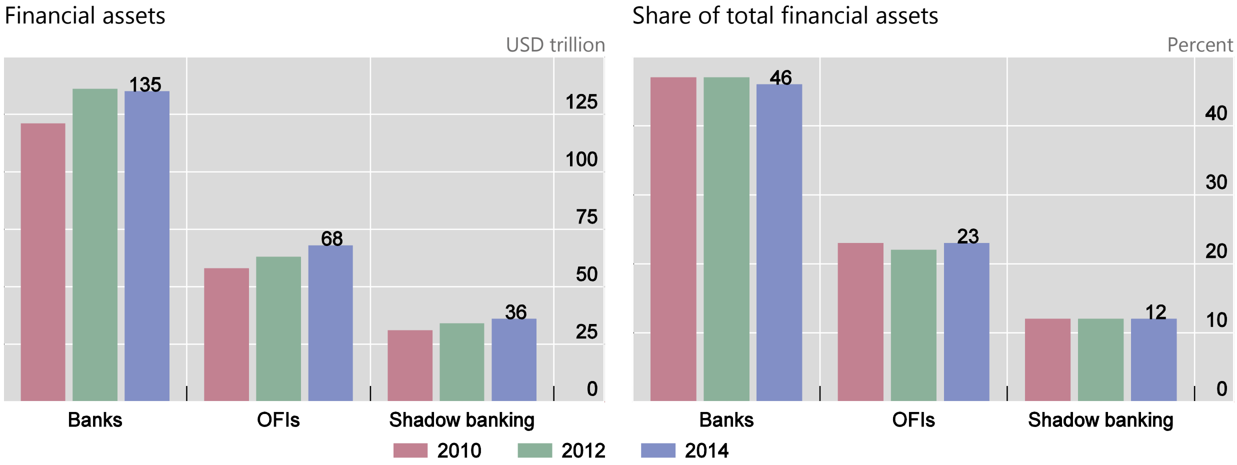
[40] Measures of growth throughout the report are based on time series data included in jurisdictions' 2015 submission, going from 2014 back to 2002. The report, however, focuses mainly on estimates of growth and trends from 2011 forward, because jurisdiction-year data gaps were relatively few between 2011 and 2013, with no such gaps for 2014.

equivalent to 59% of GDP of participating jurisdictions, and 12% of financial system assets, and has grown moderately over the past several years (Chart 1). More than 80% of global shadow banking assets reside in a subset of advanced economies in North America, Asia and northern Europe (Chart 2).

Chart 1: Assets of financial intermediaries

Assets of financial intermediaries

26 jurisdictions — Chart 1



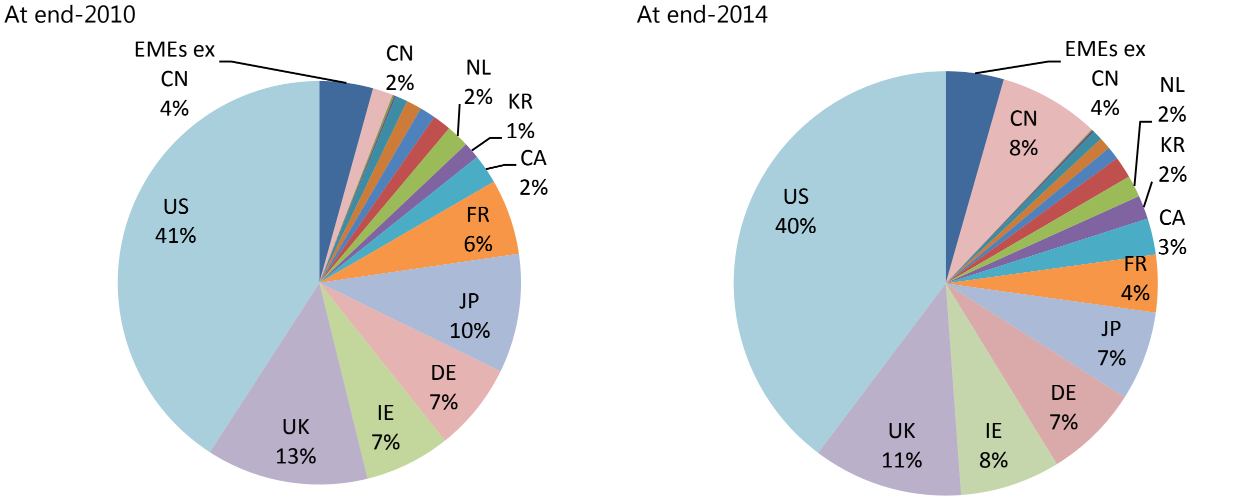
Notes: Banks = broader category of 'deposit-taking institutions'; OFIs = Other Financial Intermediaries; Shadow Banking = measure of shadow banking based on economic functions. These are not mutually exclusive categories, as shadow banking is largely contained in OFIs.

Source: Global Shadow Banking Monitoring Report 2015, FSB

Chart 2: Share of Shadow Banking Assets

Share of shadow banking assets

26 jurisdictions — Chart 2



Note: CA = Canada; CN = China; DE = Germany; EMEs ex CN = Argentina, Brazil, Chile, India, Indonesia, Mexico, Russia, Turkey, Saudi Arabia, South Africa; FR = France; IE = Ireland; JP = Japan; KR = Korea; NL = Netherland; UK = United Kingdom; US = United States.

Source: Global Shadow Banking Monitoring Report 2015, FSB

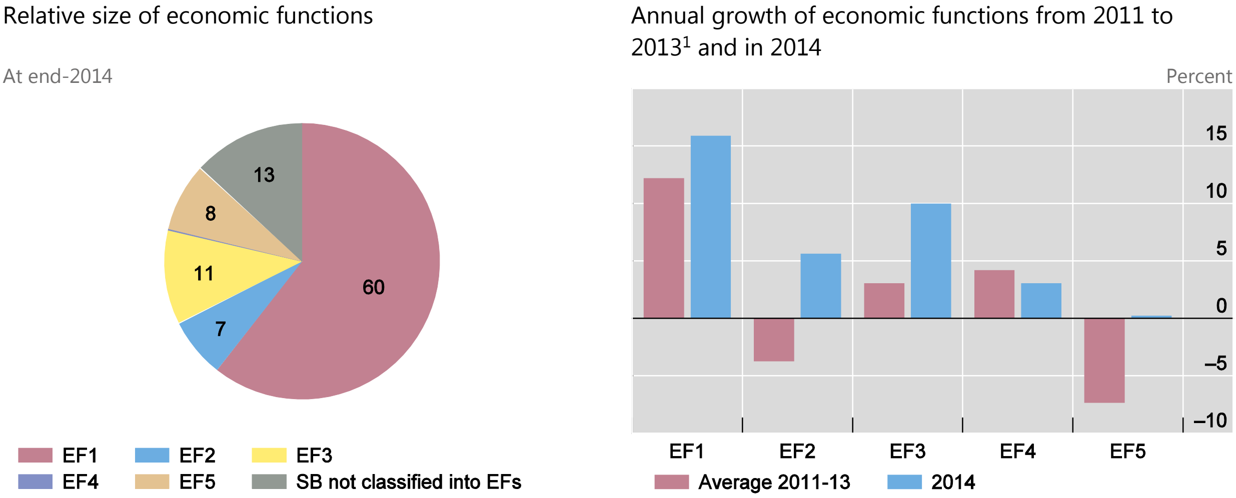
The new classification by economic functions shows that credit intermediation associated with collective investment vehicles with features that make them susceptible to runs (e.g. MMFs, hedge funds and other investment funds) represents 60% of the narrow measure of shadow banking. It has grown more than 10% on average over the past four years. By contrast, the level of securitisation-based credit intermediation – among the key contributors to the financial crisis – has fallen in recent years. At the aggregate level, interconnectedness between the banking and the non-bank financial system, excluding those OFIs that are prudentially consolidated into banking groups, continues to decrease from its pre-crisis peak. However, in some jurisdictions, OFIs' credit and funding exposures to banking systems are reported to be quite high and merit further assessment as to the extent of concentration of exposures and underlying risks (chart 3).

Chart 3: Shadow Banking by Economic Funtion

Shadow banking by economic function

26 jurisdictions

Chart 3



Note: EF1 = Economic Function 1; EF2 = Economic Function 2; EF3 = Economic Function 3; EF4 = Economic Function 4; EF5 = Economic Function 5; SB not classified into EFs = Residual OFI with some shadow banking risks but not classified into any of the five economic functions.

[1]: Controlling for exchange rate effects. Average annual growth rates not shown for "not classified" category.

Source: Global Shadow Banking Monitoring Report 2015, FSB

Building on the economic functions classification, the report introduces risk analyses as a further enhancement to the annual monitoring report. It describes ways in which particular entity types may engage in leverage, liquidity and maturity transformation, and imperfect credit risk transfer in each economic function. The report also presents aggregate risk metrics across particular entity types in different economic functions, illustrating how levels of risk-taking (as reported by each jurisdiction) range widely. Due to data limitations, some of the analysis in the report comes from a subsample of jurisdictions and may therefore not be extrapolated to describe the entire sample of participating jurisdictions. While data gaps hamper a more thorough quantitative assessment of shadow banking risks, a review of jurisdictions' assessment of risks based on available data and supervisory judgment suggests relatively higher attention to liquidity and maturity transformation risks at the current conjuncture. With respect to these risks, FSB members noted current concerns about rising risks stemming from the overestimation by investors of the degree of liquidity in fixed income markets as well as the growth of assets under management in funds that offer on-demand redemptions but invest in less liquid assets.

Annex C: Addressing inconsistencies in the reporting of non-bank financial entities by economic function (2015 information-sharing exercise)

Initial submissions from participating jurisdictions for the 2015 shadow banking information-sharing exercise revealed a number of inconsistencies in the approaches to reporting non-bank financial entities inside or outside of the five economic functions.

To some extent, these inconsistencies were expected, given the Policy Framework's focus on shadow banking activities, as described by the five economic functions, rather than the legal names or forms of the relevant non-bank financial entities. The activities and associated shadow banking risks of "trust companies", for example, varied across reporting jurisdictions, leading to valid differences in reporting relative to the economic functions.[41]

Some inconsistencies may have also reflected differences in authorities' assessment of shadow banking activities. The Policy Framework provides for authorities to assess their non-bank entities' involvement in shadow banking activities based on qualitative information and expert judgements related to local conditions in the non-bank financial system, in particular where data are not readily available.

Given these inherent inconsistencies, the information-sharing exercise also aims to improve consistency in the assessments via discussions and review. For the 2015 exercise, with many jurisdictions taking part for the first time, all participating jurisdictions were asked to make conservative assumptions in reporting their non-bank financial entities inside of economic functions, so that further detailed discussions could take place next year to narrow the differences. All participating jurisdictions were therefore guided to report non-bank credit intermediation inside economic functions if such activity was considered to give rise to shadow banking risks in at least some jurisdictions.

As part of the information-sharing exercise, participating jurisdictions discussed each other's submissions and took a number of steps to resolve these inconsistencies at a workshop and several conference calls, documented through issue notes/FAQs that were reviewed by participating jurisdictions. In some cases, participating jurisdictions agreed to a conservative approach for 2015, as outlined in the examples below, but with a view to revisit the issue more thoroughly in future exercises. The following are examples of agreements reached during the 2015 exercise:

(a) **Collective investment vehicles**: A number of participating jurisdictions initially classified fixed income funds and other (mixed/balanced) funds outside of economic functions, while others classified (at least some of) these funds into Economic Function 1 (*management of collective investment vehicles with features that make them susceptible to runs*). Through the information-sharing exercise, participating jurisdictions agreed to improve the consistency in the classification of collective investment vehicles in the 2015 exercise based on the following considerations:

- The assessment of the susceptibility to runs of collective investment vehicles (including funds) should be based on stressed-market conditions and not on normal market conditions.

[41] In some jurisdictions, trust companies' activities are limited to accounting, administrative and legal services to foreign corporations and were therefore reported outside of economic functions. In other jurisdictions their activities are similar to collective investment vehicles with features that make them susceptible to runs, leading to classification into EF 1.

- Open-ended fixed income and other (mixed/balanced) funds, if they are involved in credit intermediation, should be classified into Economic Function 1, as on-demand redemptions in combination with investments in less liquid and more long-term debt securities can potentially create runs among investors in adverse market conditions.
- Closed-ended fixed income and (mixed/balanced) funds, if they are involved in credit intermediation, should be classified into Economic Function 1 if they are leveraged and involve any sizeable amount of maturity and/or liquidity transformation. While leveraged closed-ended funds generally do not face the same on-demand redemption pressures from investors as open-ended funds, they may still be subject to runs in adverse market conditions from their creditors providing the leverage, for example if the funds invest in highly illiquid assets and/or if the maturity of assets significantly exceeds the duration of the initial lock-up period.

(b) **Prudential regulation**: Initial submissions from participating jurisdictions revealed differences in the assessment based on the type of prudential regulation applied to certain non-bank financial entities. This was particularly the case for entities classified into Economic Functions 2 and 3 (e.g. finance companies and broker-dealers). For example, some jurisdictions initially excluded entities from economic functions if they were subject to any form of prudential regulation, while others only excluded entities that were consolidated into banking groups and therefore subject to bank-prudential regulation and supervision. During the information-sharing exercise, participating jurisdictions agreed to:

- report for the 2015 exercise any non-bank entities that exhibits shadow banking activities, as described by the five economic functions, into economic functions, independent of the prudential regulation applied to them, unless the entities are prudentially consolidated into banking groups. The effectiveness of prudential regulation applied to the classified non-bank financial entities in reducing the relevant shadow banking risks will be discussed during next year's exercise.

(c) **Residual "Other" OFI subsector**: Some jurisdictions initially reported a residual "Other" OFI subsector outside of economic functions. However, after discussions participating jurisdictions collectively agreed (for the 2015 exercise):

- to classify these residual "Other" OFI subsectors into economic functions, to the extent that they could (party) include shadow banking activities. In other words, jurisdictions may only report this residual outside of shadow banking if they can demonstrate to peer jurisdictions that it is a pure statistical residual and does not include any shadow banking activities.

The discussions and collective agreements reached by participating jurisdictions as part of the information-sharing exercise significantly reduced the initial inconsistencies in the reporting of non-bank financial entities, to the extent that all of the larger entities eventually excluded from shadow banking were either not engaged in credit intermediation, or were assessed to not engage in shadow banking activities as described by the five economic functions. Any material exclusions made by jurisdictions were disclosed in Annex 1 of the Global Shadow Banking Monitoring 2015, and may be revisited as part of future exercises if needed.

In some cases, authorities from participating jurisdictions agreed to conservatively align their classification of non-bank financial entities for the 2015 exercise with a view to revisit some of these issues more thoroughly during next year's exercise. Examples include:

- the reporting of non-bank financial entities subject to bank-prudential regulation and supervision, or equivalent, but not consolidated into banking groups;
- the assessment of run risk of collective investment vehicles that invest in highly liquid markets (e.g. sovereign bonds); and
- the interpretation of “short-term” in the definition of Economic Function 2 (*loan provision that is dependent on short-term funding*) and Economic Function 3 (*intermediation of market activities that is dependent on short-term funding or on secured funding of client assets*).

Future shadow banking information-sharing exercises will benefit from lessons learned during the 2015 exercise. In particular, jurisdictions that will be participating in the exercise for the second or third time will be able to leverage on their initial experience. The 2015 exercise revealed the need for many jurisdictions to improve the availability of data, especially related to shadow banking risks. It also generated a number of issue notes related to inconsistencies, which will be turned into FAQs that will be available for future iterations of the exercise.

Annex D: Authorities responsible for the regulation and supervision of non-bank financial entities in FSB jurisdictions

Jurisdiction	Economic function	Entity types	Securities Regulator	Prudential Regulator	Central Bank	Others
Argentina	EF1	Mutual funds	CNV			
	EF2	Mutual societies, cooperatives, credit cards “closed system”, leasing and factoring companies			BCRA (credit cards and leasing and factoring companies)	
	EF3	*No entity classified*				
	EF4	Mutual guarantee societies			BCRA	
	EF5	Financial trusts	CNV			
Australia	EF1	Hedge funds, Mortgage trusts; Other funds; Money market, funds (cash management trusts)	ASIC			
	EF2	Finance companies	ASIC			
	EF3	Money market corporations (broker dealers)	ASIC			
	EF4	Lenders mortgage insurers		APRA		
	EF5	Structured finance vehicles	ASIC	APRA		
Brazil	EF1	Referenced investment funds; Fixed income investment funds; Multimarket investment funds	CVM			
	EF2	Finance companies		CMN	BCB	
	EF3	Broker dealers		CMN	BCB	
	EF4	Insurance companies				SUSEP
	EF5	Receivables investment funds	CVM			
Canada	EF1	Credit hedge and pooled funds; Money market funds; Fixed income and mixed funds; Physical ETFs	Provincial/Territorial Securities regulators			
	EF2	Finance companies; Non-prudentially regulated FIs that originate mortgages; Mortgage investment corporations (MICs)	Provincial/Territorial Securities regulators[42]			
	EF3	Broker dealers				IIROC
	EF4	Private mortgage insurers		OSFI		MOF
	EF5	ABCP; NHA MBS issued by non-prudentially regulated FIs; Synthetic ETFs	Provincial/Territorial Securities regulators[43]			CHMC[44]

[42] Provincial/Territorial Securities Regulators are only responsible for the capital raising and public disclosure of public MIC’s. They do not have any regulatory powers over their lending activities.
[43] Except NHA MBS.
[44] NHA MBS.

Jurisdiction	Economic function	Entity types	Securities Regulator	Prudential Regulator	Central Bank	Others
China	EF1	Collective trusts, MMFs, fixed income funds, other funds		CBRC		
	China responded to the peer review questionnaire partially					
France	EF1	Hedge funds; Bond funds; Mixed funds; Money market funds; Other funds	AMF			
	EF2	Finance companies (*no entities classified*)		ACPR		
	EF3	Investment firms	AMF[45]	ACPR[46]		
	EF4	Insurance companies (*no entities classified*)		ACPR		
	EF5	Securitisation	AMF	ACPR		
Germany	EF1	Hedge funds; Real estate funds; (except REITs); Money market funds; Bond funds; ETFs; Other funds (including mixed funds)	BaFin			
	EF2	Financial leasing companies; Factoring companies	BaFin		Bundesbank	
	EF3	Broker dealers (Investment firms)	BaFin		Bundesbank	
	EF4	Insurance companies (*no entities classified*)	BaFin			
	EF5	Financial vehicle corporations	BaFin		Bundesbank	
Hong Kong	EF1	Hedge funds; Money market funds; Fixed income funds, Mixed balanced funds; Other funds (non-equity related)	SFC			
	EF2	Money lenders				Companies Registry, Police, FSTB
	EF3	Broker dealers	SFC			
	EF4	Insurance companies				IA
	EF5	*No entity classified*				
India	EF1	Money market funds, Hedge funds, Fixed income funds, Other funds	SEBI			
	EF2	Housing finance companies (HFCs); Non-banking financial companies (NBFCs)			RBI (NBFCs)	NHB (HFCs) / MCA
	EF3	*No entity classified*				
	EF4	*No entity classified*				
	EF5	Securitization companies / Reconstruction companies			RBI	MOF
Indonesia	EF1	Money market funds		OJK		
	EF2	*No entity classified*				
	EF3	*No entity classified*				
	EF4	*No entity classified*				
	EF5	*No entity classified*				

45 Investment services.
46 Banking services.

<table>
<tr><th>Jurisdiction</th><th>Economic function</th><th>Entity types</th><th>Securities Regulator</th><th>Prudential Regulator</th><th>Central Bank</th><th>Others</th></tr>
<tr><td rowspan="5">Italy</td><td>EF1</td><td>Money market funds; Hedge funds; Fixed income funds; - Open-ended investment funds</td><td>CONSOB</td><td colspan="2">Bank of Italy</td><td></td></tr>
<tr><td>EF2</td><td>Finance companies (consumer credit; factoring; leasing, mixed)</td><td>CONSOB</td><td colspan="2">Bank of Italy</td><td></td></tr>
<tr><td>EF3</td><td>Investment firms (dealing on own account; execution of orders on behalf of clients; financial instruments placing; portfolio management; investment advice; multilateral trading facilities; others)</td><td>CONSOB</td><td colspan="2">Bank of Italy</td><td></td></tr>
<tr><td>EF4</td><td>Confidi (or financial guarantors)</td><td></td><td colspan="2">Bank of Italy</td><td></td></tr>
<tr><td>EF5</td><td>Structured Finance Vehicles</td><td>CONSOB</td><td colspan="2">Bank of Italy</td><td></td></tr>
<tr><td rowspan="5">Japan</td><td>EF1</td><td>Equity investment funds; Fixed income investment funds; Hedge funds; Money market funds</td><td colspan="2">FSA</td><td></td><td></td></tr>
<tr><td>EF2</td><td>Finance companies</td><td colspan="2">FSA</td><td></td><td></td></tr>
<tr><td>EF3</td><td>Broker dealers; Securities finance companies; Money market broker dealers</td><td colspan="2">FSA</td><td>BOJ</td><td></td></tr>
<tr><td>EF4</td><td>No entity classified</td><td></td><td></td><td></td><td></td></tr>
<tr><td>EF5</td><td>Securitization</td><td colspan="2">FSA</td><td></td><td></td></tr>
<tr><td rowspan="5">Korea</td><td>EF1</td><td>Money market funds; Fixed income funds; Mixed funds</td><td></td><td>FSC / FSS</td><td></td><td></td></tr>
<tr><td>EF2</td><td>Finance companies</td><td></td><td>FSC / FSS</td><td></td><td></td></tr>
<tr><td>EF3</td><td>Broker dealers</td><td></td><td>FSC / FSS</td><td></td><td></td></tr>
<tr><td>EF4</td><td>No entity classified</td><td></td><td></td><td></td><td></td></tr>
<tr><td>EF5</td><td>ABS; ABCP; residuals of SPC</td><td></td><td>FSC / FSS</td><td></td><td></td></tr>
<tr><td rowspan="5">Mexico</td><td>EF1</td><td>Money market funds; Other investment funds; fixed income funds</td><td></td><td>CNBV</td><td></td><td></td></tr>
<tr><td>EF2</td><td>Regulated Sofomes; Socaps; Financial coporations; Sofipos; Other financial entities (bonding companies); Credit unions</td><td></td><td>CNBV</td><td></td><td></td></tr>
<tr><td>EF3</td><td>Broker dealers</td><td></td><td>CNBV</td><td></td><td></td></tr>
<tr><td>EF4</td><td>Insurance companies (credit insurances)</td><td></td><td>CNSF</td><td></td><td></td></tr>
<tr><td>EF5</td><td>Securitizations</td><td></td><td>CNBV</td><td></td><td></td></tr>
<tr><td rowspan="5">Netherlands</td><td>EF1</td><td>Money market funds; Hedge funds, Fixed income and other investment funds; REITS; funds excluding equity</td><td>AFM</td><td colspan="2">DNB</td><td></td></tr>
<tr><td>EF2</td><td>Finance companies</td><td>AFM</td><td></td><td></td><td></td></tr>
<tr><td>EF3</td><td>Broker dealers dealing on own account</td><td>AFM</td><td colspan="2">DNB</td><td></td></tr>
<tr><td>EF4</td><td>No entity classified</td><td></td><td></td><td></td><td></td></tr>
<tr><td>EF5</td><td>Structured finance vehicles</td><td></td><td colspan="2">DNB</td><td></td></tr>
<tr><td rowspan="5">Russia</td><td>EF1</td><td>Hedge funds, Money market funds, Fixed income funds</td><td></td><td></td><td>CBR</td><td></td></tr>
<tr><td>EF2</td><td>Microfinance organization</td><td></td><td></td><td>CBR</td><td></td></tr>
<tr><td>EF3</td><td>Broker dealers</td><td></td><td></td><td>CBR</td><td></td></tr>
<tr><td>EF4</td><td>Insurance companies</td><td></td><td></td><td>CBR</td><td></td></tr>
<tr><td>EF5</td><td>SPVs issuing mortgage-backed securities</td><td></td><td></td><td>CBR</td><td></td></tr>
</table>

