

Financial Stability Board Regional Consultative Group for Asia

Report on Shadow Banking in Asia

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The RCG for Asia comprises FSB-Member authorities as well as non-FSB member authorities.¹ The RCGs have been established as a mechanism for the FSB to consult with non-member jurisdictions and for the RCG members to share amongst themselves and the FSB views on vulnerabilities affecting the financial system, FSB policy initiatives and on other measures to promote financial stability.

¹ *A list of members of the RCG for Asia can be found at <http://www.financialstabilityboard.org/about/rcgasia.pdf>.*

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Glossary

| | |
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| BS | Building society |
| CIS | Collective investment scheme |
| CUC | Credit union / Cooperatives |
| DFI | Development financial institution |
| EF | Economic functions |
| FC | Finance companies |
| FGC | Financial guarantee companies |
| MFI | Microfinance institution |
| MMC | Money market corporation |
| MMF | Money market fund |
| MRF | Money reserve fund |
| MSB | Mutual savings bank |
| NBDT | Non-bank deposit taker |
| NBFC | Non-bank financial company |
| NBFI | Non-bank financial intermediaries |
| OFI | Other financial intermediary |
| PFI | Public financial institution |
| RMB | Renminbi |
| SCAV | The FSB Standing Committee on Assessment of Vulnerabilities |
| SFV | Structured financial vehicle |
| SME | Small and medium size enterprise |
| SRI | Systemic Risk Indicator |

RCGA members – Jurisdiction Index

| | | |
|--------------------|----------------|------------------|
| AU - Australia | JP - Japan | PH - Philippines |
| CN - China | KH - Cambodia | PK - Pakistan |
| HK - Hong Kong SAR | KR - Korea | SG - Singapore |
| ID - Indonesia | LK - Sri Lanka | TH - Thailand |
| IN - India | MY - Malaysia | VN - Vietnam |
| NZ - New Zealand | | |

EXECUTIVE SUMMARY

- 1 The Working Group on Shadow Banking was established in February 2013 by the FSB Regional Consultative Group for Asia (RCGA) to conduct a study on shadow banking in Asia, in collaboration with IOSCO's Asia-Pacific Regional Committee (APRC), marking the first regional collaborative effort between the FSB and IOSCO. The Working Group surveyed RCGA members and reported on six areas of shadow banking in Asia namely, the profile of non-bank financial intermediaries (NBFIs) in Asia, how these entities are regulated, the definition of shadow banking applied by members, the distinction between shadow banking and NBFIs in Asia, the potential risks emanating from NBFIs in Asia and the applicability of FSB's recommendations on shadow banking to Asia.
- 2 The survey is wholly founded on a "bottom up" approach, constituting a compilation of responses from Asia jurisdictions. This, together with data limitations associated with non-bank financial intermediaries (NBFIs), has meant that the contributions to this report have not been subject to a "top down" qualitative, comparative or quantitative assessment by the Working Group. The Working Group also drew on the FSB's global shadow banking monitoring report of 2012, largely for a comparative view.
- 3 The FSB defines shadow banking as "credit intermediation involving entities and activities (fully or partially) outside the regular banking system". In the Global Shadow Banking Monitoring Report 2012¹, the term "Other Financial Intermediaries" (OFIs) which include NBFIs except insurance companies, pension funds or public sector financial entities, was used as a conservative proxy for the size of shadow banking. The Working Group did not adopt the same definition or proxy outright, given that the survey was intended to identify how RCGA members themselves define or identify "shadow banking". Accordingly, in this report, the terms "shadow banking", "NBFIs" and "OFIs" have been used where appropriate.
- 4 RCGA members welcome the FSB's policy work on strengthening oversight and regulation of shadow banking, including ongoing monitoring work of global shadow banking trends. The NBFIs identified by members in the survey are, by and large, already subject to regulatory oversight and monitoring mechanisms, which are effective and proportionate to the risks identified in each jurisdiction. In order for members to be able to effectively implement the FSB's policy framework, it is important that this is tailored to the unique features of the financial markets in Asia, taking into account the varying stages of economic development in the jurisdictions, differing socio-economic characteristics and the unique roles played by NBFIs in Asia. RCGA members welcome a policy framework on shadow banking which takes into account these factors, with a focus on mitigating threats to financial stability or systemic risks.

¹ FSB's Global Shadow Banking Monitoring Report 2012, see http://www.financialstabilityboard.org/publications/r_121118c.pdf.

A. Key findings

The majority of RCGA members are emerging or developing economies, which calls for a balanced and flexible approach in the policy response to shadow banking, taking into account national circumstances and systemic implications

- 5 Ten out of 16 RCGA members (over 60%) are emerging or developing economies as measured against international benchmarks (Appendix E, Table 1). Members recognize the beneficial roles played by NBFIs in filling a credit void and broadening access to finance by individuals and corporations which may not otherwise benefit from access to “traditional” sources of funding. These positive attributes of NBFIs are of significant socio-economic value to most jurisdictions in the region. NBFIs promote financial inclusion and sustain growth, in particular for emerging and developing markets, where further deepening of financial markets is a priority. In addition, the activities of NBFIs identified in the survey are predominantly domestic and thus, cross-border risks are minimal. RCGA members welcome a shadow banking policy framework which strikes a balance between ensuring financial stability and promoting economic and financial development in Asia. Against this backdrop, members are of the view that national circumstances and systemic importance are key considerations in identifying any NBFIs which pose risks that warrant a policy response.

Financial systems in RCGA economies remain bank dominant, with NBFIs comprising only one third of the total financial system assets of reporting RCGA members as a group and OFIs accounting for less than 15 percent of total financial system assets

- 6 Banks continue to hold a large share of the financial system assets in most RCGA economies, accounting for at least half of the total assets in the financial system of reporting members as a group, with NBFIs accounting for approximately one third. OFIs, a subset of NBFIs, account for less than 15 percent of the total financial system assets among RCGA members, which is below the global average of approximately 25 percent. OFI sectors within RCGA economies vary considerably, with Japan having the largest sector on a total assets basis, accounting for nearly 50 percent of RCGA reported OFI assets; however, this large share only accounts for seven percent of total OFI assets globally. The OFI sectors in Hong Kong and Singapore are the largest relative to the size of their economies (in terms of GDP); this is mainly attributable to their roles as financial centres or as host to financial activities carried out by foreign owned institutions. Consistent with global trends, the OFI sector in Asia experienced strong growth in the lead up to the crisis, dropped off somewhat in 2008, and since then has continued to grow in many RCGA economies, albeit at a reduced pace. Overall, from 2002 to 2011, the OFI sector’s share of total financial system assets decreased slightly in Asia, while it has increased globally.

RCGA members generally adopt the FSB’s definition of shadow banking in practice, exercising a large degree of national discretion

- 7 The survey shows that none of the reporting RCGA members have formally defined the

term “shadow banking” within their jurisdictions. However, in practice, members appear to have a process in place to identify shadow banking, which is broadly consistent with the FSB approach, while at the same time exercising a large degree of national discretion. Some members cast the net wide, while others use a narrower approach focusing on typical risk indicators including maturity or liquidity transformation, credit risks transfer, leverage etc. More developed economies in Asia tend to be of the view that the FSB’s definition of shadow banking is high level enough for general applicability across all regions to target risks and prevent regulatory arbitrage; whilst emerging or developing economies in Asia tend to be of the view that the FSB’s definition is too wide and the term “shadow banking” should have a stronger nexus with systemic risks. Some members believe that it is important for the definition of shadow banking to be flexible enough to take into account national circumstances.

Distinction between shadow banking and NBFIs – the same type of NBFIs in different jurisdictions in Asia may not be consistently characterised as shadow banking (even when they may appear to pose similar risks) because of the domestic interpretation of the term “shadow banking”. Jurisdictions take into account different characteristics when categorizing shadow banking activity, including existing regulatory regimes and potential systemic risks

- 8 The survey was the first effort to apply the FSB’s systemic risk indicators and the “economic functions” developed by the FSB shadow banking Workstream 3 (or WS3) in categorising shadow banking in Asia. RCGA members were invited to complete a mapping exercise to identify shadow banking risks and economic functions of each type of NBFIs in their jurisdictions. In doing so, the working group was able to assess the consistency of application by RCGA members of the FSB’s methodology in identifying shadow banking.
- 9 The survey results show that members’ application of these risk indicators and economic functions criteria may not result in consistent outcomes and that the same type of NBFIs in different jurisdictions in Asia may not be consistently identified as shadow banking, even when they bear similar shadow banking risk indicators.
- 10 For example, 11 members with collective investment schemes (CIS) in their jurisdictions reported similar shadow banking risks indicators for these entities. However, nearly half of them (five members) do not categorise CIS as shadow banking for various reasons: CIS are subject to adequate regulatory regimes; they are not directly involved in lending and deposit-taking activities; they mitigate risks in the financial system as loss absorbers because CIS investors bear the risks of potential loss. Some jurisdictions have a large number of CISs that are domiciled offshore, for which the home supervisors are expected to exercise supervisory oversight and as such, are not regarded as part of the shadow banking sector in these jurisdictions. Similarly, credit unions / cooperatives (CUCs) are reported as undertaking bank-like functions by seven members but only one member categorised them as shadow banking. Most of the remaining members treat CUCs as part of the traditional banking sector and as such they are already subject to bank-like prudential regulation or some form of financial safety net such as deposit insurance.