Jurisdiction	Economic function	Entity types	Securities Regulator	Prudential Regulator	Central Bank	Others
Saudi Arabia	EF1	Investment funds	CMA			
	EF2	Real estate finance companies; Other finance companies	CMA[47]	SAMA		
	EF3	*No entity classified*				
	EF4	*No entity classified*				
	EF5	*No entity classified*				
Singapore	EF1	Hedge funds; Fixed income funds; Other MMFs; Other funds	MAS			
	EF2	Finance companies	MAS			
	EF3	Broker dealers	MAS			
	EF4	Credit insurers	MAS			
	EF5	Special purpose vehicles	MAS[48]			
South Africa	EF1	Money market funds; Fixed income funds; Multi-asset funds; Hedge funds	FSB			
	EF2	Finance companies				NCR
	EF3	*No entity classified*				
	EF4	Credit insurers	FSB			
	EF5	Securitisation		SARB		
Spain	EF1	Hedge funds; MMFs (VNAV); Fixed income and mixed fixed income funds; Passive management investment funds with objective of profitability; Real estate investment funds	CNMV			
	EF2	Finance companies (credit financial institutions)		BdE		
	EF3	Broker dealers	CNMV			
	EF4	Mutual guarantee companies		BdE		
	EF5	Securitisation entities	CNMV			
Switzerland	EF1	Fixed income funds; Asset allocation funds; Alternative investments funds; Money market funds	FINMA			
	EF2	Consumer credit providers (a); Corporate leasing providers; Non-profit residential builders/cooperatives for affordable housing (b)				Cantons (a), Federal Office of Housing(b)
	EF3	Security dealers	FINMA			
	EF4	Insurance companies; Loan guarantee cooperatives for SMEs; Mortgage guarantee cooperatives	FINMA[49]			Government,[50] Federal Office of Housing[51]

47 Except real estate finance companies.
48 Disclosure requirements.
49 Insurance companies.
50 Loan guarantee cooperatives for SMEs.
51 Mortgage guarantee cooperatives.

Jurisdiction	Economic function	Entity types	Securities Regulator	Prudential Regulator	Central Bank	Others
	EF5	Securitisation	FINMA			
Turkey	EF1	Money market funds, Hedge funds, Fixed income funds, Securities investment trusts	CMB			
	EF2	Finance Companies		BRSA		
	EF3	*No entity classified*				
	EF4	*No entity classified*				
	EF5	*No entity classified*				
United Kingdom	EF1	Fixed income funds; Hedge funds; Alternative funds; Property funds; Money market funds; Convertible bond funds; Physical ETFs	FCA			
	EF2	Non-bank mortgage lenders; Business and consumer finance companies	FCA	PRA[52]		
	EF3	Broker dealers	FCA	PRA		
	EF4	Insurance companies (financial guaranty and mortgage guaranty)		PRA		
	EF5	Structured finance vehicles		PRA		
United States	EF1	Bond funds; Money market funds; Mortgage real estate investment funds; Bond ETFs; Credit hedge funds; Other funds	SEC			
	EF2	Finance companies		FRB[53]		
	EF3	Broker dealers; Funding corporations	SEC			
	EF4	Financial guaranty insurers; Mortgage guaranty insurers				State insurance departments
	EF5	Structured finance vehicles	SEC[54]			

52 Bank owned finance companies.
53 For large finance companies subject to consolidated supervision.
54 Issuers of asset-backed securities offerings that are required to be registered under the Securities Act of 1933 with the SEC are subject to a number of disclosure requirements.

Annex E: Inter-agency coordination arrangements for non-bank financial entities in FSB jurisdictions

Jurisdiction	Inter-agency MoUs	High level council / committee that also deals with shadow banking issues		Dedicated working level groups	Other arrangements
		Established by legislation	Non-statutory		
Argentina	BCRA, CNV, SSN *Info sharing*				
Australia			CFR (RBA, APRA, ASIC & Treasury) *Info sharing, respond to threats to financial stability, policy design & advice*	CFR shadow banking working group (RBA, APRA, ASIC & Treasury); focuses on implementation of FSB WS3 and WS5 recommendations	
Brazil	BCB, CVM, Susep (bi-lateral) *Info sharing*	CMN *Policy design, decisions* Coremec (BCB, CVM, Previc & Susep) *Policy advice, national coordination*			
Canada			SAC (Finance Canada, BOC, OSFI, CDIC & FCAC) *Info sharing, policy design & advice* CSA[55] *Info sharing, policy design & advice* Heads of Regulatory Agencies[56] *Info sharing coordination & advice*	SRAC (BOC & SAC members), vulnerability identification and assessment, share information and discuss emerging risks. CSA Systemic Risk Committee, monitoring and assessing financial stability risks	
China	CBRC, CSRC, CIRC *Info sharing, supervisory cooperation, cooperation on crisis management*		Inter-agency Financial Coordination Meetings (State Council, PBC) *Info sharing*		

[55] Comprising the securities regulators from the provinces of Ontario, Quebec, British Columbia, Alberta, Saskatchewa, Manitoba, New Brunswick and Nova Scotia.

[56] The Heads of Regulatory Agencies (HoA) is Chaired by the Governor of the Bank of Canada and includes the Chairs of the OSC, AMF, BCSC and ASC, the Superintendent of Financial Institutions, and senior officials from the federal Department of Finance.

Jurisdiction	Inter-agency MoUs	High level council / committee that also deals with shadow banking issues		Dedicated working level groups	Other arrangements
		Established by legislation	Non-statutory		
European Union		ESRB *Risk analysis, policy design & advice*	FSC (an ECB standing committee with membership from the ECB and national central banks) *Risk analysis*	ESRB's Joint-Expert Group on Shadow Banking (JEGS) (European institutions and agencies and national administrations) *Monitoring structural changes and risks*	
France		HCSF (MOF, BdF, ACPR, AMF & ANC) – macroprudential authority *Info sharing, risk analysis, policy design & advice/recommendations, international coordination*		Ad hoc working group (MOF, BdF, AMF) *Coordinates the French contribution to the FSB information-sharing exercise*	BdF & ACPR staff involved in a bi-annual Risk Assessment Exercise BdF participates to the AMF quarterly Risk Committee *Risk identification and assessment*
Germany		Financial Stability Committee (MoF, Bundesbank, BaFin, FMSA) *Risk analysis, policy design & advice, coordination with other European Member States and ESRB, as necessary*		BaFin-Bundesbank-MoF shadow banking network BaFin-Bundesbank joint risk committee	
Hong Kong	HKMA, SFC, IA & MPFA *Information sharing & exchange of views on regulatory issues of common interests*		CFR (Financial Secretary, FSTB, HKMA, SFC, IA & MPFA) *Info sharing, risk analysis* FSC (FSTB, HKMA, SFC & IA) *Info sharing, policy design & advice*		
India	RBI, SEBI, IRDA, PFRDA *Info sharing & consolidated monitoring, data sharing & collection*		FSDC (RBI, SEBI, IRDA, PFRDA,MOF, etc.) *Risk analysis and policy decisions*	FSDC Shadow Banking Implementation Group	
Indonesia	MoF, BI, OJK & LPS MoU to facilitate sharing of information and data *Data sharing* OJK & BI		MoF, OJK, BI & LPS Financial System Stability Coordination Forum		

Jurisdiction	**Inter-agency MoUs**	**High level council / committee that also deals with shadow banking issues**		**Dedicated working level groups**	**Other arrangements**
		Established by legislation	**Non-statutory**		
	Mechanism for coordination and cooperation in terms of policy making *Policy decisions* OJK & BI Coordination Forum for Macroprudential and Microprudential *Data sharing & policy decisions*				
Italy	Memorandum of Understanding (BoI and Consob) *Consultation, data sharing and coordination for the performance of the respective mandates*		Committee for Safeguard of Financial Stability (CSSF) (MoF, Consob, BoI, IVASS)		Recently established a Task Force on shadow banking (MEF, BoI, CONSOB, IVASS, COVIP) BoI & Consob agreed on possibility for joint inspections on intermediaries *Data sharing & collection*
Japan			Council for Cooperation on Financial Stability (FSA and BOJ) *Information sharing*		
Korea	MOU exists among FSS, FSC, MoSF, BoK and KDIC		MoF, FSS, BoK, KDIC & KCIF Macroeconomic Financial Meeting		
Mexico	Several MOUs between SHCP, CNBV, BANXICO, IPAB, CONDUSEF, Consar & CNSF	FSSC (SHCP, BANXICO, CNBV, IPAB, Consar & CNSF) *Risk analysis, policy design & advice*			Interlocking board mechanism – financial authorities are represented at the Governing Board of other authorities
Netherlands			Financial Stability Committee (DNB, AFM & MoF) *Risk analysis*	Ad hoc working group (DNB, AFM & MoF) *FSB information sharing*	
Russia			FSC (CBR, MoF, Deposit Insurance Agency, Ministry of Economic Development & Presidential Administration)		

Jurisdiction	Inter-agency MoUs	High level council / committee that also deals with shadow banking issues		Dedicated working level groups	Other arrangements
		Established by legislation	Non-statutory		
			(systemic risk assessment, proposals to restore financial stability)		
Saudi Arabia	SAMA & CMA				Financial Stability Board (CMA, SAMA & MOF) in the process of being established
Singapore			MAS Management Financial Stability Committee[57]; primary internal MAS body dealing with shadow banking issues *Info-sharing; risk analysis; policy decisions*		Other MAS internal decision making committees can also deal with shadow banking issues
South Africa			Financial Stability Committee	SARB, FSB & NT monthly coordination meeting, covers financial developments in addition to shadow banking issues	Financial Stability Oversight Committee (SARB, PA, FSCA, NCR & National Treasury) in the process of being established MoUs to be signed between the financial sector regulators and SARB.
Spain	3 MoUs signed across financial authorities			BdE, CNMV, DGS & Treasury working group; coordinates contributions to FSB shadow banking workstreams	The final design of the macroprudential architecture is under consideration
Switzerland	FDF, FINMA & SNB; information exchange & cooperation on crisis management			FDF, FINMA & SNB working group; assesses shadow banking risks and adequacy of regulatory framework	Regular meetings between FDF, FINMA & SNB pursuant to MOU

[57] While the MAS Act does not mandate the formation of the Financial Stability Committee (FSC), it confers the managing director of the MAS with the power to convene committees to execute MAS' mandates (including financial stability) and the FSC is one such committee.

Jurisdiction	Inter-agency MoUs	High level council / committee that also deals with shadow banking issues		Dedicated working level groups	Other arrangements
		Established by legislation	Non-statutory		
Turkey	Several MOUs between Treasury, BRSA, CMB, SDIF & CBRT; Information exchange	Financial Stability Committee (Treasury, CBRT, BRSA, CMB & SDIF) *Risk analysis; data and info sharing; policy design & advice*			
UK	FCA & PRA	Financial Policy Committee (BoE, FCA, external members and a non-voting member from HMT) *Risk analysis; info sharing; policy decisions*		Various working groups cover non-bank financial entities & support FPC responsibilities in this area	
US	MOUs between SEC & FRB, OCC MOUs between FSOC members, including OFR & SEC, FRB and CFTC (data sets; info sharing; staff exchange) U.S. state insurance regulators have information-sharing agreements with the FRB, the OCC, and the FDIC and that the NAIC has an MOU to provide public information to the Treasury Department.	Financial Stability Oversight Council (FRB, CFTC, FDIC, FHFA, NCUA, OCC, SEC, Treasury, CFPB and an independent member with insurance expertise and, as nonvoting members, OFR, FIO, a state insurance commissioner, a state banking supervisor, and a state securities commissioner)) *Risk analysis; info sharing; policy decisions*			

Annex F: Sources of data for assessing shadow banking risks and planned enhancements

Jurisdiction	Economic function / activities	Sources of data		Planned enhancements
		Regulatory returns[58]	Other sources of information	
Argentina	**Argentina did not provide information to populate this table.**			
Australia	EF1		Biennial and ad-hoc surveys, commercial databases, Australian Bureau of Statistics (ABS) publications, product disclosure statements	
	EF2	√		
	EF3	√	Ad hoc surveys, Company annual reports	
	EF4	√	Company annual reports	
	EF5	√	Commercial databases, ABS publications	
	Other SB activities	Data on connections within the financial sector	ABS publications (connections within the financial sector)	
Brazil	EF1	√	Data from stock exchange, trade repositories, CCP; commercial databases	
	EF2	√		
	EF3	√		
	EF4	√	Data from clearings	
	EF5	√	Commercial databases	
	Other SB activities			
Canada	EF1	√	Commercial databases, ad hoc surveys, prospectus, and continuous disclosure requirements	
	EF2	√	Commercial databases, ad hoc/quarterly surveys, prospectus, and continuous disclosure requirements	Non-prudentially regulated mortgage originators: balance sheet info, loan level data; Finance companies: data on individual entities
	EF3	√		
	EF4	√		
	EF5	√	Commercial databases, ad hoc surveys, prescribed offering and continuous disclosure requirements	
	Other SB activities	Repo	Commercial databases (securities lending)	Improved data on repo

58 A tick in a cell in the column "Regulatory returns" means that, under the economic function concerned, at least one entity type is subject to reporting requirements. A grey cell in the column "Regulatory returns" or "Other sources of information" can mean that no entity under the economic function concerned is subject to reporting requirements or that the information is not available.

Jurisdiction	Economic function / activities	Sources of data		Planned enhancements
		Regulatory returns[59]	Other sources of information	
China	EF1	√		
	EF2	√		
	EF3			
	EF4			
	EF5			
	Other SB activities			
France	EF1	√	Eg public and internal databases	
	EF2	√	Eg public and internal databases	
	EF3	√	Eg public and internal databases	
	EF4	√	Eg public and internal databases	
	EF5	√	Eg public and internal databases	ESMA proposal for disclosure on securitization vehicles (on the basis of regulation 462/2013)
	Other SB activities	√	Eg public and internal databases	EU regulation (2015/2365) on transparency of SFTs and of reuse. According to article 4, counterparties to SFTs shall report the details of any SFT they have concluded to a trade repository; This new requirement will provide supervisors with additional data on repo and securities lending.
Germany	EF1	√	Flow of funds	Enhanced reporting for investment funds
	EF2	√	Flow of funds, Industry associations	
	EF3	√	Flow of funds	
	EF4	√	Flow of funds	
	EF5	√	Flow of funds, Surveys	ESMA proposal for disclosure on securitization vehicles (on the basis of regulation 462/2013)
	Other SB activities		MoUs	EU regulation (2015/2365) on transparency of SFTs and of reuse. According to article 4, counterparties to SFTs shall report the details of any SFT they have concluded to a trade repository; This new requirement will provide supervisors with additional data on repo and securities lending.

59 A tick in a cell in the column "Regulatory returns" means that, under the economic function concerned, at least one entity type is subject to reporting requirements. A grey cell in the column "Regulatory returns" or "Other sources of information" can mean that no entity under the economic function concerned is subject to reporting requirements or that the information is not available.

Jurisdiction	Economic function / activities	Sources of data		Planned enhancements
		Regulatory returns[60]	Other sources of information	
Hong Kong	EF1	√	Periodic surveys	
	EF2		Surveys	
	EF3	√	Ad hoc information enquiries	
	EF4	√		Enhanced granularity for data on contingency risks, especially asset risk, pricing risk, interest rate risk
	EF5			
	Other SB activities			
India	EF1	√		
	EF2	√	Quarterly reporting	
	EF3			
	EF4			Reporting of lending by insurance companies to Central Repository of Information on Large Credits
	EF5	√	Quarterly reporting	
	Other SB activities		All OTC trades in short-term funding markets reported.	
Indonesia	EF1	√		
	EF2	√		
	EF3			
	EF4			
	EF5	√		
	Other SB activities			
Italy	EF1	√	Flow of funds; Market monitoring and surveillance.	
	EF2	√	Flow of funds.	
	EF3	√	Flow of funds; Market monitoring and surveillance.	
	EF4	√	Flow of funds.	
	EF5	√	Flow of funds; Data Repository on Securitizations; Market monitoring and surveillance.	
	Other SB activities		MoUs	EU regulation (2015/2365) on transparency of SFTs and of reuse. According to article 4, counterparties to SFTs shall report the details of any SFT they have concluded to a trade repository; This new requirement will provide supervisors with additional data on repo and securities lending.

60 A tick in a cell in the column "Regulatory returns" means that, under the economic function concerned, at least one entity type is subject to reporting requirements. A grey cell in the column "Regulatory returns" or "Other sources of information" can mean that no entity under the economic function concerned is subject to reporting requirements or that the information is not available.

Jurisdiction	Economic function / activities	Sources of data		Planned enhancements
		Regulatory returns[61]	Other sources of information	
Japan	EF1	√	Flow of funds, fund monitoring reports, data from Investment Trust Association of Japan (SRO), Securities registration statements, hearings (interviews).	
	EF2	√	Flow of funds, business reports, data from Japan Financial Services Association (SRO), listed company annual reports, hearing (interviews)	
	EF3	√	Flow of funds, hearings (interviews), business reports, data from Japan's Securities Dealers Association (SRO), listed company annual reports	
	EF4			
	EF5		Flow of funds, Data from Japan's Securities Dealers Association (SRO)	
	Other SB activities			
Korea	EF1	√	Data from Financial Investment Association	
	EF2	√	Flow of funds	
	EF3	√	Flow of funds	
	EF4			
	EF5		Flow of funds; Commercial data	
	Other SB activities		MoUs	
Mexico	EF1	√	Member's associations	
	EF2	√	Member's associations	
	EF3	√		
	EF4	√		
	EF5	√	Securities Depositary Entity	
	Other SB activities	Data on repo, securities lending; derivative transactions	Member's associations	

61 A tick in a cell in the column "Regulatory returns" means that, under the economic function concerned, at least one entity type is subject to reporting requirements. A grey cell in the column "Regulatory returns" or "Other sources of information" can mean that no entity under the economic function concerned is subject to reporting requirements or that the information is not available.

Jurisdiction	Economic function / activities	Sources of data		Planned enhancements
		Regulatory returns[62]	Other sources of information	
Netherlands	EF1	√	Regular statistical reports to DNB.	Enhanced data on MMFs
	EF2	√	Regular statistical reports to DNB.	More granular data on some OFI entities
	EF3	√	Regular statistical reports to DNB	
	EF4	√		
	EF5	√	Regular statistical reports to DNB	ESMA proposal for disclosure on securitization vehicles (on the basis of regulation 462/2013)
	Other SB activities		MoUs	EU regulation (2015/2365) on transparency of securities financing transactions and of reuse. According to article 4, counterparties to SFTs shall report the details of any SFT they have concluded to a trade repository; This new requirement will provide supervisors with additional data on repo and securities lending.
Russia	EF1	√	Ad hoc and regular survey of non-bank institutions, cooperation with self-regulated organizations	Project designed to include non-credit financial institutions to unified reporting form (microfinance institutions will migrate by 2018). Harmonization of industry-specific standards and accounting standards with IFRS. Improvement in quality and granularity of data.
	EF2	√	Accounting statements; ad hoc and regular surveys	
	EF3	√	Cooperation with self-regulated organizations (e.g. with National Securities Market Association)	
	EF4	√	Ad hoc and regular surveys; cooperation with self-regulated organizations	
	EF5	√		
	Other SB activities	Daily supervisory reporting forms on money market operations and repository database.	Trading platforms, trade repositories for OTC derivative and repo transactions; agreement signed with Moscow Stock Exchange giving the CRB online access to trading data.	Starting from 1 October, 2015, trade reports to be provided on OTC derivatives; from 1 July 2016, trading data on all OTC and repo transactions should contain Unique Trade Identifier.
Saudi Arabia	EF1	√		
	EF2	√		
	EF3			
	EF4			
	EF5			
	Other SB activities			

[62] A tick in a cell in the column "Regulatory returns" means that, under the economic function concerned, at least one entity type is subject to reporting requirements. A grey cell in the column "Regulatory returns" or "Other sources of information" can mean that no entity under the economic function concerned is subject to reporting requirements or that the information is not available.

Jurisdiction	Economic function / activities	Sources of data		Planned enhancements
		Regulatory returns[63]	Other sources of information	
Singapore	EF1	√	Market surveys (e.g. Annual Asset Management Survey)	
	EF2	√		
	EF3	√		
	EF4	√		
	EF5		Market surveys	
	Other SB activities			
South Africa	EF1	√	Fund fact sheets, Third-party unit trust collected data, external research company reports	Future system enhancements for enhanced data collection being discussed; proposed bill will facilitate additional data collection powers
	EF2	√	Periodic and ad-hoc surveys.	Proposed bill will facilitate additional data collection powers
	EF3			
	EF4	√		
	EF5			Proposed bill will facilitate additional data collection powers
	Other SB activities			Proposed bill will facilitate additional data collection powers
Spain	EF1	√		
	EF2	√		
	EF3	√		
	EF4	√		
	EF5	√		ESMA proposal for disclosure on securitization vehicles (on the basis of regulation 462/2013)
	Other SB activities	√	MoUs	EU regulation (2015/2365) on transparency of securities financing transactions and of reuse. According to article 4, counterparties to SFTs shall report the details of any SFT they have concluded to a trade repository; This new requirement will provide supervisors with additional data on repo and securities lending.

[63] A tick in a cell in the column "Regulatory returns" means that, under the economic function concerned, at least one entity type is subject to reporting requirements. A grey cell in the column "Regulatory returns" or "Other sources of information" can mean that no entity under the economic function concerned is subject to reporting requirements or that the information is not available.

Jurisdiction	Economic function / activities	Sources of data		Planned enhancements
		Regulatory returns[64]	Other sources of information	
Switzerland	EF1	√		Authorities working to extend the data on CIS.
	EF2		Trade associations, indirect sources(banking statistics)	
	EF3	√		
	EF4	√		
	EF5		Indirectly through bank supervision	
	Other SB activities		Exchange of information with other jurisdictions	
Turkey	EF1	√	Istanbul Settlement and Custody Bank, public disclosure by entities	
	EF2	√		
	EF3	√	Forex trading executions reported to the Takasbank	
	EF4			
	EF5			
	Other SB activities		MoUs	
United Kingdom	EF1	√	Voluntary surveys (systematic or ad hoc), publicly available information/commercial data sources, trade association data (systematic), market intelligence	Engagement with depositories for more detailed / regular information; proposed reporting of use of derivatives by UCITS management companies
	EF2	√	Trade association data (e.g. Asset Based Finance and Finance and Leasing Associations), firms' annual reports; (systematic) market intelligence	
	EF3	√	(Systematic) market intelligence	
	EF4	√	(Systematic) Market intelligence, ad hoc collections through EU / international bodies, regular / ad hoc surveys	
	EF5	√	(Systematic) Market intelligence, trade associations in the US/Europe, data providers (e.g. Bloomberg, Thomson Reuters), prospectus filings; rating agencies; Investment banks' research desks track publicly issued deals; aggregate US data split by broad categories from TRACE.	ESMA proposal for disclosure on securitization vehicles (on the basis of regulation 462/2013)
	Other SB activities	√	(Systematic) Market intelligence, surveys	EU regulation (2015/2365) on transparency of SFTs and of reuse. Counterparties to SFTs shall report the details of any SFT they have concluded to a trade repository; This new requirement will provide supervisors with additional data on repo and securities lending.

64 A tick in a cell in the column "Regulatory returns" means that, under the economic function concerned, at least one entity type is subject to reporting requirements. A grey cell in the column "Regulatory returns" or "Other sources of information" can mean that no entity under the economic function concerned is subject to reporting requirements or that the information is not available.

Jurisdiction	Economic function / activities	Sources of data		Planned enhancements
		Regulatory returns[65]	Other sources of information	
United States	EF1	√	Commercial data, publicly available data, monitoring and analytical activities	Proposed enhancement to data reporting for mutual funds, ETFs and other registered investment companies viz. (1) identifiers for securities and entities; (2) info about repo, securities lending, counterparty exposures; (3) terms of derivatives contracts; (4) discrete portfolio level and position level risk measures.
	EF2			
	EF3	√	Commercial data, publicly available data, monitoring and analytical activities	
	EF4	√	Commercial data, publicly available data, monitoring and analytical activities	
	EF5	√	Commercial data, publicly available data, monitoring and analytical activities	
	Other SB activities	√	OTC CDS data (from DTCC)	Pilot project to collect data from participants in the bilateral repo and the securities lending markets including data elements essential for analysing risks related to these markets. Permanent data collection rule proposal for participants in bilateral rep and securities lending markets. Pilot project to collect data from CCPs regarding interdependency risks.

65 A tick in a cell in the column "Regulatory returns" means that, under the economic function concerned, at least one entity type is subject to reporting requirements. A grey cell in the column "Regulatory returns" or "Other sources of information" can mean that no entity under the economic function concerned is subject to reporting requirements or that the information is not available.

Annex G: Availability of data for calculating risks metrics[66,67]

			Shadow Banking Risk Metrics[68]									
			Credit Intermediation			Maturity Transformation			Liquidity Transformation	Credit Risk Transfer	Leverage	
Jurisdiction	**Economic function (number of entity types for which reporting was required)**	**% of assets of the entity types in jurisdiction's total financial assets**	**CI1**	**CI2**	**CI3**	**MT1**	**MT2a**	**MT2b**	**LT**	**CRT**	**L1**	**L2**
Argentina	EF1 (2)	2.8										
	EF2 (3)	1.7										
	EF5 (1)	2.7										
Australia	EF1 (2)	3.1				1.8 (1)					1.8 (1)	
	EF2 (1)	1.6										
	EF5 (1)	6.4										
Brazil	EF1 (3)	12.7										
	EF2 (1)	3.3										
Canada	EF1 (2)	7.4										

66 The assessment of data gaps in this table is based on the information submitted by jurisdictions for the 2015 information-sharing report..

67 Green cells indicate no data gaps; yellow cells indicate data were not provided for some classified entity types; and red cells indicate data were not provided for all classified reporting entity types. The figures show the percent of the jurisdiction's total financial assets for which relevant data for EF-classified non-bank financial entity types are not available and, in parentheses, the number of reporting entity types within an EF being for which the relevant risk metrics could not be provided. Data gaps are being presented only for entities classified into EFs for which reporting requirements are applicable Information is not shown in those cases when no entity types are classified into a particular EF or the entity types within an EF are below the reporting threshold. As the reporting of risk metrics data pertaining to MMFs was voluntary in the information-sharing exercise, this type of funds has not been considered in the data gaps presented in this table.

68 CI1 = credit assets/total financial assets
CI2 = lending/total financial assets
CI3 = (credit assets + off balance sheet exposures (credit risk transfer type)) / (total financial assets + total off balance sheet)
MT1 = (long term assets - (long term liabilities + non-redeemable equity (equity or shareholders equity))) / total financial assets
MT2a = for EF1 short term liabilities + redeemable equity (> 30 days, <= 1 year + > 7 days, <= 1 year) / short term assets (> 3 months, <= 6 months + > 6 months, <= 1 year), for non-EF1 short term liabilities (> 30 days, <= 1 year) / short term assets (> 3 months ,<= 6 months + > 6 months, <= 1 year)
MT2b = for EF1 (short term liabilities + redeemable equity) (<= 30 days + <= 7 days) / short term assets (<= 3 months), for non-EF1 short term liabilities (<= 30 days) / short term assets (<= 3 months)
LT = for EF1 (very short-term liabilities (< 30 days) + redeemable equity (< 7 days)) / liquid assets, for non-EF1 very short-term liabilities (< 30 days) / liquid assets
CRT = off balance sheet exposures (credit risk transfer type) / (total financial assets + off balance sheet total)
L1 = for EF1 total financial assets / NAV, for non-EF1 total financial assets / equity
L2 = for EF1 (total financial assets + off balance sheet total) / NAV, for non-EF1 (total financial assets + off balance sheet total) / equity.

			Shadow Banking Risk Metrics[68]									
			Credit Intermediation			Maturity Transformation			Liquidity Transformation	Credit Risk Transfer	Leverage	
Jurisdiction	**Economic function (number of entity types for which reporting was required)**	**% of assets of the entity types in jurisdiction's total financial assets**	**CI1**	**CI2**	**CI3**	**MT1**	**MT2a**	**MT2b**	**LT**	**CRT**	**L1**	**L2**
	EF2 (3)	1.4			0.9 (2)			1.4 (2)	1.4 (2)	0.9 (2)		0.9 (2)
	EF3 (1)	4.7										
China	EF1 (2)	6.2	0.3 (1)	0.3 (1)							0.3 (1)	
France	EF1 (2)	4.8										
	EF3 (1)	2.3										
	EF5 (1)	1.7										
Germany	EF1 (3)	11.3										
Hong Kong	*100 % reporting relief for entity types classified under economic functions*											
India	EF1 (2)	1.5										
	EF2 (2)	8.1									6.0 (1)	6.0 (1)
Indonesia	EF1 (2)	0.9										
Italy	EF1 (2)	3.0										
	EF2 (3)	2.4										
	EF5 (1)	2.8										
Japan	EF1 (2)	3.1										
	EF2 (1)	1.4										
	EF3 (3)	5.1										
Korea	EF1 (2)	1.8										
	EF2 (1)	2.7										
	EF3 (1)	5.8										
	EF5 (3)	2.7										
Mexico	EF1 (1)	6.2										
	EF2 (3)	3.6				1.0 (1)	1.0 (1)	1.0 (1)	1.0 (1)		1.0 (1)	
	EF3 (1)	2.1										

			Shadow Banking Risk Metrics[68]									
			Credit Intermediation			Maturity Transformation			Liquidity Transformation	Credit Risk Transfer	Leverage	
Jurisdiction	**Economic function (number of entity types for which reporting was required)**	**% of assets of the entity types in jurisdiction's total financial assets**	**CI1**	**CI2**	**CI3**	**MT1**	**MT2a**	**MT2b**	**LT**	**CRT**	**L1**	**L2**
	EF5 (1)	1.9										
Netherlands	EF1 (3)	3.5										
	EF2 (1)	1.7										
	EF5 (1)	3.6										
Russia	EF4 (1)	1.3										
Saudi Arabia	EF1 (1)	1.8										
Singapore	EF3 (1)	1.2										
South Africa	EF1 (2)	3.8										
	EF2 (1)	1.9										
Spain	EF1 (3)	3.2										
	EF2 (1)	1.0										
	EF5 (1)	5.8										
Switzerland	EF1 (2)	5.8										
Turkey	EF1 (2)	0.3										
	EF2 (1)	3.1										
United Kingdom	EF1 (3)	1.0	0.1 (1)								0.1 (1)	
	EF2 (2)	1.1		0.5 (1)		0.5 (1)					0.5 (1)	0.5 (1)
	EF3 (1)	11.1										
	EF5 (1)	1.5										
United States	EF1 (2)	6.9										
	EF2 (1)	1.8										
	EF 3 (2)	4.7										
	EF5 (1)	1.6										

Annex H: Availability of policy tools for addressing shadow banking risks in FSB jurisdictions

Table I: Economic function 1[69]

(*) NA – Not available

Jurisdiction	Entities	Tools for managing redemption pressures	Tools to manage liquidity risk	Limits on leverage	Restrictions on maturity of portfolio assets	Others	Planned / suggested enhancements
Argentina	**Information on policy tools not provided for entities classified under EF1**						
Australia	Hedge funds	SR[70]	LI[71]	NA	NA	√[72]	√
	Mortgage trusts (open to retail investors)	SR	LI	NA	NA	√[73]	√
	Other funds	SR[74]	LI[75]	NA	NA	√[76]	√
Brazil	Referenced Investment Funds	RG(**), SR, RF	LAC	√[77]	NA	√[78]	√
	Fixed Income Funds	RG(**), SR, RF	LAC	√*[79]	NA	√**[80]	√
	Multimarket Investment Funds	RG(**), SR, RF	LAC	√*[47]	NA	√**[81]	√

69 RG: Redemption Gates; SR: Suspension of Redemptions; RF: Redemption Fees and other restrictions; SP: Side Pockets; LI: Limits on investment in illiquid assets; LB: Liquidity buffers; LAC: Limits on asset concentration. * Only for funds open to retail investors. ** Only in the context of suspension of redemptions. *** Addressed through market practice.

70 Only for funds open to retail investors.

71 Only for funds open to retail investors.

72 General statutory duty of the fund manager to act in the best interests of the funds which are offered to retail investors; internal controls.

73 General statutory duty of the fund manager to act in the best interests of the funds which are offered to retail investors; internal controls.

74 Only for funds open to retail investors.

75 Only for funds open to retail investors.

76 General statutory duty of the fund manager to act in the best interests of the funds which are offered to retail investors; internal controls.

77 Investment funds cannot lend or borrow money. Nonetheless, they are allowed to leverage through repos, securities lending and derivatives, always within the boundaries of issuers and of the type of assets in accordance with their portfolio composition rules. Referenced Investment Funds can only have derivatives for hedging purposes.

78 Other tools with the same practical results of side pockets and liquidity buffers (liquidity risk management).

79 Investment funds cannot lend or borrow money. Nonetheless, they are allowed to leverage through repos, securities lending and derivatives, always within the boundaries of issuers and of the type of assets in accordance with their portfolio composition rules. Referenced Investment Funds can only have derivatives for hedging purposes.

80 Other tools with the same practical results of side pockets and liquidity buffers (liquidity risk management).

81 Other tools with the same practical results of side pockets and liquidity buffers (liquidity risk management).

Jurisdiction	Entities	Tools for managing redemption pressures	Tools to manage liquidity risk	Limits on leverage	Restrictions on maturity of portfolio assets	Others	Planned / suggested enhancements
Canada	Credit hedge funds	NA	NA	NA	NA	√[82]	
	Credit pooled funds	NA	NA	NA	NA		
	Other investment funds	SR, RF	LI, LAC	√	√[83]		√
	Physical ETFs	SR, RF	LI, LAC	√	√[50]		√
China	Collective trusts	NA / NR	NA / NR	√	√		√[84]
EU	UCITS	SR	LI, LAC	√	√ (only MMFs)	√[85]	European MMF regulation currently being finalised
	AIF/EUVECA-EUSEF/ELTIF	RG,SR, RF, SP	LI (except ELTIF), LAC (only for ELTIF)	√[86]	√ (only MMFs)	√[87]	European MMF regulation currently being finalised
France	UCITS	SR, RF, SP	LI, LAC	√	√ (only MMFs)	√[88]	
	Alternative investment funds (AIFs)	RG[89], SR, RF, SP	LI[90], LAC [91]	√	√ (for MMFs)	√[92]	

82 General statutory duty of fund manager to act in best interest of the fund; internal control and system requirements.
83 For securities lending and repurchase transactions.
84 CBRC is researching the improvement of the indicators of the liquidity risk (incl. off B/S business) for trust companies.
85 Stress tests.
86 European asset managers must report to competent authorities on their fund's use of leverage and that competent authorities may (where deemed necessary to ensure the stability and integrity of the financial system) impose leverage limits to avoid the build-up of systemic risk in the financial system.
87 Stress tests.
88 Swing pricing and anti-dilution levy.
89 Only for real estate collective investment undertakings; and to other funds to the extent that underlying assets are illiquid.
90 For certain categories of AIFs defined at the national level.
91 For certain categories of AIFs defined at the national level.
92 Swing pricing and anti-dilution levy; lock up period, redemption in kind.

Jurisdiction	Entities	Tools for managing redemption pressures	Tools to manage liquidity risk	Limits on leverage	Restrictions on maturity of portfolio assets	Others	Planned / suggested enhancements
Germany	Hedge funds	SR, RF	LI, LB, LAC	√	NA	√[93]	
	Real estate funds	RG, SR, RF	LI, LB, LAC	√	NA		
	Bond funds	SR, RF	LI, LAC[94]	√	√[95]		
	ETFs	SR, RF	LI, LAC	√	√[96]		
Hong Kong	Hedge funds	RG,SR, RF, SP (***)	LI***, LAC	√***	NA	√[97]	
	Fixed income funds	RG,SR, RF, SP (***)	LI, LAC	√	NA		
	Mixed/balanced funds	RG,SR, RF, SP (***)	LI, LAC	√	NA		
	Other funds (non-equity related)	RG,SR, RF, SP (***)	LI, LAC	√	NA	√[98]	
India[99]	Hedge funds	NR	NR	NR	NR		
	Fixed income	NR	NR	NR	NR		
	Other funds	NR	NR	NR	NR		
Indonesia	**Only MMFs classified under EF 1; policy tools reporting for MMFs optional**						
Italy	Hedge Funds	RG,SR, RF, SP	LI[100]	√	NA	√[101]	
	UCITS Funds	SR, RF	LI, LAC	√	√ (only MMFs)	√[102]	

93 Limits on short selling.
94 Except for closed-ended special funds.
95 Only for MMF and bank deposits in the context of UCITS.
96 Only for MMF and bank deposits in the context of UCITS.
97 SFC has the power to impose additional conditions on a case by case basis.
98 Limits on large exposures.
99 The entity types by EFs in this table are in conformity with the classification in the 2015 Global Shadow Bank Monitoring Report. The Indian authorities did not agree with the classification of certain entity types (MMFs, hedge funds, fixed income funds, other funds) into EF1 and hence did not report the availability of policy tools for EF1 entities.
100 Italian funds investing more than 20% in illiquid assets (such as real estate assets, loans, financial instruments not listed in a regulated markets) must be close-ended.
101 Governance, capital and organisation requirements.
102 Governance, capital and organisation requirements.

Jurisdiction	Entities	Tools for managing redemption pressures	Tools to manage liquidity risk	Limits on leverage	Restrictions on maturity of portfolio assets	Others	Planned / suggested enhancements
Japan	Equity investment funds	SR	LI, LAC	√	NA		
	Fixed income investment funds	SR	LI, LAC	√	NA		
	Hedge funds	SR	LI,LAC	√	NA		
Korea	Public investment funds (e.g. fixed-income, equity funds excl. MMFs)	RG, SR, RF[103], SP	LAC, LB	√	√ (only MMFs)	√[104]	
	Private investment funds (e.g. fixed-income, equity funds excl. hedge funds)	SR, RF, SP	NA	√	NA		
	Hedge funds	SR, RF, SP	NA	√[105]	NA		
Mexico	Fixed income and other investment funds (MMFs, equity funds, mixed funds)	RG,SR, RF, SP	LI, LB, LAC	NA	NA	√[106]	
Netherlands	UCITS Funds	SR	LI, LAC	√	√ (only MMFs)		
	AIF Funds	RG, SR	LI, LAC	√	√		
Russia	Hedge funds	RG[107], SR	LI, LAC	√	NA		
	Money market funds	SR	LI, LAC	√	NA		
	Fixed income funds	SR	LI, LAC	√	NA		

[103] Except for MMFs.
[104] Asset management within funds are restricted by types of securities asset.
[105] Only for a collective investment business entity which borrows funds for the account of a fund in managing collective investment property.
[106] During disorderly market conditions, the funds may operate securities with related financial entities, only if authorized by the CNBV.
[107] For interval funds only.

Jurisdiction	Entities	Tools for managing redemption pressures	Tools to manage liquidity risk	Limits on leverage	Restrictions on maturity of portfolio assets	Others	Planned / suggested enhancements
Saudi Arabia	Fixed income funds, other funds	RF	LI, LAC	√	NA	√[108]	
	MMFs	SP	NA	NA	√ (only MMFs)	√[109]	
	Real estate funds	RF,	NA	√	NA		
Singapore	Hedge Fund, Fixed Income Funds, MMFs and Other Funds	RG, SR, RF, SP[110]	LI [111], LAC[112]	√[113]	√ (only MMFs)		
South Africa	Domestic MMFs (constant price)	RG,SR, RF, SP	LI, LB, LAC	√	√	√[114]	
	Fixed income funds and fixed income component of multi asset funds	RG,SR, RF, SP	LAC	√	NA		
	Hedge funds	RG,SR, RF, SP	LAC	√	NA		
Spain	Mutual funds	SR, RF, SP	LI, LB, LAC	√	√ (only MMFs)	√[115]	
	Hedge funds	RG,SR, RF, SP				√[116]	
	Real estate funds	RG,SR, RF	LB[117], LAC	√	NA	√[118]	
Switzerland	Fixed income and mixed funds	RG,SR, RF	LI, LAC	√	√[119]		
	Alternative investment funds	RG,SR, RF, SP	NA	√	NA	√[120]	

108 Prudent Investment management requirements.
109 Prudent Investment management requirements.
110 Use of redemption gates, redemption restrictions or side pockets is not restricted by MAS.
111 Except hedge funds and funds of hedge funds.
112 Except hedge funds.
113 Except hedge funds.
114 Risk management programme; stress testing.
115 Liquidity risk management, stress tests. Valuation and accounting rules regarding NAV calculation. Reporting and disclosure.
116 Stress tests, appropriate requirement for appropriate liquidity management systems, including regular reporting on portfolio and investor concentration.
117 LI and LB: A minimum of 10% of NAV should be kept in cash/cash equivalents and traded short-term fixed income securities.
118 Reporting requirements, lock-up periods, notice periods, payment in kind.
119 Maturity of deposits must be less than 12 months.
120 Explain risks, set out clearly investment restrictions.