Their exclusion from “shadow banking” is consistent with the broader FSB approach which rules out entities already captured in the regular banking system.

- 11 The survey outcomes reflect a high degree of heterogeneity and diversity in the business model of NBFIs and even within the same type of NBFIs. None of the surveyed members have expressed difficulties in applying the FSB shadow banking risk indicators and many members appear to already have domestic regulatory frameworks in place to address the risks identified in relevant NBFIs. Members’ approach to this exercise demonstrates the significant value of taking into account national circumstances, including the extent of systemic risks posed by the NBFIs in local economies as well as the domestic regulatory framework, in assessing the extent and nature of shadow banking risks of NBFIs in different jurisdictions.

Regulatory regimes – nearly all members consider that NBFIs in their jurisdictions are subject to adequate regulatory oversight, but acknowledge that further enhancement of current measures may be beneficial

- 12 Surveyed members consider that the NBFIs identified in their jurisdictions are, by and large, already subject to adequate regulatory oversight with regulatory measures consistent with the FSB’s “General Principles for Regulatory Measures Related to Shadow Banking”², which recommend that regulatory measures should be: focused and target the externalities and risks that shadow banking creates; proportionate to the risks shadow banking poses to the financial system; forward-looking and adaptable to emerging risks; designed and implemented in an effective manner and regularly assessed for effectiveness and improvement.
- 13 Members reported a range of regulatory measures in their jurisdiction which are applied to different NBFIs, including registration and licensing requirements, internal controls oversight, conduct regulations, prudential regulations and, consumer protection measures. The application of these measures varies in intensity among jurisdictions as well as among NBFIs, which may reflect the application of the concept of proportionality given the unique risk profiles of the NBFIs within the financial system in each jurisdiction. Most members reported having the powers to collect data from and supervise NBFIs if necessary; and many surveyed members reported having powers to take enforcement actions against NBFIs where required.
- 14 The survey shows that members are cognizant of the importance of regular review, assessment and improvement of the regulatory measures applicable to NBFIs in their jurisdiction and that they are proactive in these areas. Members have identified a number of regulatory enhancements currently taking place, including making legislative changes, improving intra-agency information sharing arrangements, enhancing prudential requirements, corporate governance, solvency requirements, implementing additional safeguards to address specific risks arising from NBFIs, promoting stability oversight

² FSB’s report, “Shadow Banking: Strengthening Oversight and Regulation, Recommendations of the Financial Stability Board”, 27 October 2011, see http://www.financialstabilityboard.org/publications/r_111027a.pdf

etc. This “tool box” of regulatory enhancements could be a useful reference for members, particularly for NBFIs undertaking similar functions. RCGA members may benefit from closer collaboration and experience sharing in the regulation of NBFIs.

- 15 It is noted that there is a degree of regulatory variation in the oversight of NBFIs in Asia, which may potentially result in inconsistent regulatory approaches towards NBFIs providing similar services. A degree of regulatory variability is reflective of diversity in Asia, in terms of economic development, the socio-economic role played by NBFIs in different jurisdictions and the activities of NBFIs in the financial system. The survey shows that the NBFIs identified in Asia are predominantly domestic with little or no cross-border activities or systemic risk implications within the region. Consequently, risks arising from regulatory variability appear insignificant at present.

Risks emanating from shadow banking – leverage and maturity/liquidity mismatch risks were identified as the key potential risks by members, however, no or negligible cross-border risks were identified

- 16 Two direct risks were identified by most members as the key potential risks of shadow banking in their jurisdictions namely, leverage risk and maturity and liquidity mismatch. Excess leverage can amplify pro-cyclicality. Maturity and liquidity mismatch can expose entities to liquidity and funding risks. Some members identified indirect risks stemming from interconnectedness of the banking and the non-bank sectors, and regulatory arbitrage in the domestic context as key potential risks in their jurisdiction.
- 17 Surveyed members believe that the potential cross-border effect of the risks identified is none or negligible, due to the relatively small size of the shadow banking sector and the focus on local investment or activities. None of the members consider that Asia faces the same shadow banking risks as other jurisdictions such as the US or EU. This is primarily because Asia, as a region, has relatively less developed financial markets, offers less complex financial products and the scale of the non-bank sector remains small in size and non-systemic in nature.

Applicability of the FSB policy recommendations in Asia – most recommendations are applicable in a manner appropriate to national circumstances and regulatory measures proportionate to risks are largely already in place

- 18 Most members consider the policy recommendations covering money market funds (MMFs) (developed by Workstream 2 or WS2) and securitisation (by WS4) to be generally applicable in Asia. However, members recognize that MMFs do not have the same characteristics or scale across jurisdictions. Accordingly, the specific structure and scale of a jurisdiction’s MMF market must be taken into account when considering implementation. Similar views were expressed in respect of securitisation whose structure is believed to be less complex with lower potential systemic risks in Asia. Some developing economies are in the process of creating an enabling environment for their securitisation markets. They would welcome a policy balance between maintaining financial stability and allowing sufficient scope for sound market development.

- 19 With regard to the FSB’s final policy framework to address shadow banking risks posed by non-bank financial entities other than MMFs, developed by WS3 and published on 29 August 2013³, most members confirmed that they would review the final recommendations and the relevant policy tools in the light of the nature and scale of the shadow banking activities in their jurisdictions, existing regulatory measures and the effectiveness and relevance of the final recommendations.
- 20 The applicability of the policy recommendations regarding securities lending and repos, developed by WS5 and published on 29 August 2013⁴, is limited to RCGA members with securities financing activities in their jurisdictions or which are otherwise involved in them. Some members consider that not all the recommendations are relevant to them given the current size of markets in their jurisdictions, the composition of their securities financing markets and stringent regulatory frameworks already in place. Some members are concerned about possible unintended consequences of implementation, such as reducing market activities or impeding the ability of market participants to further develop markets. The recommendation that authorities should evaluate, with a view to mitigate systemic risk, the costs and benefits of proposals to introduce central counterparty (CCPs) in their inter-dealer repo markets, is generally welcome, members were concerned about cost effectiveness and practicability, given the domestic nature of these activities in their jurisdictions. The proposed regulatory framework for haircuts, which are still undergoing consultation, remain an area of concern for certain members and is perceived by them to be counterproductive. There are concerns that these recommendations, if adopted, may result in over-regulation of local sovereign bond repo markets, causing unintended consequences (such as overkill or deterring a healthy development of securities lending and repos activities) and defeating the original objectives of these policies.
- 21 Fundamentally, it is important for RCGA members to have the flexibility to exercise national discretion in applying the FSB’s recommendations in a manner consistent with their domestic settings, existing regulatory frameworks and the extent of risks posed. This is balanced with the recognition that individual jurisdictions should appropriately manage the shadow banking risks in their financial systems. Some members are also concerned that FSB’s shadow banking policy framework and specific policy recommendations do not place enough emphasis on the need to focus on systemic risks and also the danger of inhibiting economic development in Asia.

B. Recommendations

- 22 Based on the findings of the shadow banking study, the RCGA would like to propose the following recommendations for policy development on shadow banking:

³ FSB’s report “Strengthening Oversight and Regulation of Shadow Banking, Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities” (by WS3), 29 August 2013, see http://www.financialstabilityboard.org/publications/r_130829c.pdf

⁴ FSB’s report “Strengthening Oversight and Regulation of Shadow Banking, Policy Framework for Addressing Shadow Banking Risks in Securities Lending and Repos” (by WS5), 29 August 2013, see http://www.financialstabilityboard.org/publications/r_130829b.pdf

Regional dimension in future global shadow banking work

- 23 The RCGA shadow banking study found that NBFIs play a significant role in economic development in the region, especially in developing economies, where they perform important socio-economic functions largely by filling a credit void, broadening access to finance, deepening financial markets and promoting financial inclusion. RCGA members welcome a regional dimension in future surveys on global shadow banking monitoring work, including assessing the contribution of NBFIs in Asia in promoting access to finance, taking into account different stages of economic development in the region. RCGA members believe that a regional dimension will enrich global shadow banking monitoring work. Members consider that policy measures on shadow banking should aim at ensuring financial stability and promoting sound market development. A holistic view of NBFIs, taking into account regional features and systemic risks, will better inform policy considerations and complement the FSB's monitoring framework and policy measures on shadow banking.

Scope for improvement in the methodology for identifying shadow banking

- 24 RCGA members recognise that national discretion plays an important role in identifying NBFIs that require special policy attention, by taking into account local circumstances, including the domestic regulatory framework, market characteristics, stage of economic development, the degree of inter-linkages within the financial system and the systemic risks posed by the NBFIs in question. However, the survey shows that the concept of "shadow banking" is interpreted differently, e.g., some RCGA members may identify credit unions and cooperatives (CUCs) to pose similar risks but do not agree with categorising them as "shadow banks", largely in consideration of the degree of credit intermediation, the systemic importance of the activities in question and the unique role played by CUCs in their economies. Given the different approaches to identifying "shadow banking", there may be scope for improvement in the FSB's methodology, in particular that the identification of shadow banking should refer to jurisdiction/regional-specific features and systemic risks.

Closer regional collaboration

- 25 RCGA members should consider enhancing coordination between domestic agencies within their jurisdictions to ensure that the regulations applicable to NBFIs are regularly reviewed and prioritized as appropriate. In the regional context, members may consider making use of the RCGA platform for closer collaboration through information exchange and experience sharing. Closer regional collaboration will enable members to share information on regulatory developments and policy measures and discuss emerging risks arising from NBFIs.
- 26 RCGA members should explore the possibility of closer collaboration with IOSCO's APRC in future shadow banking or similar projects. Under the FSB's Coordinated Framework for Implementation Monitoring (CFIM), the FSB coordinates closely with international standard setting bodies for the securities, banking and insurance sectors

namely, IOSCO, the Basel Committee and the IAIS, to coordinate policy development in priority reform areas including shadow banking. Closer regional collaboration between the RCGA and the APRC will integrate regional regulatory expertise on shadow banking and is consistent with the overall CFIM framework.

INTRODUCTION

A. Background

- 27 The global financial crisis has demonstrated that the “shadow banking system” can become a source of systemic risk either directly as a result of the prominence of the shadow banking system in supplying credit or liquidity to the economy or indirectly due to its interconnectedness with the regular banking system. Appropriate monitoring and regulatory frameworks for the shadow banking system need to be put in place to mitigate the potential build-up of risks.
- 28 At the November 2010 Seoul Summit, the G20 Leaders requested the FSB, in collaboration with international standard setting bodies, to develop recommendations to strengthen the oversight and regulation of the shadow banking system.
- 29 In April 2011, the FSB published a background note entitled “Shadow Banking – Scoping the issues”⁵, which defined the “shadow banking system” as “credit intermediation involving entities and activities (fully or partially) outside the regular banking system”. FSB proposed a two-stage approach for monitoring the shadow banking system:
- (1) Firstly, authorities should cast the net wide, looking at all non-bank credit intermediation to ensure that data gathering and surveillance cover all the activities within which shadow banking-related risks might arise.
 - (2) Secondly, authorities should narrow the focus, concentrating on the subset of non-bank credit intermediation where maturity/liquidity transformation and/or flawed credit risk transfer and/or leverage create important risks.
- 30 The FSB’s Task Force on Shadow Banking identified five areas of shadow banking where policy recommendations were needed to mitigate the potential systemic risks associated with them. Five workstreams (WS) were subsequently launched to develop specific recommendations in these areas.
- | | |
|-----|---|
| WS1 | Interconnection between the regular banking system and the shadow banking system to mitigate any spill-over risks |
| WS2 | Susceptibility of money market funds (MMFs) to “runs” |
| WS3 | Risks posed by other shadow banking entities |
| WS4 | Assessment and alignment of incentives associated with securitisation |
| WS5 | Risks and pro-cyclical incentives associated with securities financing transactions such as securities lending and repos which may exacerbate funding strains in times of “runs”. |

⁵ FSB’s report “Shadow Banking: Scoping the Issues; A Background Note of the Financial Stability Board” 12 April 2011, see http://www.financialstabilityboard.org/publications/r_110412a.pdf

- 31 The FSB published consultation papers with regard to the work of WS3⁶ and WS5⁷ in November 2012. With the exception of ongoing work on minimum haircut standards and numerical hair cut floors by WS5, final recommendations by WS3 and WS5 were published on 29 August 2013. For WS2⁸ and WS4⁹, IOSCO published final recommendations on MMFs and securitisation in October and November 2012, respectively. Given the scope of this report, there is minimal reference to the work of WS1 other than in the context of work pursued by other Workstreams.
- 32 The FSB Standing Committee on Assessment of Vulnerabilities (SCAV) has been conducting annual shadow banking monitoring exercises since 2011. The second report entitled “Global Shadow Banking Monitoring Report 2012” was published in November 2012¹⁰ (Global Report), including data provided by 25 jurisdictions and the euro area. Within the RCGA, there are eight FSB members who participated in the SCAV shadow banking monitoring exercise¹¹. The Global Report was extensively referred to in the Profile section of this report to supplement data limitations and to provide a comparative view of shadow banking from a regional or global perspective. The next Global Report is scheduled to be released in November 2013.
- 33 During the RCGA meeting in Seoul in November 2012, members discussed the policy priorities and challenges with respect to shadow banking in Asia. Members identified that the main challenges are to identify the relevant entities and activities that form the shadow banking system in the region, analyse their roles and develop an optimal degree of regulation which is proportionate and relevant to the activities and the economies concerned.
- 34 In February 2013, the RCGA established the Working Group on shadow banking in Asia (Working Group) which was mandated to conduct a study on shadow banking in Asia and provide a report to the FSB.
- 35 The Working Group is co-chaired by Mr. Ashley Ian Alder, Chief Executive Officer of the Securities and Futures Commission of Hong Kong and Mr. Muhammad bin Ibrahim, Deputy Governor of Bank Negara Malaysia. Given that shadow banking cuts across different financial sectors, consistent with the FSB’s close collaboration with IOSCO and the Basel Committee in conducting shadow banking work through the Workstreams, the

⁶ FSB Consultative Document, “Strengthening Oversight and Regulation of Shadow Banking, A Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities” (WS3), 18 November 2012, see http://www.financialstabilityboard.org/publications/r_121118a.pdf

⁷ FSB Consultative Document, “Strengthening Oversight and Regulation of Shadow Banking, A Policy Framework for Addressing Shadow Banking Risks in Securities Lending and Repos” (WS5), 18 November 2012, see http://www.financialstabilityboard.org/publications/r_121118b.pdf

⁸ IOSCO, “Policy Recommendations for Money Market Funds, Final Report”, (WS2), October 2012, see <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD392.pdf>

⁹ IOSCO, “Global Developments in Securitisation Regulation, Final Report”, (WS4), November 2012, see <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD394.pdf>

¹⁰ FSB, “Global Shadow Banking Monitoring Report 2012”, 18 November 2012, see http://www.financialstabilityboard.org/publications/r_121118c.pdf

¹¹ FSB members of the RCGA are: Australia, China, Hong Kong, India, Indonesia, Japan, Korea and Singapore

RCGA believed that there would be benefits for regional collaboration with IOSCO to deliver the mandate of the Working Group. The Working Group consisted of RCGA¹² members and members from IOSCO's APRC (Appendix A).

B. Objectives and scope

- 36 The Working Group's mandate is to conduct a study on shadow banking in Asia and report findings to the FSB. The scope of the mandate covers six key areas:
- (1) Develop the profile of NBFIs in Asia, including the size, types of entities and activities, mandates and roles and links with the traditional banking system;
 - (2) Identify the regulatory and supervisory regime for NBFIs in members' jurisdictions;
 - (3) Identify variations in the definition of shadow banking adopted or being considered by member jurisdictions;
 - (4) Consider the distinction between shadow banking and NBFIs in Asia;
 - (5) Consider how members identify risks in the NBFi sector, identify the potential risks emanating from NBFIs in Asia, consider whether RCGA members face the same NBFIs risks as other regions, identify issues and challenges faced by members and possible gaps in monitoring and regulatory/supervisory regimes; and
 - (6) Assess the relevance and implications of the proposed recommendations by FSB's shadow banking Workstreams 2 to 5 to Asia and provide inputs to the FSB as necessary.