Jurisdiction	Entities	Tools for managing redemption pressures	Tools to manage liquidity risk	Limits on leverage	Restrictions on maturity of portfolio assets	Others	Planned / suggested enhancements
Turkey	Hedge funds	RG, SR, RF	NA	√	NA		
	Fixed income funds	SR, RF	LI, LAC	√	√		
	Securities investment trusts	[121]	LAC	√	NA		
UK	UCITS and Non-UCITS Retail Funds (Retail AIF)	RG,SR	LI, LAC	√	√ (only MMFs)	√ [122]	
	Non-retail Alternative investment funds (e.g. hedge funds)	RG,SR, RF, SP	LI, LAC	√	NA	√[123]	
US	Bond funds	SR, RF	LI, LAC	√	NA		
	Bond Exchange Traded Fund	SR, RF	LI, LAC	√	NA		
	m-REITs	NA / NR	NA / NR	NA / NR	NA / NR		
	Credit hedge funds	RG,SR, RF, SP	NA	NA	NA	√ [124]	
	Other funds	NA	NA	NA	NA		

Notes: * Only for funds open to retail investors. ** Only in the context of suspension of redemptions. *** Addressed through market practice.

[121] All the securities investment companies in Turkey operate with fixed capital. Investors cannot redeem their shares, they can only sell their shares on Istanbul Stock Exchange.

[122] Swing/dual pricing, dilution levy.

[123] Stress testing, dilution levy. The fund manager has the responsibility of ensuring there is an appropriate liquidity management system and the fund's liquidity profile complies with its underlying obligations (asset/liability match).

[124] Disclosure requirements.

Table II: Economic function 2

(*) NA – Not available

Jurisdiction	Entities	Impose bank prudential regulatory regimes	Capital requirements	Liquidity buffers	Leverage limits	Limits on large exposures	Restrictions on types of liabilities	Others	Planned enhancements
Argentina	**Information on policy tools not provided for entities classified under EF2.**								
Australia	Finance companies	NA	NA	NA	NA	NA	√[125]	√[126]	
Brazil	Finance companies	√	√	√	NA	√	√[127]		√
Canada	Finance companies	NA /	NA	NA	NA	NA	NA	√[128]	
	Non-prudentially regulated FIs that originate mortgages	NA	NA	NA	NA	NA	NA	√[129]	
	Mortgage investment companies that are reporting issuers (not investment funds)	NA	NA	NA	√	NA	√	√[130]	
China	**No entities classified into EF 2**								
EU	Finance companies	EU regulation does not extend to non-bank financial companies except where prudentially consolidated into banks.							
France	Finance/leasing companies (entity not classified)	Deposits not allowed	√	√	NA	√	√ (deposits not allowed)	√ **(**three pillars of CRDIV/CRR)	

[125] For retail debentures issued by finance companies only.
[126] For capital requirements, liquidity buffers, and leverage limits, there are no direct requirements in Australia but finance companies offering retail debentures must make disclosures against specified benchmarks, which may encourage entities to act prudently by providing them with a reference point.
[127] For leasing companies.
[128] Market conduct requirements.
[129] Licensing, market conduct and public disclosure requirements.
[130] Disclosure requirements.

Jurisdiction	Entities	Impose bank prudential regulatory regimes	Capital requirements	Liquidity buffers	Leverage limits	Limits on large exposures	Restrictions on types of liabilities	Others	Planned enhancements
Germany	Leasing companies	√[131]	√[132]	√[133]	√[134]	NA	√	√[135]	
	Factoring companies	√[136]	√[137]	√[138]	√[139]	NA	√	√[140]	
Hong Kong	Money lenders	NA	√[141]	√[142]	NA	NA	NA		
India	Housing Finance Companies	√	√	√	√	√	√	√[143]	
	Non-bank finance companies	√	√	√	√	√	√	√[144]	

131 Only if consolidated into a banking group.
132 Only if consolidated into a banking group. Nevertheless, leasing and factoring companies in Germany need to maintain adequate internal capital (in line with the requirements for adequate ongoing risk bearing capacity).
133 Only if consolidated into a banking group.
134 Only if consolidated into a banking group.
135 E.g. comprehensive organisational requirements.
136 Only if consolidated into a banking group.
137 Only if consolidated into a banking group.
138 Only if consolidated into a banking group.
139 Only if consolidated into a banking group.
140 E.g. comprehensive organisational requirements.
141 Only for entities consolidated into a banking group.
142 Only for entities consolidated into a banking group.
143 Prudential norms for income recognition, asset classification and provisioning.
144 Prudential norms for income recognition, asset classification and provisioning.

Jurisdiction	Entities	Impose bank prudential regulatory regimes	Capital requirements	Liquidity buffers	Leverage limits	Limits on large exposures	Restrictions on types of liabilities	Others	Planned enhancements
Indonesia	**No entities classified into EF 2**								
Italy	Finance companies	√	√	NA	√[145]	√	√	√[146]	
Japan	Finance Companies	NA	√	NA	NA	NA	NA	√[147]	
Korea	Finance companies	Deposits not allowed	√	√	√	NA	√		

[145] Only if consolidated into banking groups.
[146] Governance, capital and organisation requirements.
[147] Investigation of repayment capacity of retail customers.

Jurisdiction	Entities	Impose bank prudential regulatory regimes	Capital requirements	Liquidity buffers	Leverage limits	Limits on large exposures	Restrictions on types of liabilities	Others	Planned enhancements
Mexico	Regulated sofomes	Deposits not allowed	√	NA	NA	√	√		
	Non-regulated sofomes	NA	NA	NA	NA	NA	NA		
	Credit Unions	√[148]	√	NA	NA	√	√	√[149]	
	Saving and loan companies (Socaps)	√	√	√	NA	√	√	√[150]	
	Non-bank credit card issuers	NA	NA	NA	NA	NA	NA		
	Popular financial entities (Sofipos)	√	√	√	NA	√	√	√[151]	
	Non-financial entities engaged in credit intermediation that issue public debt	NA	NA	NA	NA	NA	NA	√[152]	
	Other financial entities	NA	√	NA	√	NA	NA		
Netherlands	Finance companies	NA	NA	NA	NA	NA	NA		
Russia	Microfinance organization	NA	√	NA	NA	√	√	√[153]	
Saudi Arabia	Real estate finance companies	NA	√	√	√	√	√		
	Other finance companies	NA	√	√	√	√	√		
Singapore	Finance companies	√	√	√	NA	√	√		
South Africa	Finance companies	NA	NA	NA	NA	NA	NA		
Spain	Finance companies	Deposits not allowed	√	NA[154]	√	√	√		

[148] Requirement for resolution plan.
[149] Credit risk provision and redemption restrictions.
[150] Credit risk provision.
[151] Credit risk provision.
[152] Disclosure requirements.
[153] Liquidity ratio.
[154] Under development.

Jurisdiction	Entities	Impose bank prudential regulatory regimes	Capital requirements	Liquidity buffers	Leverage limits	Limits on large exposures	Restrictions on types of liabilities	Others	Planned enhancements
Switzerland	Consumer credit	√	√	NA	√	NA	NA		
	Corporate leasing	√	NA	NA	NA	NA	NA		
	Non-profit residential builders / cooperatives for affordable housing	NA	NA	NA	NA	NA	√		
Turkey	Finance Companies	NA	√	NA	√	NA	NA	√[155]	
UK	First charge non-bank mortgage lenders	NA	√	NA	NA	NA	√		
	Loan-based crowdfunding firms (type of non-bank finance company)	NA	√	NA	NA	NA	√		
US	Finance Companies	NA	NA	NA	NA	NA	NA	[156]	

155 Limits on the loan to value ratio and on maturity of loans.
156 Many large finance companies are under the consolidated supervision of the Federal Reserve due to their registration as other entities (e.g. Savings and Loan Holding Companies).

Table III: Economic function 3

(*) NA – Not available

Jurisdictions	Entities	Impose bank prudential regulatory regimes	Capital requirements	Liquidity requirements	Restrictions on use of client assets	Others	Planned enhancements
Argentina	**Information on policy tools not provided for entities classified under EF3.**						
Australia	Money market corporations – broker-dealers	NA	√	√	√		
Brazil	Broker-dealers	√	√	√	√		√
Canada	Broker-dealers	NA	√	√	√	√[157]	
China	**No entities classified under EF3**						
EC	Investment firms	√	√	√	√	√	
France	Broker-dealers	√	√	√	√		
Germany	Broker-dealers(Investment firms)	√	√	√	√	√ [158]	
Hong Kong	Licensed Broker-dealers providing margin loans to clients or engaged in leveraged foreign exchange trading.	NA	√	√	√		
India	**No entities classified under EF3**						
Indonesia	**No entities classified under EF3**						
Italy	Investment firms	√	√	√	√	√[159]	.

[157] Early warning system, insurance requirements.
[158] Business conduct.
[159] Governance and organisational requirements; remunerations rules; large exposure rules; reporting requirements.

Jurisdictions	Entities	Impose bank prudential regulatory regimes	Capital requirements	Liquidity requirements	Restrictions on use of client assets	Others	Planned enhancements
Japan	Broker-dealers	NA	√	NA	√	√[160]	
	Securities finance companies	NA	√	NA	√	√[161]	
	Money market broker-dealers	NA	NA	NA	√	√[162]	
Korea	Broker-dealers	√[163]	√	√	√	√[164]	
Mexico	Broker-dealers	√	√	√	√	√[165]	
Netherlands	Broker-dealers	√	√	√	√		
Russia	Broker-dealers	NA	√	NA	√		
Saudi Arabia	**No entities classified under EF3**						
Singapore	Broker-dealers	√	√	√	√		
South Africa	**No entities classified under EF3**						
Spain	Broker-dealers	√	√	√	√	√[166]	
Switzerland	Security dealers		NA	NA	√		
Turkey	**No entities classified under EF3**						
UK	Broker-dealers	√	√	√	√	√[167]	
US	Broker-dealers	NA	√	√	√		

160 Scope of resolution regime; Central Bank Examination; Liquidity risk management requirements.
161 Scope of resolution regime; Central Bank Examination.
162 Scope of resolution regime; Central Bank Examination.
163 Regulations similar to Basel II but not exactly equivalent.
164 Limits on leverage introduced in January 2016.
165 Restrictions on related businesses and ownership restrictions.
166 Information requirements and conduct of business rules.
167 Information / disclosure requirements.

Table IV: Economic function 4

(*) NA – Not available

Jurisdiction	Entities	Capital requirements	Restrictions on scale and scope of business	Liquidity buffers	Enhanced risk management practices to capture tail events	Mandatory risk-sharing between the insurer/ guarantor and insured/guaranteed	Others	Planned enhancements
Argentina	Mutual guarantee societies	√	√	NA	√	NA	NA	
Australia	Lenders mortgage insurers	√	√	NA	√	NA		
Brazil	Insurance and Re-insurance companies	√	√	√	NA	√[168]		√
Canada	Private mortgage insurance companies	√	√	NA	√	NA		√
China	**No entities classified under EF4**							
EC	Insurance companies	√	NA	NA	√	NA		
France	**No entities classified under EF4**							
Germany	**No entities classified under EF4**							
Hong Kong	Insurance companies	√	√	√	NA	NA	√[169]	
India	**No entities classified under EF4**							
Indonesia	**No entities classified under EF4**							
Italy	Confidi	√	√	NA	√	NA		
Japan	**No entities classified under EF4**							
Korea	**No entities classified under EF4**							

[168] Only for insurance companies.
[169] Asset liability matching and stress testing.

Jurisdiction	Entities	Capital requirements	Restrictions on scale and scope of business	Liquidity buffers	Enhanced risk management practices to capture tail events	Mandatory risk-sharing between the insurer/ guarantor and insured/guaranteed	Others	Planned enhancements
Mexico	Credit insurance companies	√	√	√	√	√		
Netherlands	**No entities classified under EF4**							
Russia	Insurance companies	√	√	NA	NA	NA	√[170]	
Saudi Arabia	**No entities classified under EF4**							
Singapore	Credit insurers	√	√	NA	√	NA	√[171]	
South Africa	Insurance companies	√	√	NA	NA	NA	√[172]	
Spain	Mutual guarantee companies	√	√	√	NA	√		
Switzerland	Insurance companies	√	√	NA	√	NA	√[173]	
	Loan guarantee cooperatives for SMEs	√	NA	NA	√	NA		
	Mortgage guarantee cooperatives	√	NA	NA	NA	NA		
Turkey	**No entities classified under EF4**							
UK	Insurance companies writing credit and/or suretyship business	√	√[174]	NA	√	NA	√ [175]	
US	Financial and mortgage guarantee insurers	√	√	NA	√	√		

[170] Requirement for composition and structure of insurance companies' assets.
[171] Higher capital risk charge imposed on illiquid assets that exceed a certain limit.
[172] Asset spreading requirement, stress testing and general risk management requirements.
[173] Liabilities must be fully covered at all times by assets or liquidity.
[174] For financial guarantee insurers only.
[175] Financial guarantee insurers' net worth agreements with parents.

Table V: Economic function 5

(*) NA Not available

	Entities	Restrictions on maturity/liquidity transformation	Restrictions on eligible collateral	Restrictions on exposures to, or funding from, banks/other financial entities	Others	Planned enhancements
Argentina	**Information on policy tools not provided for entities classified under EF5**					
Australia	Structured finance vehicles	√	NA	√[176]		√
Brazil	Receivables Investment Funds - FIDC	NA	NA	√		
Canada	ABCP	NA	√	NA	√[177]	
	NHA MBS issued by non-prudentially regulated FIs	√	√	NA		
	Synthetic/leveraged ETFs	NA	Not applicable	√		√
China	**No entities classified into EF5**					
EC	SPEs	NA	√	√ [178]	√ [179]	√ (EBA is developing standards/guideline to ensure harmonised application of large exposure rule)
France	SPEs	√	NA	NA	√ [180]	
Germany	Financial vehicle corporations	√	NA	√[181]	√ [182]	

[176] Banks must hold capital against exposures to structured finance vehicles.
[177] Short Term Debt Prospectus Exemption and certain other retail-focused prospectus exemptions unavailable for short-term securitized products including ABCP.
[178] Prudential requirements on investors.
[179] Appropriate consolidation, retention requirements.
[180] Restrictions on the sale of securities issued / shares of SPVs; regulatory reporting requirements.
[181] Restrictions imposed on investors, if necessary.
[182] Retention requirements.

	Entities	Restrictions on maturity/liquidity transformation	Restrictions on eligible collateral	Restrictions on exposures to, or funding from, banks/other financial entities	Others	Planned enhancements
Hong Kong	**No entities classified into EF5**					
India	Securitisation/reconstruction companies	√	NA	NA	√[183]	
Indonesia	**No entities classified into EF5**					
Italy	Securitization	√[184]	NA	NA		
Japan	Securitizations	NA	NA	NA	√[185]	
Korea	Special purpose company (incl. ABS and ABCP conduits)	NA	√	NA	√[186]	
Mexico	Securitizations	NA	NA	NA	√[187]	
Netherlands	SPEs	NA	NA	NA	√[188]	
Russia	SPVs issuing mortgage-backed securities	NA	√	√		
Saudi Arabia	**No entities classified into EF5**					
Singapore	SPVs	NA	NA	NA	√[189]	
South Africa	Securitisation	NA	NA	√[190]		

183 Prudential norms related to capital adequacy, asset classification and provisioning.
184 De facto restrictions on maturity transformation.
185 Risk management related to securitization products; ensuring traceability when selling securitization products.
186 A special purpose company, shall register an asset-backed securitization plan, including the scope of securitization assets, classes of ABSs, the management methods of securitization assets etc.
187 Banks should capitalize their investments in securitisations to which they provide guarantee as if the underlying assets have not been securitised.
188 Indirect regulation through banks and insurance companies investing in these instruments.
189 Product disclosure requirements.
190 Bank that act as originators may not provide a liquidity/cash advance facilities in respect of the securitisation scheme for which it originated assets to ensure that the originator does not retain a significant portion of the risk.

	Entities	Restrictions on maturity/liquidity transformation	Restrictions on eligible collateral	Restrictions on exposures to, or funding from, banks/other financial entities	Others	Planned enhancements
Spain	Securitisation entities	NA	NA	NA	√[191]	
Switzerland	Trenched securitisation	NA	NA	NA	√[192]	
Turkey	**No entities classified into EF5**					
UK	Securitisation entities	NA	NA	√	√ [193]	√ (ongoing work on 'qualifying securitisations' and STS securitisation).
US	Securitisation entities	NA	NA	√[194]	√[195]	

[191] Increased transparency.

[192] If the investor/acquirer is a bank or an insurance company in Switzerland, both the Basel and Swiss Solvency Test (SST) rules apply.

[193] Risk weights, Pillar 3 disclosures, risk transfer/retention rule, enhanced due diligence.

[194] Bank capital rules may impact (a) bank demand for CMBS investments; and (b) the financing and leverage available to non-bank investors who would invest in CMBS using bank or dealer financing.

[195] Restrictions on issuers imposed by FASB and NRSRO rules.

Annex I: Jurisdiction-specific summaries on implementation of the FSB Policy Framework

The following is a set of jurisdiction-specific summaries on implementation of the FSB Policy Framework. The summaries present the extent to which organisational arrangements and related efforts by FSB jurisdictions to address shadow banking risks in recent years contribute to the implementation of each of the four overarching principles of the Policy Framework.

The information presented is drawn from each jurisdiction's submission to the FSB shadow banking peer review and to the 2015 monitoring and information-sharing exercises. See Annex A for the abbreviations of financial authorities in FSB jurisdictions.

As noted in this report, the 2015 information-sharing exercise revealed different approaches and some inconsistencies in classification of entities into economic functions among jurisdictions. Annex C describes the main inconsistencies in classification that arose during the exercise and the approach taken to address them. As a result, the data and information presented in the following jurisdiction-specific summaries is not strictly comparable across jurisdictions.

In addition, it should be noted that the 2015 exercise took a conservative approach of including entity types in the narrow measure of shadow banking for all jurisdictions if the activities associated with non-bank credit intermediation could give rise to shadow banking risks in at least one jurisdiction. The FSB's Global Shadow Banking Monitoring Report 2015 notes that this activity-based 'narrow measure' may overestimate the degree to which non-bank credit intermediation gives rise to systemic risks.

The growth rates shown in the jurisdiction-specific summaries represent the compound annual nominal growth rate from end-2010 to end-2014. Growth rates were calculated from US$ figures and may therefore also reflect shifts in exchange rates. For calculating the share (in terms of GDP) of the financial assets of financial institutions, OFI sector and entities classified into shadow banking, the local currency GDP figures found in the IMF's World Economic Outlook were converted into US$ figures using the exchange rate provided by participating jurisdictions as part of the information-sharing exercise. Figures and percentages have been rounded off to the nearest integer except where the relevant figure/percentage was less than 0.5, in which case the actual figure has been shown.

Argentina

Sector size and growth			
	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	0.4	76	7
OFIs	0.03	6	21
Of which: Shadow banking	0.03	6	22

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.s.

Overseeing authority and entity types by economic function (EF)			
EF1	CNV	Prudential regulator	Mutual funds
EF2	BCRA(*)	Central bank	Mutual societies, cooperatives, credit cards "closed system", leasing and factoring companies
EF3	-	-	*No entity classified*
EF4	BCRA	Central bank	Mutual guarantee societies
EF5	CNV	Prudential regulator	Financial trusts

(*) Credit cards and leasing and factoring companies only.

Available policy tools	
EF1 (Hedge funds)	-
EF1 (FI funds)	-
EF2	-
EF3	*No entities classified*
EF4	Capital requirements, Restrictions on scale and scope of business, Enhanced risk management to capture tail events
EF5	-

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.

Implementation of FSB Policy Framework	
OP1	• The central bank is implicitly responsible for financial stability. Some NBFEs not subject to formal regulation – mutual guarantee societies come under the purview of BCRA but are not subject to specific regulation; financial trusts come under the purview of the Ministry of Industry. • Shadow banking assets assessed not to pose a challenge to financial stability for now. BCRA, in coordination with CNV and SSN, has the capacity to identify, measure and mitigate any systemic risk that may arise. In this regard, BCRA took on additional powers in 2016. • Coordination among authorities for to monitor and assess shadow banking risks, formalised through MOUs.
OP2	• BCRA regularly collects information on micro-prudential as well as systemic matters, which is shared with local authorities. • Insufficient information to calculate risks metrics in the FSB 2015 info-sharing exercise. No specific plans to improve data availability. In some cases, data is not collected as the authorities do not see the entities undertaking shadow banking activities. • Cooperation with foreign regulators is achieved through MoUs.
OP3	• No specific public disclosure requirements for non-bank financial entities; reliability of statistical information to date a challenge in the jurisdiction. • BCRA publishes regular reports on financial stability, including a half-yearly Financial Stability Report, monthly reports on banks and other institutional releases where it discloses a wide set of financial indicators and their methodological notes. • Authorities expect that the new powers of the Ministry of Finance and BCRA would help advance transparency and public disclosure of information.
OP4	• BCRA coordinates Argentina's participation in the information-sharing exercise. • EF classification conducted, entities classified into EFs 1, 2, 4 and 5. Risk mapping was not done. • Policy tools not reported except for EF4.

Australia

Sector size and growth

	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	6	429	2
OFIs	1	64	-1
Of which: Shadow banking	0.4	27	-3

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	ASIC	Securities regulator	Hedge funds, mortgage trusts; other funds; money market, funds (cash management trusts)
EF2	ASIC	Securities regulator	Finance companies
EF3	ASIC	Securities regulator	Money market corporations (broker dealers)
EF4	APRA	Prudential regulator	Lenders mortgage insurers
EF5	ASIC APRA	Securities regulator Prudential regulator	Structured finance vehicles

Available policy tools

EF1 (Hedge funds)	Suspension of Redemptions (*); Limits on investment in illiquid assets (*) ***Other tools:*** General statutory duty of fund manager to act in best interest of fund are offered to retail investors/ internal controls
EF1 (FI funds)	Suspension of Redemptions (*); Limits on investment in illiquid assets (*) ***Other tools:*** General statutory duty of fund manager to act in best interest of fund are offered to retail investors/ internal controls.
EF2	Restrictions on types of liabilities (**) ***Other tools***: No direct requirements for capital requirements, liquidity buffers, and leverage limits but finance companies offering retail debentures must make disclosures against specified benchmarks.
EF3	Liquidity requirements, Capital requirements, Restrictions on use of client assets
EF4	Capital Requirements, Restrictions on scale and scope of business, Enhanced risk management practices to capture tail events
EF5	Restrictions on maturity / liquidity transformation; Restrictions on exposures to or funding from banks / OFIs (***)

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.
(*) Only for funds open to retail investors; (**) For retail debentures issued by finance companies only; (***) Banks must hold capital against exposures to structured finance vehicles

Implementation of FSB Policy Framework	
OP1	• The Council of Financial Regulators (CFR), comprising representatives from APRA, ASIC, RBA and the Australian Treasury, is the main coordinating body for discussing financial stability issues and advising the Government on the adequacy of the regulatory and supervisory perimeter. It established a working group tasked with reviewing the application of the FSB's Policy Framework in Australia. • As prudential regulator, APRA monitors the risks from banks' relationships with NBFEs. ASIC oversees conduct and disclosure regulation of all financial products available to retail investors and a licencing regime for all financial service providers involved with those financial products. However, wholesale funds mostly fall outside the scope of ASIC's regulation. Although not having a mandate for systemic stability, in its role as a financial services regulator ASIC performs analysis of the systemic risk of certain sectors, such as hedge funds, and of other sectors on a more ad-hoc basis (e.g. money market corporations). RBA monitors and assesses financial stability risks posed by NBFEs and activities; it also coordinates an annual update to CFR on developments and risks in the shadow banking sector.
OP2	• The Australian Bureau of Statistics (ABS) collects data on investment funds and securitisation vehicles; ASIC collects survey-based information on hedge funds; APRA collects data on finance companies, money market corporations and insurers. APRA has the legal power, in certain circumstances, to collect data from financial entities outside the regulatory perimeter. • The RBA regularly analyses data on NBFEs at an aggregate level as part of its financial stability assessment process and the annual shadow banking update to the CFR. ASIC has undertaken periodic in-depth reviews of certain types of shadow banking entities. • There exist data gaps in relevant risk metrics for investment funds, mainly due to lack of fund-type level data. Data gaps were also observed for entities classified under EF2 and EF5. • Domestic information sharing occurs through the CFR process, or bilaterally between agencies under existing MoUs. Legislative provisions mostly allow authorities to share confidential information with each other. The authorities are able to share aggregated information on shadow banking risks with overseas counterparts, but entity-level information can generally only be shared for prescribed purposes. RBA is working to bolster its legal protection for sharing confidential information with Treasury and international organisations.
OP3	• Required entity-level public disclosures by NBFEs are mostly targeted at retail investors and not directly focused on facilitating the assessment of shadow banking risks. • RBA publishes its analysis of systemic risk in the non-bank financial sector in its semi-annual Financial Stability Review. ASIC publishes ad-hoc reviews on certain shadow banking sectors that it has completed. ABS and RBA also regularly publish aggregated balance sheet data on segments of the non-bank financial sector.
OP4	• RBA led the classification of NBFEs into economic functions (EFs), with inputs from ASIC and APRA. The EF classification framework has been incorporated into the RBA's annual shadow banking update to the CFR. Risk mapping was completed. • Some policy tools available for entities classified into EFs; in the case of entities classified into EF1, these tools are available only for funds open to retail investor. There are no plans to expand existing policy tools.

Brazil

Sector size and growth			
	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	5	228	-0.2
OFIs	1	60	-1
Of which: Shadow banking	1	33	2

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)			
EF1	CVM	Securities regulator	Referenced investment funds; Fixed income investment funds; Multimarket investment funds
EF2	CMN BCB	Prudential regulator, Central bank	Finance companies
EF3	CMN BCB	Prudential regulator, Central bank	Broker dealers
EF4	SUSEP	Other	Insurance and re-insurance companies
EF5	CVM	Securities regulator	Receivables investment funds

Available policy tools	
EF1 (Hedge funds)	-
EF1 (FI funds)	Redemption Gates (*), Suspension of Redemptions, Redemption Fees/ restrictions (D); Limits on asset concentration, Limits on leverage (**) ***Other tools***: Liquidity risk management requirements with the same practical results of side pockets and liquidity buffers
EF2	Bank equivalent prudential requirements; Capital Requirements; Liquidity buffers; Limits on large exposures; Restrictions on types of liabilities (***)
EF3	Bank equivalent prudential requirements; Capital Requirements; Liquidity requirements; Restrictions on use of client assets
EF4	Capital requirements; Restrictions on scale and scope of business; Liquidity buffers; Mandatory risk sharing between insurer and insured(****)
EF5	Restrictions on exposures to or funding from banks / other financial entities

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.
(*) Only in the context of suspension of redemption. (**)Investment funds cannot lend or borrow money. Nonetheless, they are allowed to leverage through repos, securities lending and derivatives, always within the boundaries of issuers and of the type of assets in accordance with their portfolio composition rules. Referenced Investment Funds can only have derivatives for hedging purposes. (***) .For leasing companies only. (****) For insurance companies only.

Implementation of FSB Policy Framework	
OP1	• The National Monetary Council (CMN) has a formal mandate for financial stability in Brazil. The BCB is a member of the CMN; CVM participates in meetings with no voting rights. • All financial entities as legally defined in Brazil are regulated by a federal agency. Any gaps identified in the regulatory perimeter can be addressed through a formal legal process. • Coordination among the regulatory bodies is achieved through the COREMEC, an advisory body established under law.
OP2	• The primary source of data for the authorities is regulatory returns, with BCB and CVM having powers to collect *ad-hoc* data from regulated entities as necessary. Data collected is analysed for risks on a systematic basis. • Some recent enhancements to data collected from mutual funds (CVM) and the reporting of fixed-income investments held by open-end private funds (Susep) have been effected. No further enhancements are currently being planned. • There were gaps in the risk metrics data submitted to the 2015 information-sharing exercise. • Authorities exchange information based on bilateral agreements. A multilateral agreement between COREMEC members with the objective of monitoring stability issues is being planned.
OP3	• Data, including risk data, about entities classified under EF1 and EF5 are published on CVM's website. EF2 and EF3 entities are subject to the same disclosure requirements as applicable to banks. Semi-annual financial statements of EF4 entities are published with some financial information available on the SUSEP website. • No changes to the disclosure requirements by entities supervised by BCB or SUSEP are being planned. The CVM is considering whether further information related to the investment funds (e.g. stress testing, sensitivity analysis) can be published.
OP4	• CVM coordinates Brazil's participation in the information-sharing exercise. • EF classification conducted. Entities not classified were not seen to give rise to shadow banking risks, or are still under assessment but make up a small percentage of total financial assets. • Risk mapping was completed. • All entities classified in EFs are regulated with the relevant policy tools adopted. Several policy tools from the FSB Policy Toolkit available for entities classified into EFs.

Canada

Sector size and growth

	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	9	523	4
OFIs	2	147	5
Of which: Shadow banking	1	58	8

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	CSA jurisdictions	Provincial/ Territorial securities regulators	Fixed income funds; hedge funds; alternative funds; property funds; money market funds; convertible bond funds; physical ETFs; cash collateral reinvestment programmes
EF2	CSA jurisdictions	Provincial/ Territorial securities regulators	Finance companies; Non-prudentially regulated FIs that originate mortgages; Mortgage investment corporations (MICs)
EF3	IIROC	Other	Broker-dealers
EF4	OSFI	Prudential supervisor	Private mortgage insurers
	MOF	Other	
EF5	CSA jurisdictions	Provincial/ Territorial securities regulators	ABCP; NHA MBS issued by non-prudentially regulated FIs; Synthetic ETFs
	CHMC *(NHA MBS only)*	Other	

Available policy tools

EF1 (Hedge funds)	***Other tools:*** General statutory duty of investment fund manager to act in best interest of fund; internal control and system requirements for investment funds managers.
EF1 (FI funds)	Suspension of Redemptions (D), Redemption Fees/ restrictions (D) Limits on investment in illiquid assets, Limits on asset concentration, Limits on leverage, Restrictions on maturity of assets(*)
EF2	Leverage limits (MICs only), Restrictions on types of liabilities (MICs only) ***Other tools***: Market conduct regulations (finance companies), licensing, market conduct and public disclosure requirements (Non-prudentially regulated FIs that originate mortgages); Disclosure requirements (MICs)
EF3	Liquidity requirements, Capital requirements, Restrictions on use of client assets ***Other tools:*** Early warning system; insurance requirements
EF4	Capital Requirements, Restrictions on scale and scope of business, Enhanced risk management practices to capture tail events
EF5	Restrictions on maturity / liquidity transformation (except ABCP and synthetic/leveraged ETFs); Restrictions on exposures to or funding from banks / OFIs (only synthetic / leveraged ETFs) ***Other tools:*** Short Term Debt Prospectus Exemption and certain other retail-focused prospectus exemptions unavailable for short-term securitized products including ABCP

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.
(*) For securities lending and repurchase transactions.

Implementation of FSB Policy Framework	
OP1	• Institutional arrangements for regulation of NBFEs are a mix of national and provincial authorities; some NBFEs are not prudentially regulated; a new Capital Markets Regulatory Authority has been proposed. • Coordination arrangements exist for monitoring and assessing financial stability risks posed by NBFE, although not specific to NBFEs. The proposed Capital Markets Regulatory Authority will have powers to monitor and assess risks. • The federal government reviews the regulatory framework every 5 years through legislative review of statutes that govern federally regulated financial institutions, and can act if needed in interim; securities regulators have rule-making powers in extraordinary circumstances or when there is a public interest concern.
OP2	• Data sources to collect information about shadow banking risks are regulatory reporting, statistics, commercial databases, and voluntary surveys of market participants. • Regular and *ad-hoc* analysis of collected information, part of which is made public. Identified challenge is the lack of legal mandate for OSFI to collect data from non-federally regulated financial institutions. • Gaps in availability of data to calculate most risk metrics for assessing SB risks, especially for entities in EF1 and EF3. • Availability of data highlighted as challenge in participating in the information-sharing exercise. More data will be made available and additional quantitative metrics will be developed. The use of market intelligence will be increased. • Formal channels for sharing of data between securities regulators and non-securities financial regulators yet to be established.
OP3	• Disclosures by NBFEs focus on investor information; entities such as hedge funds and private MICs are not subject to any disclosure requirements. No changes in disclosure requirements currently planned. • Authorities disclose various types of information such as statistics, information about the result of their reviews, regular reports and articles. No changes are planned at this time.
OP4	• EF classification conducted; risk mapping completed. Availability and collection of data highlighted as challenges in participating in the information-sharing exercise. • Availability of policy tools, especially for investment funds and finance companies, is limited but no additional tools are deemed to be currently necessary. Some tools not in the FSB Policy toolkit available.

China

Sector size and growth

	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	38	370	18
OFIs	3	29	40
Of which: Shadow banking	3	26	53

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	CBRC	Banking regulator	Collective trusts, MMFs, fixed income funds, other funds (*)
EF2	-	-	*No entities classified*
EF3	-	-	*No entities classified*
EF4	-	-	*No entities classified*
EF5	-	-	*No entities classified*

(*) The Chinese authorities did not agree with the classification of certain entity types as shadow banking. The 2015 Global Shadow Bank Monitoring Report showed a narrow measure of China's shadow banking sector based on OFIs that are involved in credit intermediation.

Available policy tools

EF1 (Hedge funds)	-
EF1 (FI funds)	-
EF1 (collective trust companies)	Limits on leverage; Restrictions on maturity of portfolio assets
EF2	*No entities classified*
EF3	*No entities classified*
EF4	*No entities classified*
EF5	*No entities classified*

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.

Implementation of FSB Policy Framework	
OP1	• CBRC is responsible for regulation/supervision of trust companies and wealth management products (WMPs) offered by commercial banks. The response to the peer review questionnaire did not indicate whether and how other authorities regulate/supervise other NBFEs. • CBRC monitors and assesses financial stability risks associated with trust companies. No information was provided regarding the involvement of other authorities in the monitoring and assessment of financial stability risks from NBFEs. Inter-agency financial coordination meetings, led by the State Council, discuss financial stability issues, including those relating to NBFEs. • MoU signed between CBRC, CSRC and CIRC on cooperation and information-sharing in relation to supervisory matters. • Chinese authorities did not elaborate on the process for reviewing the regulatory perimeter.
OP2	• CBRC requires trust companies to regularly submit financial statements and other information regarding business operations. CBRC obtains data on bank-sponsored WMPs from WMP business statements and from the China Banking Wealth Management Information Registration System. CBRC is planning to enhance its IT systems to automate the collection and aggregation of data on trust companies, which is currently a largely manual process. • The Trust Institution Supervisory Department of the CBRC regularly monitors developments and risks within the trust industry and WMPs on the basis of information obtained from regulatory reports. • Risk metrics data was provided for collective trust products only, but were insufficient to calculate any of the risk metrics related to maturity and liquidity transformation.
OP3	• Required public disclosures of trust companies and bank WMPs are mainly focused on investor information (nature of the investment, fees, returns etc.) rather than specifically addressing shadow banking risks. The CBRC is revising its disclosure requirements for bank WMPs to clarify the nature, frequency and timeliness of the information that must be disclosed. • The China Trustee Association (CTA), an industry body, publishes statistics on the trust industry quarterly and a report on the performance and risk profile of the industry annually. • The CBRC publishes an annual report on the performance and supervisory actions in the trust industry and semi-annual reports on banks' wealth management businesses.
OP4	• The CBRC responded to the FSB information-sharing exercise, focusing on entities under its regulatory purview. It is not clear to what extent other Chinese authorities were involved in the process. • Economic function classification was conducted; entities were classified only under EF1. • Risk mapping was completed. • Restrictions on leverage and maturity transformation of trust companies are in place, along with restrictions on asset composition of bank WMPs. Other policy tools in the FSB Policy Framework for controlling shadow banking risks posed by EF1 entities are not available. • The CBRC indicated that it is researching improved liquidity risk indicators for trust companies.

France

Sector size and growth			
	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	16	622	1
OFIs	2.5	96	-3
Of which: Shadow banking	1.6	61	-5

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)			
EF1	AMF	Securities regulator	Hedge funds; Bond funds; Mixed funds; Money market funds; Other funds
EF2	-	-	*No entities classified*
EF3	AMF ACPR	Securities regulator Prudential regulator	Investment firms
EF4	-	-	*No entities classified*
EF5	AMF ACPR	Securities regulator Prudential regulator	Securitisation

Available policy tools	
EF1 (AIFs)	Redemption Gates (*)(D), Suspension of Redemptions , Redemption Fees/ restrictions (D); Side pockets (D); Limits on investment in illiquid assets (**); Limits on asset concentration; Limits on leverage ; Restrictions on maturity of assets(***) ***Other tools***: Swing pricing and anti-dilution levy; lock up period; redemptions in kind (***)
EF1 (UCITS)	Suspension of Redemptions, Redemption Fees/ restrictions (D); Side pockets (D); Limits on investment in illiquid assets; Limits on asset concentration; Limits on leverage ; Restrictions on maturity of assets (****) ***Other tools: S****wing pricing and ant-dilution levy*
EF2	***No entity classified***
EF3	Bank-equivalent prudential regulatory regimes; Liquidity requirements; Capital Requirements; Restrictions on use of client assets
EF4	***No entity classified***
EF5	Restrictions on maturity liquidity transformation ***Other tools***: Restrictions on the sale of securities issued / shares of SPVs; regulatory reporting requirements.

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.
(*) Only for real estate collective investment undertakings; and to other funds to the extent that underlying assets are illiquid. (**) For certain categories of AIFs defined at the national level. (***) Generally used for tax purposes. Specific provisions exist in case of private equity funds. In some cases, redemptions in kind may be permitted only as part of the liquidation process and is subject to investors' approval. (****) For MMFs only.

Implementation of FSB Policy Framework	
OP1	• BdF and HCSF, the French macroprudential authority, are in charge of ensuring financial stability. The ACPR is also mandated with preserving the stability of the financial system. Each supervisory authority is responsible for identifying risks within its remit and can share concerns with other authorities via HCSF. HCSF ensures a close coordination between relevant authorities. • All financial entities providing financial services in France are regulated. The regulatory and supervisory perimeter is reviewed and updated through informal discussions as part of day-to-day supervision and monitoring.
OP2	• Monitoring of entities and analysis of information about shadow banking risks is split between AMF (EF1 and EF5) and the BdF and ACPR (EF2, EF3 and EF4). The BdF collects data on the shadow banking sector. • The BdF monitors systemic risks linked with shadow banking activities on a continuous basis. This is supplemented by other analyses on developments on financial stability risks from shadow banking entities by the BdF, ACPR and the AMF. • Gaps in availability of risks metrics data were observed for EF1, EF3 and EF5; risk metrics data not required to be reported for other EFs. Data availability is expected to improve in the future (e.g. due to new regulation entering into force such as the Securities Financing Transactions Regulation). • The HCSF facilitates cooperation and exchange of information between its member institutions. BdF, ACPR and AMF meet on a monthly basis in order to discuss common regulatory issues. Cross-border exchange of information on shadow banking risks takes place through the involvement of the AMF in various EU and international working groups.
OP3	• Non-bank entities are subject to relevant disclosure and transparency requirements for current and prospective investors. • One of the aims of the EU regulation on key information documents for packaged retail and insurance-based investment products is to help investors understand risks of different products. • In terms of disclosures by authorities, HCSF issued its first annual report in June 2015 which includes a review of the French shadow banking system; quarterly press releases are also issued. BdF and ACPR carry out a bi-annual risk assessment exercise and disclose its results. BdF also publishes shadow banking data and studies. AMF publishes its annual risk outlook and multiple *ad hoc* studies.
OP4	• Each competent authority classifies into economic functions those entities that fall under its remit, with HCSF ensuring coordination between the authorities in risk assessment. EF classification was done. No entities were classified into EF2 and EF4 because relevant entities were either consolidated into banking groups or covered by Solvency II. Risk mapping was completed. • Policy tools for entities classified into EFs include some tools from the FSB toolkit, with additional tools for entities in EF1 and EF 5. Appropriateness of any tools is assessed as part of monitoring and supervision. In addition, HCSF can impose more stringent capital requirements to investment firms (other than asset managers) that are shadow banking entities. The HCSF evaluates efficiency of policy tools adopted by verifying *ex-post* that the measure had the desired effect.

Germany

Sector size and growth	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	15	430	-1
OFIs	3	81	4
Of which: Shadow banking	3	73	4

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	BaFin	Prudential / securities regulator	Hedge funds; Real estate funds; (except REITs); Money market funds; Bond funds; ETFs; Other funds (including mixed funds)
EF2	BaFin	Prudential regulator / securities	Financial leasing companies; Factoring companies
	Bundesbank	Central bank	
EF3	BaFin	Prudential / securities regulator	Broker dealers (Investment firms)
	Bundesbank	Central bank	
EF4	-	-	*No entities classified*
EF5	BaFin	Prudential / securities regulator	Financial vehicle corporations
	Bundesbank	Central bank	

Available policy tools

EF1 (Hedge funds)	Suspension of Redemptions; Redemption fees / restrictions (D); Limits on investment in illiquid securities; Liquidity buffers; Limits on asset concentration; Limits on leverage (D) ***Other tools***: Limits on short selling
EF1 (FI funds)	Suspension of redemptions (D); Redemption gates(*); Redemption fees / restrictions (D); Limits on investment in illiquid securities; Limits on asset concentration(**); Limits on leverage; Restrictions on maturity of portfolio assets(***)
EF2	Bank equivalent prudential regulation (****); Capital requirements (****); Liquidity buffers (****); Limits on leverage (****); Restrictions on types of liabilities ***Other tools:*** Comprehensive organisational requirements
EF3	Bank-equivalent prudential regulatory regimes; Liquidity requirements; Capital requirements; Restrictions on use of client assets ***Other tools:*** Business conduct rules
EF4	***No entity classified***
EF5	Restrictions on maturity liquidity transformation; Restrictions on exposures to / funding from banks / other FIs (&) ***Other tools***: Retention requirements

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants. (*) Only for real estate funds. (**) Except for close-ended special funds. (***) Only for MMFs and bank deposits in the context of UCITS. (****) Only if consolidated into a banking group. (&) Restrictions imposed on investors, if necessary.