C. Methodology

Data collection

- 37 The Working Group collected data on NBFIs from the RCGA membership through three questionnaires (Appendix D) which cover the following areas:
- Part A Basic profile of NBFIs in Asia, covering the identification of NBFIs and the number of institutions
 - Part B Detailed profile of NBFIs in Asia, covering assets and liabilities of NBFIs to banks to establish size and linkages
 - Part C Definition of shadow banking, distinction between shadow banking and NBFIs, regulatory regimes for NBFIs identified, risks, applicability of FSB recommendations on shadow banking to Asia
- 38 The Working Group broadly followed the FSB's two-stage approach for monitoring shadow banking and the scope set out in the mandate. The first step taken by the Working Group was to "cast the net wide" by requesting RCGA members to identify all

¹² Working Group members are from the following jurisdictions: Australia, China, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, Philippines and Thailand

NBFIs in their jurisdictions and provide data to enable profiling work to be undertaken. The second step involved inviting members to consider the applicability of the FSB's definition on shadow banking in their jurisdictions, the distinction between NBFIs and shadow banking; to describe the regulatory regime for each type of NBFI, identify the key risks of shadow banking and spill-over risk from a regional perspective; and to consider the applicability of the FSB's recommendations on shadow banking to their jurisdictions.

- 39 There was overwhelming support for this exercise with a response rate of 95% (Appendix C). The support from members reflects the general importance of the issue of shadow banking and relevant policy recommendations to RCGA members, and the proactive attitude of the members to monitor shadow banking development in the region.

Use of data from the SCAV monitoring exercise

- 40 In so far as the profiling of NBFIs in Asia is concerned, the Working Group's questionnaires were largely consistent with the methodology of the SCAV annual global shadow banking monitoring exercise¹³, which draws on flow of funds and sector balance sheet data as well as some supervisory data to consider trends in non-bank credit intermediation. The SCAV data set provides a useful benchmark for the Working Group in reviewing the regional and global trends of NBFIs; where appropriate, SCAV data has been used to supplement data collected by the Working Group in this exercise to provide a comparative view. Additional data from the World Bank has been applied in the section on profiling of NBFIs in Asia, to provide a background on the economies and financial systems of RCGA jurisdictions.

Data issues and limitations

- 41 *Lack of or incomplete data* – Some RCGA members did not have sufficient or complete data to the level of detail required in the questionnaires. Data limitations in this regard are understandable given that the regulatory regimes for NBFIs may not be as mature or sophisticated as those in place for banking institutions or licensed brokerages in the securities sector. For some jurisdictions, the lack of long term series data on some NBFIs also limited the ability of the Working Group in undertaking trend analysis.
- 42 *Different interpretations of NBFIs* – Different members may employ different classifications of certain NBFI entities, primarily due to the diverse economic, legal and social infrastructures within the membership. As an example:
- (1) some members consider that “Collective Investment Schemes” (CIS) encompass all forms of investment schemes regardless of legal form or structure, whereas another member considers CIS should exclude schemes that are structured as funds;

¹³ Supra, footnote 10. FSB SCAV conducts an annual shadow banking monitoring exercise covering 25 economies and the euro area, giving this ‘global’ report an estimated coverage of 86 percent of global GDP and 90 percent of global financial system assets. The 2012 Global Report contains data up to December 2011.

- (2) Public Financial Institutions may extend loans in some jurisdictions, whereas in others, they do not; and
 - (3) Pension Funds may refer to public or private pension funds depending on the social welfare system of the jurisdiction. Given the potential for inconsistent classifications of NBFIs by members, the Working Group has taken a broad-brush approach in analysing data particularly where cross-jurisdiction comparisons are involved.
- 43 *Comparability of data* – Given the data gaps and different classifications by members of NBFIs in this exercise, there are limitations as to the extent that data is comparable.
- 44 *Verification of data* – The Working Group adopted a “bottom up” approach; the report is a compendium of information based on survey responses from RCGA members on a self-reporting basis. Responses from members have not been verified or subject to a “top down” qualitative, comparative or quantitative assessment by the Working Group.

Working Group process

- 45 The co-chairs of the Working Group developed the survey questionnaires. In view of the extensive scope of the mandate and the amount of data involved, the survey was conducted in three parts and rolled out consecutively, covering all six areas of the scope of the mandate. The Working Group formed six sub-groups (SGs). Ten authorities from selected member jurisdictions volunteered to take part in the SGs¹⁴ (Appendix B). Each of the SGs were designated an area under the mandate and was responsible for analysing the survey responses and preparing a report to cover their respective area of responsibility. This report was compiled by the co-chairs, drawing upon the SG reports. In addition, Hong Kong, Thailand and Malaysia submitted case studies on their views on selected NBFIs in their respective jurisdictions to supplement the report.

D. Overview of the report

- 46 In line with the mandate of the Working Group, this report covers six substantive areas:
- (1) Profile of NBFIs in Asia – This section starts with a brief overview of the key economic data of the RCGA membership showing a dominance of emerging and developing markets, followed by an analysis of NBFIs in the region and a growth analysis.
 - (2) Definition of shadow banking – This section covers members’ views on the FSB’s definition of shadow banking, the extent that they adopt the FSB’s two stage approach and the factors considered by them in scoping shadow banking in their jurisdictions.

¹⁴ Sub-Group member jurisdictions: Australia (Reserve Bank of Australia; Australian Treasury), Hong Kong (Hong Kong Monetary Authority), India (Reserve Bank of India), Indonesia (Bank of Indonesia), Korea (Bank of Korea; FSC/FSS Korea), Philippines (Central Bank of the Philippines) and Thailand (Bank of Thailand; SEC Thailand)

- (3) Distinction between NBFIs and shadow banking – This section starts with a brief explanation of the mapping benchmarks (FSB’s systemic risk indicators and “economic functions” approach) across all NBFIs identified by them, followed by an analysis of how members map the risk indicators for each type of NBFIs, identifying similarities and differences in terms of the application of the risk indicators and the outcome of the mapping exercise.
- (4) Regulatory regimes for NBFIs in Asia – This section identifies the common regulatory measures for NBFIs, the supervisory and regulatory powers members have in exercising oversight on NBFIs and regulatory areas currently being enhanced by members.
- (5) Risks of shadow banking in Asia – This section starts with a general discussion of how members monitor shadow banking risks and the micro and macro approach adopted in assessing shadow banking risks, followed by a discussion on two key direct risks identified by many members namely, leverage risk, and maturity and liquidity mismatch; and the indirect risks stemming from the interconnectedness of the banking and the non-bank sector, and regulatory arbitrage as potential risks. Thirdly, the cross-border impact of shadow banking risk on the region is assessed, with a discussion of whether Asia faces the same shadow banking risks as other jurisdictions such as the EU and the US. Lastly, the report identifies the challenges faced by members in monitoring and mitigating shadow banking risks.
- (6) Relevance of FSB recommendations on shadow banking to Asia – The scope of this section is wide and covers the FSB’s recommendation on shadow banking stemming from the four Workstreams noted earlier. The areas of policy recommendations with which members have concerns are summarised in this section.

47 Three case studies are appended to this report:

- (1) Hong Kong’s case study on CIS explains the shock absorber feature of CIS and assesses the extent to which Hong Kong CIS pose risk generally associated with shadow banking activities. The case study explains how regulatory requirements on CIS, including eligibility and disclosure requirements, enhance transparency which effectively addresses the concerns about regulatory arbitrage. The study finds that the risk of runs associated with money market funds (MMFs) has little or no relevance in Hong Kong, given the specific requirements on CIS to manage investor liquidity as well as the relatively small size of MMFs in Hong Kong. Similarly, CIS in Hong Kong generally do not engage in securities lending and repos which are perceived to be shadow banking activities. The case study also discusses how robust regulation on collateral policy effectively address concerns that certain banks may use investment funds to finance their illiquid assets through derivative transactions with synthetic exchange traded funds. (Annex A)

- (2) SEC Thailand prepared a case study on Fixed Income Funds in Thailand. The case study focuses on the redemption problems experienced by Thailand in 2003 and how these problems were addressed by the private sector as well as by SEC Thailand in 2003 and thereafter. Thailand's experience shows that even though the SEC had the powers to apply the tools to manage redemption pressure as proposed by the FSB in its policy recommendations on shadow banking of November 2012 (and which were issued in updated form in August 2013), these tools were not adopted. Instead, Thailand adopted alternative measures taking into account industry needs and the regulatory regime specific to the national circumstances applicable at the time. These alternative measures have proven to be successful in Thailand. (Annex B)
- (3) The case study prepared by Bank Negara Malaysia (BNM) provides an overview of the size and characteristics of NBFIs in Malaysia and the monitoring framework adopted by BNM. In general, NBFIs in Malaysia are assessed to have low propensity to transmit shocks to the financial system due to various factors. These include a predominantly bank based financial system in Malaysia, low complexity of activities undertaken by NBFIs, generally low reliance of NBFIs on capital markets and bank borrowings to fund their intermediation activities, well-contained direct asset-liability inter-linkages of NBFIs with banking system and the bulk of NBFIs being subject to oversight by authorities. The case study also outlines the recent enhancements to the legislative framework which would further strengthen the capacity of the BNM, as the authority responsible for financial stability, to undertake ongoing monitoring and necessary measures to manage risks to financial stability that may emanate from NBFIs. (Annex C)

I. PROFILE OF NBFIs IN ASIA

A. Overview of RCGA markets

48 There is considerable difference within Asia in terms of the stage of economic development (Exhibit 1)¹⁵. The majority of RCGA members are emerging and developing markets. According to recognized international benchmarks, 10 out of 16 of the RCGA members can be categorized as emerging or developing economies (Appendix E, Table 1). As a result, the size of capital markets differs considerably from jurisdiction to jurisdiction and the financial markets and financial intermediaries in Asia display vastly different features. Hong Kong has the largest financial system (based on contribution of financial sector to GDP) at 16.1%, followed by Singapore, Australia, Malaysia, the Philippines and Korea.

Exhibit 1 Key Economic and Financial Indicators

| | AU | CN | HK | ID | IN | JP | KH | KR* | MY | PH** | PK | SG | TH |
|---|--------|-------|--------|-------|-------|--------|-----|--------|--------|-------|-------|--------|-------|
| Nominal Gross GDP (USD b) | 1,541 | 8,227 | 262 | 852 | 1,742 | 5,692 | 14 | 1,116 | 307 | 250 | 231 | 274 | 371 |
| Contribution of financial sector to GDP (%) | 9.8 | 5.5 | 16.1* | 3.29 | 5.7 | 4.9 | 0.6 | 7.0 | 7.5 | 7.2 | 4.8 | 11.9 | 4.7 |
| GDP per capita (USD) | 67,004 | 6,076 | 36,557 | 3,500 | 1,449 | 45,903 | 971 | 22,424 | 10,448 | 2,612 | 1,372 | 52,052 | 5,466 |

* Figure as of 2011 ** Figure as of end June 2012

49 In terms of size of financial markets, Japan has the largest capital market of all RCGA members on a total assets basis, followed by China, India, Hong Kong and Australia. Japan's bond market is substantially larger than other members, totalling USD11,721 billion, which is almost three times larger than its equity market. China has the second largest bond market. China, Australia, Hong Kong, India and Korea have relatively large equity markets (Exhibits 2 and 3).

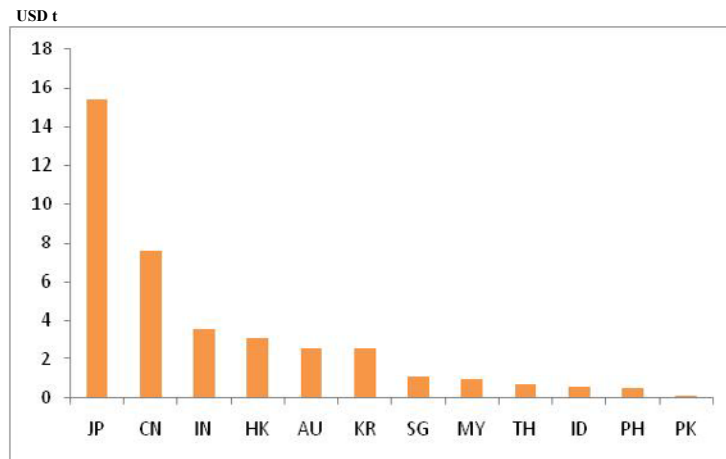
Exhibit 2 Size of Capital Markets (USD billions)

| Size | AU | CN | HK | ID | IN | JP | KR | MY | PH | PK | SG | TH |
|---------------|-------|---------|-------|-----|-------|--------|-------|-----|-----|-------|-------|-----|
| Bond | 858 | 4,137^^ | 176 | 106 | 950 | 11,721 | 1,207 | 330 | 142 | 47*** | 263 | 280 |
| Equity | 1,381 | 3,665 | 2,820 | 430 | 2,498 | 3,485 | 1,078 | 480 | 265 | 44 | 765 | 386 |
| Money market* | 333 | 113^^ | 86 | 1 | 135 | 224** | 267 | 95 | 114 | 0^ | 57 | 18 |
| Total | 2,572 | 7,915 | 3,082 | 537 | 3,583 | 15,430 | 2,552 | 905 | 521 | 91 | 1,085 | 684 |

* Money market size is not reported consistently across all members ** Outstanding value of call market *** Figure represents outstanding value of government bonds of various tenors only ^ Figure represents the outstanding value of call market in Pakistan, USD0.21billion ^^ Source: China Financial Stability Report 2013

¹⁵ All exhibits in Section I are based on survey responses and/or the Global Report (see footnote 10) published on 18 November 2012, which draws on flow of funds and sector balance sheet data as well as some supervisory data to consider trends in non-bank credit intermediation. Data is based on end-2012 unless otherwise stated.

Exhibit 3 Size of Capital Markets



B. Bank dominance in Asia

- 50 In most RCGA economies, banks continue to hold a large share of financial system assets, accounting for at least half of financial system assets in most jurisdictions (Australia, Hong Kong, India, Japan, Singapore, China, Indonesia, Philippines and Thailand) (Exhibit 4).

Exhibit 4 Share of financial system

| Percent of total financial system assets (end-2011) | |
|---|-------------------|
| Banks | |
| < 50 | KR MY |
| ≥ 50 to 70 | AU HK IN JP SG TH |
| > 70 | CN ID PH* |
| Other Financial Intermediaries (OFIs)^ | |
| < 15 | AU CN ID JP TH |
| 15-30 | IN KR MY SG PH |
| > 30 | HK |

^OFIs: all financial institutions excluding banks, insurers, pension funds and public financial institutions

* Percentage share is based on best estimate of total financial system assets using available data in 2011.

Source: survey responses, national flow of funds data.

- 51 India reported the largest number of banking institutions (2,194). The Philippines also reported a relatively large number compared to other RCGA members (696), closely followed by Japan (693). Australia, Korea, Malaysia and Thailand have fewer banks (Exhibit 5). However, the number of institutions does not adequately capture the concentration of various banking systems (Exhibit 6), which illustrates that a small number of banks make up a substantial share of the financial system in most RCGA

economies.

Exhibit 5 Profile of RCGA banking systems

| | Number of institutions and total assets (USD m) | | | | | | | | | |
|------------------------------|---|-----------|---------|-----------|------------|-----------|---------|---------|-----------|---------|
| | AU | HK | ID | IN | JP | KR | MY | PH | SG | TH |
| Number | 67 | 198 | 120 | 2,194* | 693 | 57 | 62 | 696 | 165 | 31 |
| Total Assets | 3,078,536 | 1,917,194 | 440,805 | 1,574,523 | 18,871,456 | 1,706,491 | 625,975 | 195,429 | 1,677,023 | 482,383 |
| Average Assets ¹⁶ | 45,948 | 9,683 | 3,673 | 718 | 27,232 | 29,938 | 10,096 | 281 | 10,164 | 14,188 |

*Figures include cooperative banks in India.