Implementation of FSB Policy Framework	
OP1	• BaFin is the integrated regulator for NBFEs; Bundesbank is primarily responsible for the assessment of systemic risks. • The Financial Stability Committee (FSC) comprising representatives of the MoF, Bundesbank, BaFin and the FMSA (latter member without voting right) is responsible for monitoring and assessing financial stability risks, including risks posed by NBFEs. In addition, the Bundesbank has set up a team responsible for monitoring shadow banking and financial innovation. • BaFin, Bundesbank and the MoF have established formal/informal joint structures to discuss risks associated with NBFEs. • The FSC may issue recommendations addressed to the federal government to extend the regulatory perimeter. Any of the three member authorities of the FSC may propose discussions about revisions to the regulatory perimeter.
OP2	• Bundesbank has a framework for collection/analysis of data on SB risks from entities/activities and monitors innovations; BaFin contributes to this framework. • Data is collected from statistical and supervisory returns; interactions with market participants, supervisors and researchers. BaFin and Bundesbank staff is involved in the analysis of information about SB risks at regular intervals as well as on an *ad-hoc* basis. • Gaps in availability of risks metrics data were observed for EF1; risk metrics data not required to be reported for other EFs. • Bilateral sharing of information between domestic authorities takes place through established contacts and committee structures (e.g. the FSC). Exchange of information on SB risks with authorities in other jurisdictions occurs mainly via international fora or through existing bilateral MoUs.
OP3	• Market disclosures stem primarily from regulatory requirements. BaFin revised the Derivatives Ordinance in the light of adoption of the ESMA Guidelines on ETFs and other UCITS issues. The guidelines include provisions on enhanced disclosure. • Authorities disclose aggregate information about SB risks through annual reports of the FSC, FSRs, articles in the Bundesbank's FSR or Bundebank's or BaFin's monthly bulletins, and Bundesbank discussion papers.
OP4	• BaFin coordinated Germany's participation in the information sharing exercise with the involvement of Bundesbank and the MoF. EF classification was done. No entities were classified into EF4 because no German insurance undertakings are engaged in monoline or credit and financial guarantee business is considered regular insurance business and is subject to prudential regulation. One entity type not involved in maturity/liquidity transformation and not highly leveraged was identified under "SB not classified." • Risk mapping was completed. • Some policy tools covering all entities classified into EFs were available both from the FSB toolkit and some additional tools.

Hong Kong

Sector size and growth

	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	3	1165	11
OFIs	0.2	85	14
Of which: Shadow banking	0.1	20	37

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	SFC	Securities regulator	Hedge funds; Money market funds; Fixed income funds, Mixed balanced funds; Other funds (non-equity related)
EF2	Companies registry, Police, FSTB	Other	Money lenders
EF3	SFC	Securities regulator	Broker dealers
EF4	IA	Insurance regulator	Insurance companies
EF5	-	-	*No entity classified*

Available policy tools	
EF1 (Hedge funds)	Redemption gates (D); Suspension of Redemptions (D); Redemption fees / restrictions (D); Side Pockets (D); Limits on investment in illiquid assets (D); Limits on asset concentration; Limit on leverage (D) ***Other tools:*** SFC has the power to impose additional conditions on a case by case basis.
EF1 (FI funds)	Redemption gates (D); Suspension of Redemptions (D); Redemption fees / restrictions (D); Side Pockets (D); Limits on investment in illiquid assets; Limits on asset concentration; Limit on leverage
EF2	Capital Requirements (*); Liquidity buffers (*)
EF3	Capital requirements; Liquidity requirement; Restrictions on use of client assets
EF4	Capital requirements; Restrictions on scale and scope of business; Liquidity buffers ***Other tools:*** Asset liability mismatches; stress testing
EF5	*No entities classified*

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.
(*) Only for entities consolidated into banking groups.

Implementation of FSB Policy Framework	
OP1	• In line with the SFC's statutory objectives of reducing systemic risks and maintaining financial stability in the securities and futures market, the SFC established a Risk and Strategy Unit in 2012 as a centralised unit overseeing risk identification and contributing to strategic planning. Under legislation passed in 2015, an independent insurance authority (IIA) with enhanced legal capacity, powers and financial independence is being established, along with a statutory licensing regime for insurance intermediaries. A risk-based capital framework for insurers is also under development. • FSC (chaired by the Secretary for Financial Services and the Treasury, and comprising representatives from HKMA, SFC and IA) is responsible for monitoring financial market functioning and formulating and coordinating responses to issues and events with possible systemic implications. • CFR (chaired by the Financial Secretary of the Hong Kong Special Administrative Region Government, and comprising representatives from the FSTB, HKMA, SFC, IA and MPFA) is the main coordinating body to close regulatory gaps among supervisors and to expand the regulatory perimeter where necessary. Regulators could make legislative proposals to amend the regulatory perimeter after consultation with the public and other stakeholders.
OP2	• SFC-regulated funds, fund operators and broker dealers as well as IA-authorised insurers are subject to various regulatory reporting requirements; information on hedge funds and money lenders is mainly based on periodic surveys. Regulatory reporting requirements for insurers are to be enhanced upon implementation of the IIA regime. SFC is undertaking an on-going review of its risk data strategy. • The jurisdiction received full reporting relief for risk metrics in the information-sharing exercise. • SFC and IA have broad information-sharing powers subject to certain public interest and secrecy conditions. Bilateral and multilateral MoUs facilitate domestic and cross-border information sharing. Regular CFR and FSC meetings also support information sharing between domestic authorities.
OP3	• Disclosure requirements for most EF1 entities are focused on investor information; for public funds, this also includes financial reports that must be distributed to investors twice a year. Hedge funds, broker dealers and money lenders are not subject to market disclosures because they are private entities. Insurers' financial statement filings are publicly accessible from Companies Register. Public disclosure requirements for insurers to be enhanced in line with IAIS Core Principles under the proposed risk-based capital framework for insurers. • SFC publishes selected aggregated data on broker dealers, hedge funds and the funds management industry. IA publishes market statistics on insurance.
OP4	• HKMA coordinated the jurisdiction's involvement in the FSB information-sharing exercise among domestic authorities. EF classification was done; no entity was classified in EF5. Certain broker dealers were classified outside EF3 because they do not rely on short-term funding or perform credit intermediation. Risk mapping was completed. • Most policy tools for EF1 entities were discretionary. No plans to augment existing policy toolkit for classified entities.

India

Sector size and growth

	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	4	193	8
OFIs	0.4	17	7
Of which: Shadow banking	0.4	19	9

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	SEBI	Securities regulator	Money market funds, Hedge funds, Fixed income funds, Other funds
EF2	RBI NHB, MCA	Central bank Other	Housing finance companies (HFCs); Non-banking financial companies (NBFCs)
EF3	-	-	*No entity classified*
EF4	-	-	*No entity classified*
EF5	RBI MoF	Central bank Other	Securitization companies / Reconstruction companies

The entity types by economic functions in this table are in conformity with the classification in the 2015 Global Shadow Bank Monitoring Report. The Indian authorities did not agree with the classification of certain entity types (money market funds, hedge funds, fixed income funds, other funds) in EF1 and hence did not report the availability of policy tools for EF1 entities.

Available policy tools	
EF1 (Hedge funds)	-
EF1 (FI funds)	-
EF2	Bank equivalent prudential regulations; capital requirements; Liquidity requirements; Limits on leverage; Limits on large exposures; Restrictions on types of liabilities ***Other tools:*** Prudential norms for income recognition, asset classification and provisioning
EF3	*No entities classified*
EF4	*No entities classified*
EF5	Restrictions on maturity / liquidity transformation ***Other tools:*** Prudential norms related to capital adequacy, asset classification and provisioning

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.

Implementation of FSB Policy Framework	
OP1	• The FSDC (with representatives from RBI, SEBI, IRDA, PFRDA and the Government) monitors and assesses financial stability risks emanating from different parts of the financial sector, including NBFEs. It established a Shadow Banking Implementation Group (SBIG) in 2015 to guide the implementation of FSB reforms for shadow banking entities. • The only unregulated NBFEs in India are money lenders and pawn brokers, which are not considered to be systemically important by the authorities given their small size. Review and update of the regulatory perimeter is undertaken by the respective regulators; extant legal provisions provide considerable scope for the inclusion of new entities/activities within the regulatory perimeter via a process of notification without the need for government approval or legislative amendments.
OP2	• Data on EF-classified entities are mainly sourced from periodic regulatory reporting. NBFCs deemed systemically important by RBI are subject to more frequent reporting requirements than other NBFCs. SEBI can collect data from unregulated entities in connection with enforcement of regulation under its remit. • Lack of granular data for calculating some risk metrics observed for EF-classified entities in the FSB info-sharing exercise. Data gaps sought to be addressed by SBIG, with the possibility of more granular data being collected from NBFEs. • RBI performs analysis of systemic risk posed by NBFEs. Such analysis includes interconnectedness with the banking system and stress testing analysis covering NBFEs. The analysis is published semi-annually in FSRs. SEBI regularly contributes to the FSR on financial stability issues related to securities markets. • Existing MoU signed by the various financial sector regulators of FSDC facilitates domestic exchange of information relating to shadow banking risks. Authorities see little need for information-sharing mechanism with regulatory authorities in other jurisdictions for NBFCs as these entities only operate domestically. SEBI has multilateral/bilateral MoUs with a number of overseas securities regulators that provide for information-exchange in certain circumstances.
OP3	• RBI regulated systemically important and deposit-taking NBFCs are required to disclose data on asset and liability profiles, non-performing assets, off-balance sheet items, etc.; other EF-classified entities are not subject to shadow banking-specific disclosure requirements. Listed companies are subject to continuous disclosure requirements as per agreement with exchanges / SEBI regulations. • Systemic risk analysis by RBI is published in its FSR.
OP4	• RBI is the coordinating authority for the FSB info-sharing exercise. EF classification was done with no entities classified into EF3 and EF4. NBFEs not classified into EFs included fee-based stock brokers that do not take public funds; insurance companies that do not perform any credit intermediation; and unregulated money lenders and pawn brokers that rely mainly on own funds and are perceived as too small to pose systemic risk. Risk mapping was not undertaken. • SBIG is considering potential enhancements to the existing framework for oversight and regulation of shadow banking entities. • No policy tools were reported for entities classified under EF1; policy tools for entities classified under EF2 and EF5 were available (both from the FSB toolkit and other tools). Enabling legislation gives RBI broad powers to introduce any policy tools necessary to help it meet its mandate.

Indonesia

Sector size and growth

	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	1	90	7
OFIs	0.1	8	7
Of which: Shadow banking	0.01	1	8

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	OJK	Prudential regulator	Money market funds
EF2	-	-	*No entities classified*
EF3	-	-	*No entities classified*
EF4	-	-	*No entities classified*
EF5	-	-	*No entities classified*

Available policy tools

EF1 (Hedge funds)	*No entities classified*
EF1 (FI funds)	Suspension of Redemptions, Redemption Fees/ restrictions (D); Limits on investments in illiquid assets; Liquidity buffers; Limits on asset concentration; Limits on leverage; Restrictions on maturity of portfolio assets
EF2	*No entities classified*
EF3	*No entities classified*
EF4	*No entities classified*
EF5	*No entities classified*

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.

Implementation of FSB Policy Framework	
OP1	• OJK conducts micro-prudential supervision for all NBFIs, banks and capital markets. BI is the macroprudential authority responsible for assessing financial stability risks, and its assessment includes risks posed by NBFEs. • By law, the establishment of any new type of NBFE should be approved by OJK. This ensures that all NBFEs would fall under the scope of OJK supervision. Financial service institutions are required to seek supervisory approval from authorities (OJK or BI) prior to issuing new products or performing new activities. • OJK conducts market surveillance to assess risks to financial stability from NBFIs' activities. It can pass new regulations on financial activities that are currently unregulated. BI also performs periodic assessments of emerging non-bank financial intermediary activities. • Formal coordination between the OJK, BI, Ministry of Finance, and the *Lembaga Penjamin Simpanan/LPS* (Indonesian Deposit Insurance Corporation) set under the Forum Koordinasi Stabilitas Keuangag/FKSSK (Financial System Stability Coordination Forum) in order to provide a coordinated response to risks identified. Multi-agency MoU and bi-lateral MoUs between authorities exist.
OP2	• OJK has the authority to collect information from NBFEs on a regular and *ad-hoc* basis. OJK embarked on building a new reporting platform to collect data from non-bank sectors. • New regulation on the submissions by finance companies will be implemented in June 2016, providing for alignment with the new accounting standards (PSAK) and expansion of data and information provided. The authorities are making efforts to reduce gaps between the risk assessment framework for NBFEs and the banking system. • OJK is conducting studies to consider adding early warning system to the set of variables and indicators used for fixed-income mutual funds and developing an integrated electronic trading system for fixed income instruments to better capture fixed income portfolio flows.
OP3	• NBFEs required under regulation to disclose risks of individual products to current and prospective customers. • The BI publishes a Financial Stability Review semi-annually that contains the results of its analysis of financial stability risks, including those posed by NBFIs. • OJK periodically publishes information and statistics on its website based on types of financial institutions or activities.
OP4	• A formal structure for implementing the FSB Policy Framework does not exist between OJK and BI, and no institutional arrangements are in place to coordinate the classification of NBFEs and capital market-related activities into economic functions. The classification process is conducted on an *ad-hoc* basis through discussions among the relevant authorities: BI leads the exercise from a macroprudential perspective, in close coordination with the OJK that is responsible for micro-prudential aspects. • Entities were classified only under EF1. Finance companies are considered outside EF2 since they borrow long-term to finance short-term loans. • Risk mapping was completed. • Most policy tools in the FSB policy toolkit for entities classified under EF1 were available.

Italy

Sector size and growth			
	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	7	362	-0.1
OFIs	1	38	-5
Of which: Shadow banking	0.3	17	-4

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	CONSOB Bank of Italy	Securities regulator Central bank	Money market funds; Hedge funds; Fixed income funds; - Open-ended investment funds
EF2	Bank of Italy	Central bank	Finance companies
EF3	CONSOB Bank of Italy	Securities regulator Central bank	Investment firms
EF4	Bank of Italy	Central bank	Confidi (or financial guarantors)
EF5	Bank of Italy	Central bank	Securitisation

Available policy tools	
EF1 (Hedge funds)	Redemption Gates (D); Suspension of Redemptions; Redemption fees / restrictions (D); Side Pockets (D); Limits on investment in illiquid assets (*); Limits on leverage ***Other tools***: Governance, capital and organisation requirements
EF1 (FI funds)	Suspension of redemptions; Redemption fees / restrictions (D); Limits on investment in illiquid assets; Limits on asset concentration; Limits on Leverage; Restrictions on maturity of portfolio assets(**) ***Other tools***: Governance, capital and organisation requirements
EF2	Bank equivalent prudential regulation; Capital requirements; Limits on leverage (***); Limits on large exposures; Restrictions on types of liabilities ***Other tools***: Governance, capital and organisation requirements
EF3	Bank-equivalent prudential regulatory regimes; Capital Requirements; Liquidity requirements; Restrictions on use of client assets ***Other tools:*** Governance and organisational requirements; remunerations rules; large exposure rules; reporting requirements.
EF4	Capital requirements; Restrictions on scale / scope of business; Enhanced risk management practices to capture tail events
EF5	Restrictions on maturity and liquidity transformation (****)

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.
(*) Italian funds investing more than 20% in illiquid assets (such as real estate assets, loans, financial instruments not listed in a regulated markets) must be close-ended. (**) .Only for MMFs. (***) Only if consolidated into banking groups; (****) De factor restrictions on maturity transformation.

Implementation of FSB Policy Framework	
OP1	• Italy has a consolidated approach for banking and financial supervision involving the BoI and CONSOB. A Task Force on Shadow Banking was set up to improve coordination and exchange of data and thereby ensure effective monitoring. • Law 262 ensures periodic review of content of regulation at least every three years (although this review has been in practice integrated into the authorities' annual planning, also taking into account the ongoing work undertaken at EU level)..
OP2	• BoI and CONSOB have the authority to collect (eventually also in collaboration with other authorities) information from all supervised entities. • BoI undertakes *ad-hoc* system-wide analysis to identify and asses shadow banking risks and summarizes results in internal notes. Financial Stability Report can include output of shadow banking risk analysis. CONSOB employs specific risk evaluation models, taking into account the qualitative and quantitative information provided by regulated entities, including non-bank financial entities, and performs quantitative analysis to support supervisory functions; the related output feeds into CONSOB priorities, strategic objectives and general planning. • Gaps in availability of risks metrics data were observed, especially for EF1 and EF5; risk metrics data was not required to be reported for EF3 and EF4. • BoI and CONSOB cooperate to share information at EU level and have signed MoUs and participate in relevant work streams.
OP3	• Regulatory requirements ensure public disclosure of information. • BoI annual report analyses trends and reports aggregate statistics on non-banking intermediaries. Flow of funds data is available for other financial intermediaries. CONSOB's risk outlook (including a risk dashboard) is published every six months.
OP4	• Classification into EFs was completed by two shadow banking tasks forces (one within the Bank of Italy, the other amongst all competent authorities) set up in response to the Policy Framework. • Entities were classified into all EFs. Four entity types not subject to run risk were identified under "SB not classified." • Risk mapping was completed. • Policy tools covering all entity types classified into EFs were available from the FSB toolkit, with some additional tools reported for entities in EF1, EF2 and EF3.

Japan

Sector size and growth

	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	29	717	-5
OFIs	4	87	-4
Of which: Shadow banking	2	60	-5

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	FSA	Banking, insurance and securities regulator	Equity investment funds; Fixed income investment funds; Hedge funds; Money market funds
EF2	FSA	Banking, insurance and securities regulator	Finance companies
EF3	FSA BOJ	Banking, insurance and securities regulator Central bank	Broker dealers; Securities finance companies; Money market broker dealers
EF4	-	-	*No entity classified*
EF5	FSA	Banking, insurance and securities regulator	Securitizations

Available policy tools

EF1 (Hedge funds)	Suspension of Redemptions (D); Limits on investment in illiquid assets; Limits on asset concentration; Limit on leverage
EF1 (FI funds)	Suspension of Redemptions (D); Limits on investment in illiquid assets; Limits on asset concentration; Limit on leverage
EF2	Capital Requirements ***Other tools:*** Investigation of repayment capacity for retail customers
EF3	**Broker dealers**: Capital requirements, Restrictions on use of client assets **Securities finance companies**: Capital requirements, Restrictions on use of client assets **Money market broker dealers**: Restrictions on use of client assets ***Other tools***: Scope of Resolution regime; Central Bank examination; Liquidity risk management requirements
EF4	*No entities classified*
EF5	- ***Other tools:*** Risk management related to securitization products; ensuring traceability when selling securitization products.

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.

Implementation of FSB Policy Framework

OP1	• The FSA has primary responsibility for regulating and supervising non-bank financial entities (NBFEs). The BOJ monitors and assesses certain NBFEs (broker dealers and securities finance companies) that have accounts with it. The BOJ monitors and assesses financial stability risks, including those emanating from NBFEs. High-level coordination between BOJ and FSA takes place through semi-annual meeting of the Council for Cooperation on Financial Stability. • The FSA is responsible for reviewing the adequacy of the regulatory perimeter. When considering expanding the regulatory perimeter to capture new entities and/or activities, the Council of Experts is consulted. Updates to the regulatory perimeter may require law changes in the Diet and public consultations in accordance with the Administrative Procedure Act.
OP2	• FSA collects information on entities it regulates mainly through required regulatory reporting (including annual business reports), on and off- site monitoring and interviews. The BOJ has data collection and on-site examination powers for account-holders under Article 44 of the Bank of Japan Act. • Japan received reporting relief for risk metrics in the information-sharing exercise for structured finance vehicles (EF5). For the remaining classified entities, there were some gaps in the availability of data to calculate risk metrics, mainly regarding asset and liability maturity profiles. No data were provided on hedge funds classified under EF1. Authorities have no current plans to enhance data collection(s). • No MoUs exist between the authorities for information-sharing purposes, but FSA can formally request information from BOJ regarding the results of the BOJ's on-site examinations.
OP3	• Listed companies and investment trusts issuing securities to the public are subject to disclosure requirements that are mainly focused on information that could affect the decisions of investors. Disclosures are made available to the public through an online disclosure system ('Electronic Disclosure for Investors Network'). Broker dealers and Securities finance companies are required to disclose business reports publicly. Finance companies are required to prepare and preserve books on its business, which can be disclosed to its obligors upon requests. For entities that are not ordinarily required to provide public disclosures (e.g. finance companies, money market broker dealers), FSA has legal power to require public disclosures if deemed necessary. Various industry associations publish aggregated industry data, such as the Japan Investment Trust Association, Japan Financial Services Association and Japan Securities Dealers Association. • The FSA publishes analysis of its monitoring program in its annual *Financial Monitoring Report*. The BOJ publishes a semi-annual *Financial System Report* that includes its analysis of financial stability risks posed by NBFEs. FSA also publishes aggregated information on investment funds (EF1) and finance companies (EF2).
OP4	• FSA, in consultation with the BOJ, participated in the information-sharing and EF classification. No entities were classified under EF4. • Risk mapping was completed. • Many of the policy tools in the FSB Policy toolkit are available for EF-classified entities; however few policy tools are available for finance companies (EF2), money market broker dealers (EF3) and securitisation entities (EF5). FSA deems its existing policy tools as adequate for addressing potential financial stability risks associated with classified NBFEs.

Korea

Sector size and growth

	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	6	418	8
OFIs	1	100	10
Of which: Shadow banking	1	48	12

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	FSC/FSS	Prudential regulator	Money market funds; Fixed income funds; Mixed funds
EF2	FSC/FSS	Prudential regulator	Finance companies
EF3	FSC/FSS	Prudential regulator	Broker dealers
EF4	-	-	*No entity classified*
EF5	FSC/FSS	Prudential regulator	ABS; ABCP; residuals of SPC

Available policy tools

EF1 (Private funds)	Suspension of Redemption (D); Redemption fees/ restrictions (D); Side pockets (D); Limits on leverage(*)
EF1 (Public funds)	Redemption gates; Suspension of Redemption (D)(**); Redemption fees/ restrictions (D) (**); Side pockets (D); Limits on asset concentration (***); Liquidity buffers(***), Limits on leverage; Restrictions on maturity profile of assets (****)
EF2	Capital requirements; Liquidity buffers; Leverage limits; Restrictions on types of liabilities
EF3	Bank-equivalent prudential regulation (*****); Capital requirements; Liquidity requirements; Restrictions on use of client assets ***Other tools***: Leverage limits
EF4	*No entities classified*
EF5	Restrictions on eligible collateral ***Other tools***: Registration requirements for asset-backed securitization plans.

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.

(*) Only for a collective investment business entity borrowing funds for the account of a fund in managing collective investment property. (**) Except for MMFs; (***) Public funds only; (****) Only MMMFs; (*****) Similar to Basel II requirements.