Exhibit 6 Concentration within Banking Systems

| | AU | HK | IN | JP | KR | PH | SG | TH |
|----------------------------------|----|----|----|----|----|----|----|----|
| 3-bank concentration (%)* | 69 | 72 | 29 | 45 | 51 | 39 | 30 | 48 |
| 5-bank asset concentration (%)** | 91 | 81 | 40 | 59 | 74 | 54 | 41 | 69 |

* Assets of 3 largest banks as a share of total commercial banking assets **Assets of 5 largest banks as a share of total commercial banking assets
Sources: World Bank (Global Financial Development Database, 2013); Monetary Authority of Singapore; Bangko Sentral ng Pilipinas

- 52 On a total assets basis, Japan's banking system is the largest among participant economies by a substantial margin. However, on an average-asset-size basis, Australia is the largest, and Korea and Japan are the second and third largest.
- 53 Banks' share of financial intermediation in RCGA economies has been increasing since 2008, which is in contrast to the slight decline of the global banking sector's share of the financial system for the same period. This rise in Asia was largely driven by increased asset shares by banks in Australia and Japan, where banks have increased their share of total financial system assets by more than 10 percentage points between 2002 and 2011.
- 54 While Asian financial systems remain predominantly bank-based, a wide variety of NBFIs exist that hold a relatively small share of the financial system. NBFIs include pension funds, insurers, public financial institutions and other financial intermediaries. NBFIs comprise approximately one third of the total financial system assets of surveyed RCGA members as a group.

¹⁶ In some cases, total assets figures include estimates; therefore, the average assets figure is provided for reference purposes only and should not be considered authoritative.

C. Insurance Companies and Pension Funds

55 Insurance companies are financial companies that engage in the business of underwriting insurance, receiving premiums and paying insurance benefits. Singapore, Hong Kong and Australia have the largest number of insurance companies among surveyed members, reporting 164, 155 and 149 companies respectively (Exhibit 7). On total and average-asset-size bases, Japan and Korea have the two largest insurance sectors.

Exhibit 7 Insurance Companies

Number of institutions and total assets (USD m)

| | AU | HK [^] | ID | IN | JP | KR | MY | PH | SG | TH |
|----------------|---------|-----------------|--------|---------|-----------|---------|--------|--------|---------|--------|
| Number | 149 | 155 | 137 | 50 | 69 | 55 | 58 | 97 | 164 | 90 |
| Total Assets | 390,221 | 153,376 | 56,702 | 352,299 | 4,677,377 | 653,530 | 66,527 | 18,115 | 142,758 | 71,104 |
| Average Assets | 2,619 | 990 | 414 | 7,046 | 67,788 | 11,882 | 1,147 | 187 | 870 | 790 |

[^] Data for end 2011, asset size include only assets maintained in Hong Kong by general insurers and the assets of long term business funds maintained by long term insurers.

56 Pension funds are generally funds set up to pay the pension benefits of employees after their retirement. Hong Kong and Australia reported large numbers of pension funds, reporting 5,265 and 3,660 respectively, with much fewer numbers in other RCGA economies (Exhibit 8). However, some of the large differences are likely due to different approaches to data reporting, with India, Korea, and the Philippines only reporting public pension funds, whereas some economies (such as Australia) include private pension funds within this measure.

Exhibit 8 Pension Funds

Number of funds and total assets (USD m) (Data as of end 2012 unless otherwise stated)

| | AU* | HK | ID | IN | JP** | KR | MY | PH |
|----------------|-----------|--------|--------|-------|-----------|---------|---------|---------------------|
| Number | 3,660 | 5,265 | 270 | 6 | | 4 | 15 | 2 |
| Total Assets | 1,027,205 | 89,979 | 15,719 | 2,563 | 1,453,233 | 428,008 | 214,119 | 21,511 [^] |
| Average Assets | 281 | 17 | 58 | 427 | | 107,002 | 14,275 | 10,756 |

* Includes only pension funds supervised by APRA (of which 3,316 are small APRA-regulated funds with fewer than five members), does not include single-member and self-managed pension funds' ** Total number of pension funds is not available

[^] Data based on financial statements as of the year ended 2011

57 In terms of total asset size, Japan, Australia, Korea and Malaysia have the four largest pension fund sectors among participants.

D. Public Financial Institutions

58 Public financial institutions (PFIs) are established or funded by the government to provide specialized services to certain segments of the economy and advance the national

agenda. India has a relatively large number of PFIs (59)¹⁷, whereas other RCGA economies reported much fewer (ten or less). Australia and Singapore do not have PFIs. On total and average-asset-size bases, Japan and Korea have the two largest sectors among surveyed members (Exhibit 9).

Exhibit 9 Public Financial Institutions

| | Number of institutions and total assets (USD m) | | | | | | | | |
|----------------|---|-------|------|---------|-----------|--------|--------|----------------|----|
| | AU | HK | ID | IN | JP | KR | MY | PH | SG |
| Number | 0 | 1 | 3 | 59 | 10 | 5 | 8 | 3 [^] | 0 |
| Total Assets | 0 | 6,821 | 4390 | 65,744* | 3,875,258 | 85,488 | 11,104 | 206 | 0 |
| Average Assets | - | 6,821 | 1463 | 13,149* | 387,526 | 17,098 | 1,388 | 69 | - |

* These figures are based on five government sponsored financial institutions only ^ Government-owned and controlled corporations with readily available financial data

Role of PFIs in Asian economies

- 59 Generally, PFIs play an important role in the financial system of developing economies (e.g. Thailand, Pakistan, Malaysia) by providing basic financial services (e.g. traditional lending). In more developed economies (e.g. Korea, Japan, Hong Kong), PFIs take on a more supportive role to contribute towards developing particular markets (e.g. undertake securitisation to broaden and deepen the domestic debt market) or players (e.g. provide credit guarantees to mortgagors, SMEs or technology industries) in the financial system.
- 60 PFIs play multi-faceted roles in promoting social, economic and financial development. For example, some PFIs provide financing for the purpose of education (Japan, Malaysia), while others provide home financing to lower and medium income households to promote home ownership and address poverty (India, Thailand). In many Asian economies, PFIs commonly provide loans to SMEs, the trade sector as well as new growth sectors (e.g. green technology) which contribute towards economic growth. In some economies, housing finance agencies have been established to develop the mortgage backed securities market as well as providing mortgage insurance related services (Hong Kong, Indonesia, Malaysia).

E. Other Financial Intermediaries

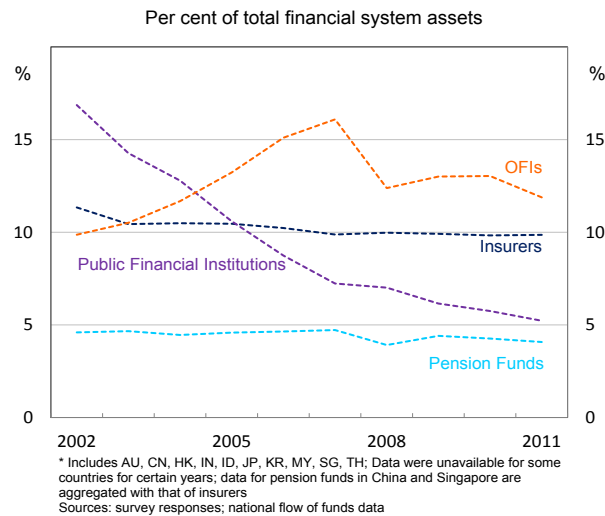
- 61 Consistent with the FSB's approach to shadow banking studies, the focus of the Working Group's study on shadow banking in Asia is on Other Financial Intermediaries (OFIs)¹⁸ and does not cover banking, insurance companies, pension funds and PFIs except where a comparative view is drawn or for background.
- 62 OFIs account for less than 15 percent of total financial system assets of reporting RCGA members, which is lower than the global average as reported in the Global Report of 25

¹⁷ Some of these PFIs are regulated by the Reserve Bank of India as non-banking financial companies and financial institutions.

¹⁸ The types of entities covered under OFI in this report may be different from those classified as OFI in the Global Report.

percent (Exhibit 10).

Exhibit 10 NBFIs - Share of the Financial System*



- 63 As is the case in many other regions, OFI sectors within Asia vary considerably in terms of their size. Japan has the largest sector on a total assets basis, with nearly 50 percent of the total RCGA reported OFI assets. However, this large share within the RCGA only accounts for 7 percent of OFI assets globally according to the Global Report. The OFI sectors in Hong Kong and Singapore are the largest relative to the size of their economies (in terms of GDP), however, their respective share of the global OFI assets was only two percent and one percent respectively. Most OFI sectors in other RCGA economies are small.

Diverse role of OFIs in Asian economies

- 64 Within Asia, the significance of OFIs in the financial system varies between jurisdictions. Reflecting the different pace of financial development and variation in economic structures and legislative frameworks, the types of OFIs and activities undertaken by them are diverse (Appendix E, Table 2).
- 65 OFIs in emerging and developing economies generally play a role in socio-economic and financial sector development. To a large extent, they have a key financial inclusion role, e.g. to broaden access to financing via provision of basic financial services to individuals and SMEs. OFIs performing this role may include credit unions and cooperatives, microfinance institutions, development financial institutions and building societies. In some jurisdictions, they also contribute towards development of niche markets and services through the provision of specialised products to promote the development of domestic capital markets, hedging platforms and alternative investment channels (collective investment schemes, mortgage corporations, venture capital).

66 Activities undertaken by OFIs in emerging and developing economies in Asia are, when compared to those in advanced economies, generally less complex in nature, consistent with their developmental role in the economy. Given that OFIs with similar legal names or forms may conduct different types of activities in different jurisdictions, members were invited to identify the types of activities conducted by the OFIs in their jurisdictions. The types of activities surveyed were loan provision, management of client cash pools, intermediation of market activities, facilitation of credit creation and securitisation-based credit intermediation and funding of financial entities. Survey findings show that some OFIs undertake more than one of these activities.

Collective Investment Schemes, Money Market Funds

67 CIS manage assets for investment using money or similar funds pooled by inviting two or more persons to participate in the investment. Financial investment business entities comprise mostly CIS.

68 CIS are present in most jurisdictions within RCGA. Korea and Thailand reported many more financial investment business entities than other jurisdictions – 9,864 and 1,272 respectively (Exhibit 11).

Exhibit 11 Number of Collective Investment Schemes

| | Number of funds | | | | | | | | |
|------|------------------|-----|--------|------|-------|----|----|-----|-------|
| | HK | ID | IN | JP | KR | MY | PH | SG | TH |
| CIS | 261 [^] | 777 | 1,309* | 86** | 9,864 | 42 | 52 | 310 | 1,272 |
| MMFs | 7 [^] | 32 | 55 | | 156 | | | 10 | 40 |

[^] Number of SFC-authorized unit trusts and mutual funds domiciled in Hong Kong * Number of mutual funds. Although RBI clarifies that India doesn't classify mutual funds as CIS, this exhibit includes mutual funds in CIS according to the methodology for assessing the implementation of the IOSCO Objectives and Principles of Securities Regulation (published in Sep 2011 and updated in Aug 2013). Thus care is needed when interpreting India's data in this exhibit. ** Japan reported the number of institutions that manage investment funds

69 Only a small number of MMFs were reported among CIS. Korea reported the largest number of MMFs (156). Some jurisdictions have a large number of CIS that are domiciled offshore, for which the home regulators are expected to exercise supervisory oversight.

70 Japan reported the largest MMF sector among RCGA members on a total assets basis, followed by Korea and China, yet the scale of the MMF sector in these economies remain small compared to larger markets such as the US (Exhibit 20). At the end of 2012, the total assets of China's MMF sector were USD112.57 billion¹⁹, which represented only 4% of the USD2.69 trillion total net assets of the MMF sector in the US²⁰.

¹⁹ Source: People's Bank of China, *Financial Stability Report 2013, Page 174*. Original figure is RMB707.541 bn, converted to USD using State Administration of Foreign Exchange's official exchange rate of 6.2855 at 31 December 2012. The report is available at the following weblink: www.pbc.gov.cn/image_public/UserFiles/goutongjiaoliu/upload/File/中国金融稳定报告2013.pdf

²⁰ Source of the US MMF sector data is from Investment Company Institute (ICI) statistics, fourth quarter 2012. <http://www.ici.org/research/stats/worldwide>

Finance Companies

- 71 All surveyed members reported finance companies in their economies, with survey data suggesting a wide variety of business activities from jurisdiction to jurisdiction. In respect of credit-specialised finance companies including credit card companies and instalment financing companies, Malaysia and Japan have the largest number, with 3,445 and 2,259 companies respectively. The Philippines and India also reported large numbers, reporting 579 and 415 finance companies respectively. Other RCGA economies reported far fewer finance companies operating in their jurisdictions (Exhibit 12).
- 72 Only seven economies had data available on both the number and asset sizes of their finance companies. Among those, Japan has the largest sector on a total assets basis, while Singapore has the largest sector on an average-asset-size basis, closely followed by Hong Kong.

Exhibit 12 Finance Companies*

| | Number of institutions and total assets (USD m) | | | | | | | | | |
|----------------|---|-----------|--------|--------|---------|---------|--------|---------|--------|----|
| | AU | HK | ID | IN | JP | KR | MY | PH | SG^^ | TH |
| Number | 101 | 62 | 200 | 415*** | 2,259 | 65 | 3,445# | 579 | 3 | 29 |
| Total Assets | 106,327 | 248,035** | 36,322 | | 580,394 | 154,054 | 21,498 | 16,862^ | 12,247 | |
| Average Assets | 1,053 | 4,001 | 182 | | 257 | 2,370 | 6 | 29 | 4,082 | |

* The basis for measuring the number of Finance Companies and their total assets may be different between jurisdictions.

** The figure represents the total assets of listed finance companies in Hong Kong (including property developers, investment companies and consumer/mortgage companies with loans reported on their balance sheets). Only 2% of their assets are related to credit intermediation.

*** India originally reported 12,385 non-banking finance companies including investment companies, microfinance institution, etc as being registered with the Reserve Bank of India. To achieve statistical consistency, however, this table includes only credit specialised companies such as asset finance companies (206), infrastructure finance companies (8), loan companies (197) and factoring companies (4) out of 737 companies furnishing returns to it. Non-deposit taking companies below a certain threshold level of assets do not have to file.

^ Data based on financial statements as of year-end 2011.

^^ Although finance companies in Singapore are prudentially regulated like banks by virtue of the deposit-taking role that they undertake, they are still included in this table because they are known as “finance companies” in Singapore.

Includes non-bank credit card issues, money lenders as well as non-bank entities undertaking leasing, factoring, development finance and/or building credit businesses. These companies are not deposit-taking institutions.

Credit Unions, Cooperatives, Mutual Savings Banks

- 73 Credit unions and cooperatives (CUCs), and mutual savings banks²¹, which are primarily involved in providing basic financial services, are also present in a few Asian economies. CUCs serve to support members’ mutual interests by providing them convenient access to savings and lending services.
- 74 India has a large number of CUCs²² (93,413) relative to other RCGA members, with the second largest by number being the Philippines (22,555), followed by Malaysia (9,073) and Korea (3,759). Japan has the largest sector of CUCs on a total assets basis among

²¹ Credit unions, cooperatives and mutual savings banks are treated similarly to banks in terms of prudential regulation in some RCGA member economies. The RCGA survey broadly classified these entities as NBFIs, which differs from the Global Report, where they are classified as banks.

²² In India, CUCs are called “primary agricultural credit societies”.

RCGA members (Exhibit 13).

Exhibit 13 Credit Unions and Cooperatives

| | Number of institutions and total assets (USD m) | | | | | |
|----------------|---|--------|-----------|---------|-------|--------|
| | AU | IN | JP | KR | MY | PH |
| Number | 91 | 93,413 | 443 | 3,759 | 9,073 | 22,555 |
| Total assets | 49,013 | | 4,824,886 | 329,134 | 4,997 | 6,395 |
| Average Assets | 539 | | 10,891 | 88 | 0.6 | 0.3 |

75 Korea was the only jurisdiction that reported a profile of mutual savings banks (MSBs). MSBs are local financial institutions mainly for the underprivileged and small companies having low credit ratings but sound solvency. There are 93 MSBs in Korea, and their total assets are USD 49,387 million, with USD 531 million in average assets.

Brokerage Companies

76 Brokerage companies are financial institutions that facilitate the buying and selling of financial securities. Some may also provide margin lending to their clients. India reported 15,079 brokerage companies currently operating in its financial system, which is substantially higher than any other RCGA members. The large gap may reflect actual differences in numbers, but also possible definitional differences in the classification of brokerage companies.

77 Nine members have data available on both the number and asset sizes of brokerage companies within their jurisdiction. Japan has the largest sector on a total assets basis. (Exhibit 14).