Implementation of FSB Policy Framework

OP1	• The FSC is responsible for licensing and regulation of NBFEs, while the FSS is responsible for the supervision of entities under the guidance and oversight of the FSC. The BOK monitors and assesses financial stability risks posed by NBFEs and can request the FSS to undertake joint examinations of regulated entities and share examination reports. The FSC acts as a consultative body on financial stability issues. Financial stability concerns relating to non-bank financial entities and activities are also discussed at the Macroeconomic Financial Meeting (attended by the Ministry of Strategy and Finance (MOSF), BOK, FSC, FSS, KDIC and Korea Center for International Finance), which is convened at least quarterly. Any decisions taken at this meeting are not binding, and an agency would rely on its existing powers/authority if it elected to take action based on those discussions. • The FSC has the power to either draft or revise regulations when a financial stability concern is identified, and has the power to submit a new or revised bill to the National Assembly to change the regulatory perimeter.
OP2	• Information on registered CIS and securities firms mainly obtained from regulatory returns. ABS issued pursuant to the ABS Act are required to be registered and submit an issuance report; other ABS are not required to be registered and information on them is obtained indirectly from securities firms involved in the issuance or from the Korean Securities Depository. • Data on financial institutions collected by FSS are made available to other authorities and the public via a web-based system, Financial Statistics Information System (FISIS). • There were gaps in availability of data to calculate risk metrics in the information-sharing exercise, particularly for EF1, EF3 and EF5 entities. Main data gaps were for maturity profile of assets and liabilities and off-balance sheet items. BOK recently enhanced its data on interconnections between the banking and shadow banking sectors, but has no other current initiatives to further enhance data collections. • The FSC, FSS, BOK, MOSF and KDIC have signed a joint MoU that provides for sharing of financial information submitted by financial institutions to the BOK, FSS and KDIC. Korean authorities have also entered into MoUs with 46 authorities in 25 jurisdictions to facilitate cross-border supervisory cooperation and information sharing.
OP3	• NBFEs are required to periodically disclosure financial and business information to the FSS, which is made available to the public via FISIS (see above). The FSS also publishes financial sector statistics in its *Monthly Financial Statistics Bulletin*. Industry self-regulatory bodies, such as the Korea Financial Investment Association and Credit Finance Association of Korea, publish selected industry statistics and analyses. BOK publishes a semi-annual *Financial Stability Report* that contains its assessment of financial stability risks, including those emanating from non-bank financial entities and activities. Authorities have no plans to enhance disclosure requirements for NBFEs.
OP4	• BOK coordinated Korea's involvement in FSB information-sharing exercise in conjunction with FSC. EF classification was done with no entities classified under EF4. Risk mapping was completed. • Several policy tools from the FSB toolkit were available for EF-classified entities, with relatively few tools being available for securitization vehicles (EF5). The authorities note that the regulatory requirements for EF5 entities may need to be strengthened, but that the current set of policy tools is otherwise deemed adequate to address potential risks posed by NBFEs.

Mexico

Sector size and growth			
	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	1	118	6
OFIs	0.3	23	6
Of which: Shadow banking	0.2	16	3

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	CNBV	Prudential regulator	Money market funds; Other investment funds; fixed income funds
EF2	CNBV	Prudential regulator	Regulated Sofomes; Socaps; Financial coporations; Sofipos; Other financial entities (bonding companies); Credit unions
EF3	CNBV	Prudential regulator	Broker dealers
EF4	CNSF	Prudential regulator	Insurance companies (credit insurances)
EF5	CNBV	Prudential regulator	Securitizations

Available policy tools	
EF1 (Hedge funds)	-
EF1 (FI funds)	Redemption gates (D); Suspension of Redemptions, Redemption Fees/ restrictions (D), Side pockets (D), Limits on investment in illiquid assets, Liquidity buffers, Limits on asset concentration ***Other tools:*** During disorderly market conditions, funds authorised by the CNBV may operate securities with related FIs.
EF2	For regulated entities: Capital requirements, Limits on large exposures; Restrictions on types of liabilities. ***Other tools:*** disclosure requirements; credit risk provision and redemption restrictions (for credit unions),
EF3	Bank-equivalent prudential regulatory regimes; Liquidity requirements, Capital requirements, Restrictions on use of client assets ***Other tools:*** Restrictions on ownership and related business
EF4	Capital Requirements, Restrictions on scale and scope of business, Liquidity buffers; Enhanced risk management practices to capture tail events
EF5	***Other tools:*** Banks should capitalize their investments in securitisations to which they provide guarantee as if the underlying assets have not been securitised.

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.

Implementation of FSB Policy Framework	
OP1	• The authorities in charge of most NBFEs are vested with a financial stability mandate. Coordination arrangements include an interlocking board mechanism and participation in a Financial System Stability Council (FSSC). No change currently planned. • Any amendment to the supervisory perimeter must undergo a legislative process. Requirements on leverage and debt service coverage for REITS were recently introduced, while some non-regulated entities (Sofomes) were brought within the regulatory perimeter.
OP2	• Data sources are regulatory reports, public balance sheets and income statements, industry sources, some market intelligence and press releases. Some non-regulated, non-deposit taking entities are required to regularly report borrower level data to a credit information bureau. BANXICO has access to this information. • Each authority conducts its own financial stability assessment and contribute to the FSSC's annual report. Cooperation between authorities domestically and internationally possible through MoUs, provided for under law. • Several gaps in data for calculating risk metrics were observed for entities in all EFs (except EF4); no changes are currently planned with regard to the availability of data, although the authorities identify standardisation of data for EF5 entities as a major challenge and suggest that improved coordination amongst domestic agencies could improve the analysis of shadow banking risks.
OP3	• Disclosures requirements vary by entity type (e.g. investor-oriented disclosures in prospectus; investment portfolios and risk management policies by investment funds; financial statements, risk management policies; credit ratings by broker dealers, etc.) No changes to disclosure requirements are currently planned. • Authorities disclose risk assessment data on entities on their website and in FSSC annual reports and BANXICO FSRs. No change currently planned, although the authorities suggest that additional disclosure of information on non-regulated entities would enhance the market participants' ability to assess shadow banking risks.
OP4	• BANXICO coordinates Mexico's participation in the FSB information-sharing exercise. • EF classification conducted; risk mapping completed. • Policy tools not available for all entity types classified under EFs. No change in the policy toolkit is currently planned, although the authorities suggest that liquidity risk management tools for investment funds could be useful.

Netherlands

Sector size and growth			
	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	12	1443	3
OFIs	7	838	3
Of which: Shadow banking	1	74	1

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	AFM DNB	Securities regulator Central bank	Money market funds; Hedge funds, Fixed income and other investment funds; REITS; funds excluding equity
EF2	AFM	Securities regulator	Finance companies
EF3	AFM DNB	Securities regulator Central bank	Broker dealers dealing on own account
EF4	-	-	*No entity classified*
EF5	DNB	Central bank	Structured finance vehicles (*)

(*) Indirect supervision on SPV that are consolidated in a banking group

Available policy tools

EF1 (Hedge funds)	Redemption Gates (D), Suspension of Redemptions (D), Redemption Fees,/ restrictions (D), Limits on Investment in illiquid assets, Limits on asset concentration; Limits on Leverage; Restrictions in maturity profile of assets
EF1 (FI funds)	Suspension of Redemptions (D)), Limits on Investment in illiquid assets, Limits on asset concentration; Limits on Leverage; Restrictions in maturity profile of assets (*)
EF2	-
EF3	Bank equivalent prudential requirements, Capital requirement, Liquidity requirements, Restrictions on use of client assets
EF4	*No entities classified*
EF5	***Other tools:*** Indirect regulation through banks and insurance companies investing in these instruments.

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.
(*) Only for MMFs.

Implementation of FSB Policy Framework	
OP1	• DNB and AFM supervise NBFEs under a twin-peak supervisory model, with DNB being responsible for monitoring and assessing financial stability risks posed by NBFEs. Coordination is facilitated through the Financial Stability Committee (FSC) as well as *ad-hoc* working groups. • Regulatory perimeter is updated via the issuance of new licenses. When a new entity or innovation emerges in the credit intermediation space, the authorities work together to decide where it should fall under the current regulatory framework.
OP2	• DNB systematically collects information on NBFEs based on flow of funds data. AFM collects information on mutual funds and their managers on a survey basis. DNB has legal power to collect data from entities not under supervision for financial stability purposes. • DNB reports regularly on general developments, while risk analysis takes place on an *ad-hoc* basis. DNB plans to put in place a more structured process. • Gaps in availability of risks metrics data were observed for EF1, EF2, EF4, and EF5; risk metrics data was not required to be reported for EF3. Improvements to collect data are underway. • Information is exchanged between DNB and AFM. To enhance cross-border information exchange DNB and AFM participate in various international committees and working groups.
OP3	• Disclosure includes publication of annual accounts and aggregated balance sheet data of investment funds. • DNB recently published an occasional study on financial stability risks in the Dutch shadow banking system, implementing the FSB's new activity-based "economic function" measure of shadow banking.
OP4	• The AMF set up a small *ad-hoc* working group to implement the Framework and conduct risk analysis for the FSC. The group conducted 2 workshops early in the year and again in the summer to discuss with experts, market participants, the Ministry of Finance and DNB on issues related to the inputs for the questionnaire and analysis of EFs. • EF classification was done. No entities were classified into EF4. Fifteen entity types were identified under "SB not classified." • Several policy tools for entities classified under EF1 and EF3 are available from the FSB toolkit. Policy tools from FSB toolkit are not available for entities classified under EF2 and EF5, with entities classified under EF5 being only indirectly supervised.

Russia

Sector size and growth

	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	2	165	4
OFIs	0.1	5	13
Of which: Shadow banking	0.1	4	13

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	CBR	Central bank and prudential regulator	Hedge funds, Money market funds, Fixed income funds
EF2			Microfinance organization
EF3			Broker dealers
EF4			Insurance companies
EF5			SPVs issuing mortgage-backed securities

Available policy tools

EF1 (Hedge funds)	Redemption Gates (*); Suspension of Redemption (D);Limits on investments in illiquid assets; Limits on asset concentration; Limits on leverage
EF1 (FI funds / MMFs)	Redemption Gates (*); Suspension of Redemption (D);Limits on investments in illiquid assets; Limits on asset concentration; Limits on leverage
EF2	Capital requirements; Limits on large exposures; Restrictions on types of liabilities ***Other tools:*** Liquidity ratio
EF3	Capital requirements; Restrictions on use of client assets
EF4	Capital requirements; Restrictions on scale and scope of business ***Other tools:*** Requirement for composition and structure of insurance companies' assets
EF5	Restrictions on eligible collateral; Restrictions on exposures to or funding from bank / other FIs

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.
(*) For interval funds only.

Implementation of FSB Policy Framework

OP1	• CBR's Financial Stability Committee (FSC) is responsible for monitoring and assessing financial stability risks posed by NBFEs. Quarterly risk assessment of NBFEs based on data/information obtained from supervisory reporting and regular/*ad-hoc* surveys by CBR. • CBR's systemic risk assessment results are regularly discussed at the NFSC, an inter-agency body comprising representatives from CBR and the Government, to assess the level of systemic risks and threats to financial stability and to develop proposals on measures to protect financial stability. • CBR is also responsible for reviewing the adequacy of the regulatory and supervisory perimeter for NBFEs, including new NBFEs/activities posing potential systemic risk. The regulatory perimeter can be expanded by amending the law, CBR's regulations or by issuing new Ordinance/Instructions.
OP2	• Data on NBFEs are mainly sourced from supervisory reporting (mandatory financial statements) and surveys by CBR. • CBR performs risk analysis of NBFEs, including assessment of potential systemic risk posed by new NBFEs/activities based on information obtained from surveys, with assessment results and issues identified reported to FSC. • Supervisory reporting does not provide relevant data for calculating all risk metrics (e.g. on maturity/liquidity transformation) in the FSB information-sharing exercise, but initiatives are underway to improve data availability, granularity and quality (e.g. migration to unified reporting form that adheres to International Financial Reporting Standards). • Information-exchange with foreign regulatory authorities takes place through the FSB information-sharing exercise and existing MoUs.
OP3	• Data disclosure requirements imposed on NBFEs by CBR include: net asset value, cash allocation, structure of assets and rules on governance of funds (investment funds); effective interest rates (microfinance organisations); disclosure of own funds (broker-dealers); and annual financial statements (insurance companies). • CBR publishes systemic risk assessment results of NBFEs semi-annually in the FSR.
OP4	• CBR identifies as a major challenge the lack of data of necessary depth and scope to appropriately classify NBFEs by economic function (which may, for example, overstate the size of shadow banking activities in the case of insurance companies). • In the 2015 information-sharing exercise, EF classification was completed; the risk mapping was partially completed. • Some policy tools from the FSB toolkit as well as some additional tools were available for all entities classified into the EFs. As part of its systemic risk assessment process for NBFEs, CBR regularly assesses the adequacy/effectiveness of policy tools applied to NBFEs, including considering any need for additional regulatory measures based on systemic risk assessment results and issues identified.

Saudi Arabia

Sector size and growth

	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	1	199	12
OFIs	0.03	5	9
Of which: Shadow banking	0.03	5	9

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	CMA	Prudential regulator	Investment funds
EF2	CMA SAMA	Securities regulator Central bank and prudential regulator	Real estate finance companies; Other finance companies
EF3	-	-	*No entities classified*
EF4	-	-	*No entities classified*
EF5	-	-	*No entities classified*

Available policy tools

EF1 (Hedge funds)	Side Pockets
EF1 (FI funds)	Redemption fees; Limits on investment in illiquid assets; Limits on asset concentration; Limits on leverage ***Other tools:*** Prudent investment management requirements
EF2	Capital requirements, Liquidity buffers; Leverage limits; Limits on large exposures; Restrictions on types of liabilities
EF3	*No entity classified*
EF4	*No entity classified*
EF5	*No entity classified*

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.

Implementation of FSB Policy Framework	
OP1	• SAMA is the prudential regulator of entities classified under EF2 since 2012, while the CMA supervises entities classified under EF1. Authorities feel that the existing arrangements are adequate for monitoring any new shadow banking activities and updating the regulatory perimeter accordingly. Recent instances of the update of the regulatory perimeter include the regulation of finance companies. Possible changes to the perimeter with regard to investment funds, real estate and securitisations is under consideration. • Cooperation between authorities (SAMA, MoF and CMA) takes place through regular meetings and a MoU between SAMA and CMA. Internationally, CMA is a signatory IOSCO MMoU signatory while on a regional level, the authorities participate in Gulf Cooperation Council and the Union of Arab Securities Authorities. A Saudi Financial Stability Board, which will have a broad mandate for financial stability including shadow banking risks, is yet to be fully operational.
OP2	• The main sources of data on NBFEs include regulatory reporting and market information on investment funds from fund managers. Availability and accuracy of data from finance companies (FCs) were identified as major challenges. • No risk metrics data was submitted by the authorities. Greater enhancement to the data collection process is under consideration, while there are ongoing reviews on the adequacy of data being collected. • SAMA and CMA share data on the basis of a MoU. The establishment of the Saudi Financial Stability Board is expected to improve the exchange of information and coordination. • The authorities report that the data collected is regularly analysed to assess shadow banking risks posed by the entities.
OP3	• FCs are required to publish regular financial statements. SAMA proposes to publish aggregated quarterly information on these entities. Publication of financial statements by entities conducting securities business is voluntary (though many entities do publish their financial statement). Investment funds are required to disclose information on daily net asset value and financial statements (at least annually). • Authorities report certain recent enhancements in the disclosures by listed investment funds and that a review of disclosure requirements for entities in the securities markets is underway as part of a review of the regulatory framework.
OP4	• SAMA coordinated Saudi Arabia's participation in the 2015 information-sharing exercise, with CMA providing data on investment funds. EF classification was conducted; no entities were classified into EFs 3, 4 and 5. • Risk mapping was partially completed. • Some tools from the FSB policy toolkit were available for most entities classified into the EFs. The authorities note that the available toolkit is adequate and that there no current plans to enhance the toolkit except to develop liquidity and capital adequacy standards for real estate finance companies.

Singapore

Sector size and growth			
	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2012-2014)
Financial institutions	2	838	6
OFIs	0.3	90	13
Of which: Shadow banking	0.03	10	1.4(*)

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.
(*) Growth rate calculated for 2012-14 due to structural break in data.

Overseeing authority and entity types by economic function (EF)

EF1	MAS	Central bank and banking, insurance and securities regulator	Hedge funds; Fixed income funds; Other MMFs; Other funds
EF2			Finance companies
EF3			Broker dealers
EF4			Credit insurers
EF5			Special purpose vehicles (*)

(*) Disclosure requirements only.

Available policy tools	
EF1 (Hedge funds)	Redemption gates(D), Suspension of Redemptions (D); Imposition of redemption fees / restrictions (D); Side pockets (D)
EF1 (FI funds)	Redemption gates (D), Suspension of Redemptions (D); Imposition of redemption fees / restrictions (D); Side pockets (D); Limits on investment in illiquid assets; Limits on asset concentration; Limits on leverage; Restrictions on maturity of portfolio assets (*)
EF2	Bank-equivalent prudential regulation, Capital Requirements; Liquidity requirements; Limits on large exposures; Restrictions on types of liabilities
EF3	Bank-equivalent prudential regulation; Capital requirements; Liquidity requirements; Restrictions on use of client assets
EF4	Capital requirements; Restrictions on scale and scope of business; Enhanced risk management practices to capture tail events ***Other tools***: Higher capital risk charge imposed on illiquid assets that exceed a certain limit
EF5	- ***Other tools***: Product disclosure requirements.

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants. (*) Only MMFs.

Implementation of FSB Policy Framework	
OP1	• MAS has a legislated responsibility for financial stability. There are financial entities operating in Singapore not regulated by MAS, for example money lenders, but these are small in aggregate sector size, Money lenders are regulated under an Act administered by the Ministry of Law. MAS regularly monitors and assesses systemic risks in Singapore's financial system, including from NBFEs and activities. • MAS has formalised internal governance arrangements for coordinating cross-departmental views, work and decisions on financial sector regulation, supervision and financial stability risk assessment. • MAS reviews of the regulatory perimeter are triggered by internal or external concerns about a non-bank financial entity or activity. Changes to the regulatory perimeter may require promulgation/amendment of primary legislation, on which the MAS would publicly consult prior to them being tabled in parliament. Changes to the regulatory perimeter could also be made through promulgation/amendment of subsidiary legislation.
OP2	• Information to assess shadow banking risks of MAS-regulated NBFEs comes from regulatory returns, commercial databases, and periodic surveys (e.g. annual Asset Management Industry Survey). • Singapore received reporting relief for risk metrics in the information-sharing exercise for entities in 4 EFs. There were some gaps in availability of data to calculate risk metrics for broker dealers (e.g. asset and liability maturities, liquid assets, off-balance sheet items). • Authorities are reviewing the scope and adequacy of regulatory data collections and have identified some areas where enhanced data collection could improve the assessment of shadow banking risks (e.g. composition and maturity profile of assets and liabilities). • There are no domestic information-sharing constraints because MAS is a single, integrated regulator. MAS is signatory to various multilateral and bilateral MoUs that facilitate cross-border information sharing for supervisory purposes.
OP3	• MAS-authorised funds are subject to prospectus disclosure requirements targeted at retail investors and their advisors. Listed entities are subject to listed company disclosure requirements. • MAS' annual Financial Stability Review provides assessments of financial stability risks, including those emanating from NBFEs; it periodically features boxes on shadow banking risks in more detail.
OP4	• EF classification was completed. Licensed money lenders were not classified because they generally are funded privately, do not take deposits or investments from the public and account for less than 0.1% of national financial assets, so they are not presently considered to pose shadow banking risks by the authorities. • Risk mapping was completed. • Some policy tools to address shadow banking risks from FSB Policy toolkit were available to address risks from entities classified under EFs, with the exception of entities classified under EF5 where no tools were available. The tools available for hedge funds were also limited. No plans to augment existing policy toolkit for classified entities though authorities report that the policy toolkit can be augmented, as necessary.

South Africa

Sector size and growth

	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	1	324	-4
OFIs	0.2	61	0.4
Of which: Shadow banking	0.1	27	-5

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	FSB	Securities regulator	Money market funds; Fixed income funds; Multi-asset funds; Hedge funds
EF2	NCR	Other	Finance companies
EF3	-	-	*No entity classified*
EF4	FSB	Securities regulator	Credit insurers
EF5	SARB	Central bank	Securitisation (only by banks)

Available policy tools

EF1 (Hedge funds)	Redemption Gates (D), Suspension of Redemptions (D), Redemption Fees/ restrictions (D); Side pockets; Limits on asset concentration, Limits on leverage
EF1 (FI funds)	Redemption Gates (D), Suspension of Redemptions (D), Redemption Fees/ restrictions (D); Side pockets; Limits on asset concentration, Limits on leverage ***Other tools***: Risk management programme; stress testing
EF2	-
EF3	*No entities classified*
EF4	Capital requirements; Restrictions on scale and scope of business ***Other tools***: Asset spreading requirement, stress testing and general risk management requirements
EF5	-

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.

Implementation of FSB Policy Framework

OP1	• Finance companies in South Africa are currently regulated only from a market conduct perspective. The Financial Stability Committee (FSC) within SARB plays a leading role in assessing shadow banking risks. • The planned Financial Stability Oversight Committee (FSOC) will be the coordination body comprising various regulatory bodies, and support SARB in its function. The planned introduction of a 'twin peaks' supervisory model is expected to improve oversight of shadow banking risks, e.g. asset managers would be subject to prudential supervision in addition to conduct supervision. • FSC in its quarterly meetings discusses non-bank financial sector risks, informed by analysis of financial soundness indicators to quantify financial sector risks. • Some small specialised entities are currently not under the regulatory and supervisory perimeter. The proposed changes to the regulatory framework will enable SARB to collect data from such entities and bring them within the regulatory perimeter.
OP2	• Primary sources of data for the authorities include regulatory returns. For finance companies, the FSC conducts regular surveys and publishes findings with regard to shadow banking risks. SARB and FSB have data collection powers in respect of finance companies and listed entities. • Some gaps in South Africa's submission of risk metrics data observed. Lack of granular data to calculate leverage, maturity mismatches etc. identified as challenges. Legislation proposed to provide the FSC with broader data collection powers. Plans in place to improve data analyses across the collective investment scheme (CIS) industry and granularity of data for finance companies. Data for hedge funds are not yet collected, but this is planned for 2016/2017. • Regular interaction and coordination between regulators takes place through quarterly trilateral meetings and monthly international coordination meetings regarding shadow banking.
OP3	• Quarterly publications by the Association of Savings and Investments South Africa (ASISA) in addition to CIS fact-sheets and disclosure of daily NAV. Finance companies publish balance sheet data. • Shadow banking risks in aggregated form disclosed in Financial Stability Review of SARB; FSB publishes registrars of long-term and short-term insurance in annual report. BSD annual report. • Informational improvements planned for CIS in relation to retail investors under reform. Plans to enhance disclosure under review, e.g. disclosure of investment by portfolio to securitised asset, data on peer-to-peer-lenders.
OP4	• SARB coordinated South Africa's participation in the 2015 information-sharing exercise. EF classification conducted, no entities classified into EF3. Entities which were not classified were not seen to carry shadow banking risks, but could be classified in future. • Risk mapping was completed. • Several policy tools were available for fixed income funds; the Registrar of Collective Investment Schemes has the flexibility to implement the necessary tools as and when required due to market events. For other entity types, policy tools were not available. Reform measures to give authorities powers to introduce policy tools at short notice across the financial sector under consideration.

Spain

Sector size and growth	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	5	415	-4
OFIs	1	69	-8
Of which: Shadow banking	0.3	21	-3

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	CNMV	Securities regulator	Hedge funds; MMFs (VNAV); Fixed income and mixed fixed income funds; Passive management investment funds with objective of profitability; Real estate investment funds
EF2	Banco de España	Central bank	Finance companies (credit financial institutions)
EF3	CNMV	Securities regulator	Broker dealers
EF4	Banco de España	Central bank	Mutual guarantee companies
EF5	CNMV	Securities regulator	Securitisation entities

Available policy tools	
EF1 (Hedge funds)	Redemption Gates (D); Suspension of Redemptions; Redemption fees / restrictions (D); Side Pockets (D) ***Other tools***: Stress tests, appropriate requirement for appropriate liquidity management systems, including regular reporting on portfolio and investor concentration.
EF1 (FI funds)	Suspension of redemptions; Redemption fees / restrictions (D); Side Pockets (D); Limits on investment in illiquid assets; Liquidity buffers; Limits on asset concentration; Limits on Leverage; Restrictions on maturity of portfolio assets(*) ***Other tools***: Liquidity risk management, stress tests, valuation and accounting rules regarding NAV calculation, data reporting and disclosure
EF2	Capital requirements; Limits on leverage; Limits on large exposures; Restrictions on types of liabilities
EF3	Bank-equivalent prudential regulatory regimes; Liquidity requirements; Capital Requirements; Restrictions on use of client assets ***Other tools:*** Information requirements and conduct of business rules.
EF4	Capital requirements; Restrictions on scale / scope of business; Liquidity buffers; Mandatory risk sharing between insured and insurer.
EF5	- Other tools: Increased transparency

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.
(*) Only for MMFs.

Implementation of FSB Policy Framework	
OP1	• The design of the macroprudential architecture in Spain is still being finalised. Until this legislation is approved, BdE (which is responsible for financial stability in Spain) has been legally designated as the authority responsible for the macroprudential instruments foreseen in the EU solvency legislation (CRDIV/CRR). • Authorities regard the regulatory perimeter in Spain as already quite wide. Emerging shadow banking risks are addressed when concerns about their systemic relevance arise. An example of a recent change to the regulatory perimeter is the development of the regulatory regime for internet platforms, which provides a framework for crowdfunding.
OP2	• Data sources include: public flow of funds data, confidential regulatory reporting, and information gained through the supervisory process (e.g. AIFMD reporting on leverage and whether this may pose systemic risk). CNMV has legal powers to request any information deemed necessary to conduct its supervisory duty. • Gaps in availability of risks metrics data were observed for EF1, EF2 and EF5; risk metrics data not required to be reported for EFs 3 and 4. • MoUs facilitate information exchange among authorities both domestically and internationally.
OP3	• Reporting and disclosure requirements for collective investment schemes (CIS) falling under EF1 are designed for micro-prudential and investor protection reasons. Various market disclosures exist, including quarterly reports to investors by CIS and Pillar III disclosure requirements by broker-dealers subject to Basel III. • CNMV aggregates data on CIS and publishes quarterly statistics together with a report on the current situation and outlook for the sector. Disclosures by authorities include: quarterly bulletin of CNMV; *ad-hoc* studies and reports; semi-annual CNMV 'securities markets and their agents: situation and outlook' report; annual report of CNMV; twice-yearly financial stability reports of the BdE; and the Journal on Financial Stability (which is mainly focused on the banking system).
OP4	• Authorities set up an informal working group to coordinate the shadow banking exercises submissions (particularly between BdE and CNMV). • EF classification was done; entities were classified into all EFs. Five entity types and a residual category were identified under "SB not classified." Risk mapping was partially completed. • Authorities see micro-prudential tools as an indirect approach to address financial stability risks. • Policy tools for entities classified under the various EFs were available except in the case of entities classified under EF 5. These tools include some from the FSB Policy toolkit as well as other tools.

Switzerland

Sector size and growth	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	6	928	5
OFIs	2	277	4
Of which: Shadow banking	1	90	6

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	FINMA	Integrated financial regulator	Fixed income funds; Asset allocation funds; Alternative investments funds; Money market funds
EF2	Cantons (a), Federal Office of Housing(b)	Other	Consumer credit providers (a); Corporate leasing providers; Non-profit residential builders/cooperatives for affordable housing (b)
EF3	FINMA	Integrated financial regulator	Security dealers
EF4	FINMA(*) Govt (**) Federal Housing Office (***)	Integrated financial regulator Other	Insurance companies; Loan guarantee cooperatives for SMEs; Mortgage guarantee cooperatives
EF5	FINMA	Integrated financial regulator	Securitisation

($) Insurance companies; ($$) Loan guarantee cooperatives for SMEs); ($$$) Mortgage guarantee cooperatives;

Available policy tools

EF1 (Hedge funds)	Redemption Gates (D), Suspension of Redemptions (D), Redemption Fees,/ restrictions (D), Side Pockets (D), Limits on Leverage ***Other tools:*** Explain risks, set out clearly investment restrictions
EF1 (FI funds)	Redemption Gates (D), Suspension of Redemptions (D), Redemption Fees/ restrictions (D), Limits on investment in illiquid assets, Limits on asset concentration, Restrictions on maturity of assets
EF2	**Consumer credit companies:** Bank-equivalent prudential regulation, Capital requirements, Limits on leverage **Corporate leasing companies:** Bank-equivalent prudential regulation **Non-profit residential builders / cooperatives for affordable housing:** Restrictions in types of liabilities
EF3	Restrictions on use of client assets
EF4	Capital Requirements, Restrictions on scale and scope of business, Enhanced risk management practices to capture tail events ***Other tools:*** Liabilities must be fully covered at all times by assets or liquidity.
EF5	***Other tools:*** If the investor/acquirer is a bank or an insurance company in Switzerland, both the Basel and Swiss Solvency Test rules apply

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.

Implementation of FSB Policy Framework	
OP1	• The Federal Department of Finance (FDF) coordinates between FINMA (which supervises financial markets, securities dealers, insurance companies etc.) and the SNB (which monitors potential shadow banking risks). Based on an MoU, FDF, FINMA and SNB meet regularly to exchange information and views on financial stability and issues of current interest in financial market regulation. • FDF created a working group of experts from FDF, FINMA and SNB, which assessed the size and the risk of the shadow banking sector. • Any expansion of the regulatory perimeter requires new primary legislation.
OP2	• SNB has legal power to collect OFI (flow of funds) statistics, collective capital investment statistics and banking statistics. FINMA has legal power to collect all relevant information from supervised persons and entities. Information about SB risks are analysed in regulator meetings of the authorities as well on an *ad-hoc* basis in response to current regulatory issues or conjectural concerns. • Gaps in availability of risks metrics data were observed for EF1; risk metrics data not required to be reported for other EFs. • FDF, SNB and FINMA share information. There are no legal impediments in exchanging information between FINMA and SNB. SNB can share statistical data with foreign authorities and international organisations in aggregated form only. An amendment of the National Banking Act, which is expected to come into force in 2016, will enable SNB to exchange confidential information with international organisations on a non-aggregated basis provided certain conditions are met.
OP3	• FINMA issues periodic reports, financial statements, prospectus and key investor information documents on collective investment schemes. For banks (securitization) and securities dealers, BCBS disclosure standards are in the process of national implementation. • The case study of Switzerland was published in the FSB's Global Shadow Bank Monitoring Report 2014.
OP4	• FDF coordinates the work to implement the FSB Policy Framework, including the 2015 FSB Information Sharing exercise. EF classification was done; entities were classified into all EFs. Two entity types and a residual category were identified under "SB not classified." Risk mapping was completed. • Some tools from the FSB policy toolkit were available for most entities classified into the EFs (except for entities classified under EF5), with some additional tools being reported for entities under EF1 and EF5. The proposed Federal Financial Services Act will also cover shadow banking entities.

Turkey

Sector size and growth

	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	1	149	7
OFIs	0.1	11	6
Of which: Shadow banking	0.05	6	4

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	CMB	Securities regulator	Money market funds, Hedge funds, Fixed income funds, Securities investment trusts
EF2	BRSA	Prudential regulator	Finance Companies
EF3	-	-	*No entities classified*
EF4	-	-	*No entities classified*
EF5	-	-	*No entities classified*

Available policy tools

EF1 (Hedge funds)	Redemption Gates (D), Suspension of Redemptions (D), Redemption Fees/ restrictions (D); Limits on Leverage (D)
EF1 (FI funds)	Suspension of Redemptions (D), Redemption Fees/ restrictions (D); Limits on investment in illiquid assets, Limits on asset concentration, Limits on leverage, Restrictions on maturity of assets
EF2	Capital Requirements, Leverage limits ***Other tools***: Limits on loan to value ratio and maturity of loans; internal systems, accounting and reporting requirements
EF3	*No entities classified*
EF4	*No entities classified*
EF5	*No entities classified*

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.

Implementation of FSB Policy Framework	
OP1	• Financial authorities coordinate through the Financial Stability Committee (FSC) as well as the Financial Sector Commission and Coordination Committee. Financial regulatory and supervisory authorities also have MoUs on cooperation and information sharing. • Financial Stability Committee aims to identify and mitigate emerging systemic risks including shadow banking risks and coordinate policy actions in this sense. The Committee meets almost every two months.When the Financial Stability Committee identifies new risks that demand a change in the regulatory perimeter, the relevant member institutions will initiate the regulatory process.
OP2	• The primary source of data for the authorities is regulatory returns. The CMB also has direct access to the portfolios of mutual funds, pension funds, hedge funds and investment trusts. Additional information needed on collective investment schemes can be collected by CMB at any time. The authorities plan to collect more detailed information from finance companies, such as data regarding the maturity of assets and liabilities. • There were significant gaps in the risk metrics data submitted by the authorities to the 2015 information-sharing exercise, especially for entities classified under EF1 (for which none of the risk metrics was calculated). • In addition to MoUs with domestic authorities, the CMB is also a signatory to IOSCO's MMoU.
OP3	• Disclosures by entities classified under EF1 are oriented towards investors. Finance companies disclose their financial statements and audited reports. • CBRT publishes a financial stability report twice a year focused on macroeconomic perspective. • The authorities indicate that existing disclosures cover all the necessary disclosure requirements for investors' decisions. There are no immediate plans for further enhancement.
OP4	• CBRT coordinated Turkey's participation in the 2015 information-sharing exercise. EF classification was conducted; no entities were classified into EFs 3, 4 and 5. Risk mapping was partially completed. • Each financial authority is in charge of classifying entities under their regulation/supervision into EFs, assessing the risks posed by these entities; and determining policy tools to mitigate such risks. • Some policy tools from the FSB policy toolkit were available for the entities classified into EFs. Policy tools' effectiveness is evaluated regularly by CBRT and by BRSA, as part of their systemic risk analysis and monitoring activities.

United Kingdom

Sector size and growth	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	33	1172	0.1
OFIs	9	326	2
Of which: Shadow banking	4	147	0.2

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	FCA	Securities regulator	Fixed income funds; Hedge funds; Alternative funds; Property funds; Money market funds; Convertible bond funds; Physical ETFs
EF2	FCA	Securities regulator	Non-bank mortgage lenders; Business and consumer finance companies
	PRA	Prudential regulator	Bank-owned finance companies
EF3	FCA	Securities regulator	Broker dealers
	PRA	Prudential regulator	
EF4	PRA	Prudential regulator	Insurance companies (financial guaranty and mortgage guaranty)
EF5	PRA	Prudential regulator	Structured finance vehicles

Available policy tools

EF1 (Hedge funds)	Redemption Gates (D), Suspension of Redemptions (D), Redemption Fees/ restrictions (D); Side pockets (D); Limits on leverage ***Other tools***: Stress testing, dilution levy. The fund manager has the responsibility of ensuring there is an appropriate liquidity management system and the fund's liquidity profile complies with its underlying obligations (asset/liability match).
EF1 (FI funds)	Redemption Gates (D), Suspension of Redemptions Limits on investment in illiquid assets; Limits on asset concentration, Limits on leverage ***Other tools***: Swing/dual pricing, dilution levy
EF2	Capital requirements; Restrictions on types of liabilities
EF3	Bank-equivalent prudential regulatory regimes; Liquidity requirements; Capital Requirements; Restrictions on use of client assets; Restrictions on types of liabilities ***Other tools:*** Information and disclosure requirements
EF4	Capital requirements; Restrictions on scale and scope of business(*); Enhanced risk management practices to capture tail events ***Other tools***: Financial guarantee insurers' net worth agreements with stronger parents
EF5	Restrictions on exposures to / funding from banks / other FIs ***Other tools***: Risk weights, P3 disclosures, risk transfer/retention rule, enhanced due diligence.

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants. (*) For financial guarantee insurers only

.Implementation of FSB Policy Framework

OP1	• The Financial Policy Committee (FPC) is UK's macroprudential authority and has the statutory responsibility to identify, assess, monitor and take action in relation to systemic risk to the UK financial system, which would include risks arising from NBFEs. • The FPC has committed to hold a dedicated discussion on the regulatory perimeter at least annually, and has assessed systemic risks arising from activities conducted in 30 different types of sectors outside the core banking sector. The FPC is also able to make recommendations to Her Majesty's Treasury (HMT) on the regulatory perimeter. • Some finance companies and some securitisation special purpose vehicles are not currently regulated by any regulator.
OP2	• In its annual risk assessment, the FPC collects data on NBFEs from multiple sources, including supervisory data, voluntary surveys, publicly available information from commercial data sources, market intelligence, and industry expertise. The PRA, part of the BoE, also has the necessary authority to collect data on an ongoing basis. • Various working level committees and groups comprised of staff from the FCA, PRA, BoE, and HMT, support the FPC's responsibility for assessing risks arising from NBFEs. • Gaps in availability of risks metrics data were observed for EF1, EF2, EF3 and EF5; risk metrics data not required to be reported for EF4. As part of its assessment of risks from outside the core banking system, the FPC considers whether to commission data/information collection exercises to enhance its understanding of the risks. • The FCA, PRA, BoE and HMT are able to share information with each other where this is done for the purpose of carrying out their public functions and is permitted by relevant legislation (both domestic and at EU level). The UK authorities have information-sharing arrangements, some of which are underpinned by MoUs. Information can be shared cross-border in the form of a summary, provided that it is not possible to ascertain from it information relating to any particular person (including firms).
OP3	• Market disclosures are generally made in response to regulatory requirements (e.g. prospectus, periodic or transactional reports), and through some general market practices (e.g. public statutory reporting). • BoE and the FPC communicate aggregate information on risks in NBFEs through bi-annual FSRs, quarterly bulletins and financial stability papers, speeches, press articles etc. The FPC plans to publish the results of its deep-dives in future FSRs.
OP4	• BoE coordinates the UK's participation in the information-sharing exercise. EF classification was done. Two entity types were classified outside of EFs and a residual category was identified under "SB not classified." • Risk mapping was partially completed. • Policy tools cover all EFs and including some tools from the FSB toolkit and some additional tools for EF1, EF3, EF4 and EF5. Policy tools limited for non-bank finance companies classified under EF2. Planned deep-dives by the FPC will consider whether additional policy measures are required to mitigate risks associated with NBFEs and activities.

United States

Sector size and growth	2014 (US$ trillion)	2014 (% of GDP)	Growth rate (%) (2011-2014)
Financial institutions	85	490	5
OFIs	26	148	5
Of which: Shadow banking	14	82	3

Note: The size of the 'shadow banking' sector in the jurisdiction-specific summaries represents the financial assets of entities classified into EFs and of entities in the 'shadow banking not classified' category. The shadow banking and OFI sectors are not mutually exclusive categories, as shadow banking is largely contained in OFI.

Overseeing authority and entity types by economic function (EF)

EF1	SEC	Securities regulator	Bond funds; MMFs; Mortgage real estate investment funds; Bond ETFs; Credit hedge funds; Other funds
EF2	FRB	Central bank	Finance companies(*)
EF3	SEC	Securities regulator	Broker dealers; funding corporations
EF4	State insurance commissions	Other	Financial guaranty insurers; Mortgage guaranty insurers
EF5	SEC	Securities regulator	Structured finance vehicles

(*) Only finance companies designated as systemically important are supervised by the Federal Reserve and subject to bank prudential regulatory regimes

Available policy tools	
EF1 (Hedge funds)	Redemption Gates (D), Suspension of Redemptions (D), Redemption Fees,/ restrictions (D), Side Pockets, ,Limits on investment in illiquid assets (D), Limits on Asset Concentration (D), Limits on Leverage(#), Restrictions on maturity on portfolio of assets(D)
EF1 (FI funds)	Redemption Gates (D), Suspension of Redemptions (D), Redemption Fees/ restrictions (D), Side Pockets (D) ***Other tools:*** Disclosure requirements
EF2	- (*)
EF3	Liquidity requirements, Capital requirements, Restrictions on use of client assets
EF4	Capital Requirements, Restrictions on scale and scope of business, Enhanced risk management practices to capture tail events
EF5	Restrictions on exposures to or funding from banks / OFIs(**) ***Other tools:*** Restrictions on issuers imposed by FASB, NRSROs

Note: (1) "Other tools" refers to tools available with jurisdictions which are not part of the toolkit in the FSB Policy Framework; (2) tools marked as "D" are those which are available at the discretion of market participants.
(*) Many large finance companies are under the consolidated supervision of the Federal Reserve due to their registration as other entities (e.g. Savings and Loan Holding Companies). (**) Bank capital rules may impact (a) bank demand for CMBS investments and (b) the financing and leverage available to non-bank investors who would invest in CMBS using bank or dealer financing.

Implementation of FSB Policy Framework	
OP1	• Institutional arrangements for regulation of NBFEs spread across FRB, SEC and state insurance regulators. Initiatives underway to enhance regulation of NBFEs, e.g. enhance liquidity management by open-ended funds. • The inter-agency Financial Stability Oversight Council (FSOC) discusses financial stability issues. The FSOC has many of the same objectives as the FSB but does not itself seek to implement the FSB policy framework; rather, the individual member agencies of the Council are responsible for considering the FSB policy framework. Treasury's Office of International Affairs (IA) has played the role of coordinator among agencies. • FSOC has the power to designate certain nonbank financial institutions for prudential standards and consolidated supervision by FRB and to make recommendations to primary financial regulatory agencies to apply new heightened standards and safeguards for financial activities. The Office of Financial Research (OFR) under the US Treasury support FSOC and its member agencies by carrying out data collection, research and analysis.
OP2	• FSOC, acting through the OFR, may require the submission of periodic and other reports from any nonbank financial company or bank holding company for the purpose of assessing the extent to which the nonbank financial company or bank holding company, or a financial activity or financial market in which it participates poses a threat to the financial stability of the United States. • OFR uses data collected from member agencies, commercial data providers, publicly available data sources and financial entities. OFR has the authority to require financial companies to submit data as necessary to fulfil its mandate. • FSOC identified in its 2015 annual report challenges to data quality, collection and sharing as a potential vulnerability. • Legal and cultural barriers to exchanging critical micro- and macro-prudential information, both across borders and across supervisory functions, identified as challenge to assessment and analysis of risks to financial stability posed by NBFEs.
OP3	• Disclosures by NBFEs focus on helping investors make an investment decision. • FSOC and OFR annual reports and OFR research papers provide data on NBFE activities and risks. FSOC publishes public bases of its designations of nonbank financial companies for enhanced prudential standards and Federal Reserve supervision. Along with the rules and guidance for designation, these provide market participants with a framework for assessing risks more broadly. Recently, SEC has proposed enhancement of investment funds disclosures, requesting public comment on whether enhanced information collection would help both regulators and market participants better assess potential risks across a range of areas.
OP4	• EF classification conducted with entities classified across 5 EFs. Risk mapping partially completed. • Some policy tools available except for entities classified into EF2. In its annual report, the OFR analyses effectiveness of policy tools in addressing risks to financial stability.