Exhibit 14 Brokerage Companies

| | Number of institutions and total assets (USD m) | | | | | | | | | |
|----------------|---|--------|-------|--------|-----------|---------|-------|-------|--------|-------|
| | AU* | HK | ID | IN | JP | KR | MY | PH | SG | TH |
| Number | 20 | 249# | 57 | 15,079 | 282 | 62 | 26 | 146^ | 80 | 43 |
| Total Assets | 47,047 | 27,827 | 4,900 | | 1,534,802 | 242,793 | 8,481 | 1,206 | 28,222 | 2,311 |
| Average Assets | 2,352 | 112 | 86 | | 5,443 | 3,916 | 326 | 8 | 353 | 54 |

* Brokerage companies are classed as money market corporations in Australia ^ Data based on financial statements as of the year ended 2011
Brokerage companies which provide margin loans

Structured Finance Vehicles

78 Structured finance vehicles (SFVs) typically pool assets and sell claims on the cash flows backed by these pools to investors. SFVs are used by financial institutions to transform the maturity and liquidity of financial products. However, data on total assets for SFVs is only available in seven economies - Australia, Indonesia, Japan, Korea, Malaysia,

Singapore and Thailand. Japan, Australia and Korea have the three largest sectors based on total assets, with total assets similar in size to a number of other advanced economies (Exhibit 15).

Exhibit 15 Structured Finance Vehicles

Incidence of entities and their total assets (USD m)

| | AU | ID | IN | JP | KR | MY | SG | TH |
|--------------|---------|-----|-----|---------|---------|-------|-------|----|
| Total Assets | 130,029 | 205 | 33* | 278,046 | 123,825 | 4,534 | 4,546 | 29 |

* Data in respect of SPVs set up by 14 Asset Reconstruction companies registered with Reserve Bank of India

F. OFI trends in Asia

79 This section focuses on OFIs and is mainly based on data as of end 2011. The contents of the Global Report have been referred to particularly where comparisons with other FSB economies or global trends are made.

OFI's share of the financial system in Asia

80 As noted earlier, banks continue to hold a large share of financial system assets in most RCGA economies. As a result, within Asia, OFIs comprise a relatively small share of the financial system compared to banks, but the share of OFIs is larger than the respective share of either pension funds or insurers (although not collectively) (Exhibit 10). Over the last decade, pension funds and insurers appear to have grown at a rate fairly consistent with the rest of the financial system, while OFIs grew at a faster rate in the lead up to the crisis, and a more subdued rate (relative to the rest of the financial system) since then²³.

81 In most RCGA economies, the OFI sector's share of total financial system assets remains below the global average of 25 percent. As observed by in the Global Report, the larger share in Hong Kong and Singapore is comparable to other major international financial centres, such as Switzerland, the Netherlands and the UK.

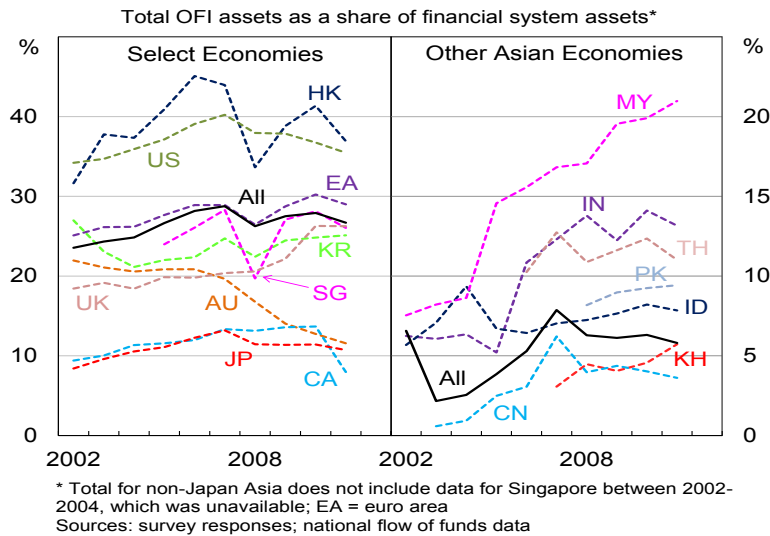
82 Consistent with the OFI trend in the Global Report, in Asia, the size of the OFI sector experienced strong growth in the lead up to the crisis. In emerging markets, such strong growth commenced later. Since the onset of the crisis, the rate of growth in OFI sectors in the Asian region has dropped off considerably, although the very high pre-crisis growth rates in Asia reflected the low base in some economies, where OFI sectors were relatively small in size in 2002-2003. Over a longer term (2002-2011), the OFI sector's share of financial intermediation decreased slightly in Asia, while globally it increased.

83 Consistent with global trends, the overall share of total financial system assets held by OFIs has decreased since the onset of the crisis in many RCGA economies, with a few exceptions. For example: in Malaysia, the OFI sector's share of financial intermediation

²³ The large decrease in the share held by public financial institutions (PFIs) is due to a substantial decline in the assets of Japanese PFIs; total assets of PFIs in a number of other RCGA member economies have increased since 2002.

has increased from 17 to 21 percent since 2008²⁴; in Korea, it has increased from 22 to 26 percent; in Cambodia and Pakistan, the shares of the financial systems held by the OFI sectors also appear to have increased, though they still account for a small share of the financial system in these jurisdictions (Exhibit 16).

Exhibit 16 OFI trends



Variation of share of OFI within Asia

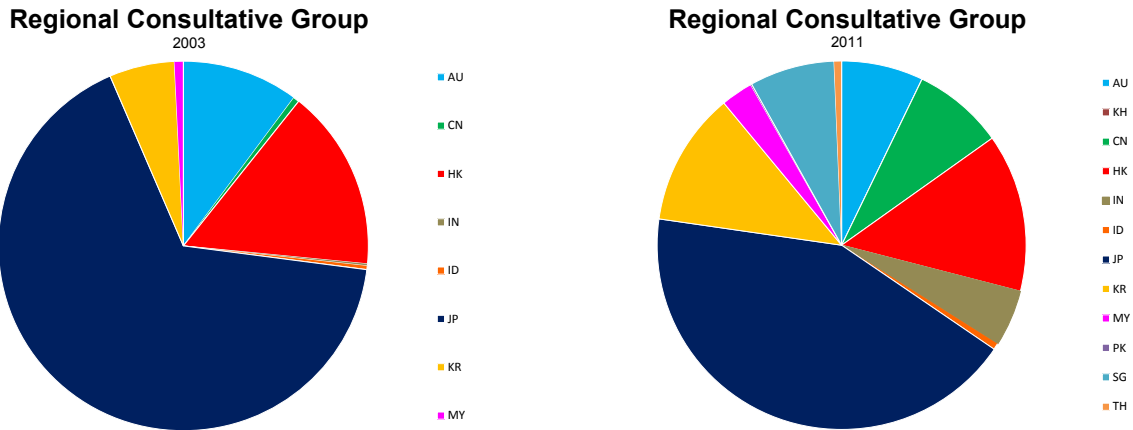
84 In terms of OFI’s share of the total financial system assets, there is considerable variation among RCGA members. The OFI sector in China, Hong Kong, India, Korea and Singapore exhibited growth patterns (on a total assets basis) consistent with the global trend – that is, growing strongly prior to the crisis, declining somewhat in 2008 and experiencing positive growth since then. In Australia, the OFI sector grew more slowly than other parts of the financial system, with a declining share of total financial system assets apparent throughout the period, despite positive growth in total assets.

85 As might be expected with financial deepening within the region, the share of all OFI assets in Asia held by each jurisdiction has also shifted (Exhibit 17). While Japan still holds the largest share of assets, China, Korea, Malaysia and India appear to now hold a greater share than they did in 2003. Australia and Hong Kong still hold sizeable shares, although Australia’s share has decreased more than in Hong Kong. As data for 2003 were unavailable for Cambodia, Pakistan, Singapore and Thailand, this shift in distribution may change following improved reporting.

²⁴ Malaysia’s OFI sector continued to grow throughout 2002-2011, albeit starting from a low base. Enhanced data reporting and data capture exercise have also contributed to growth in OFI assets.

Exhibit 17 Distribution of OFI Assets

Share of Total OFI Assets in Asia



Sources: survey responses; national flow of funds data.

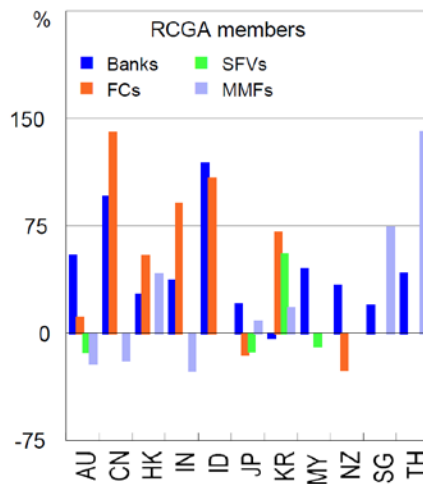
Sources: survey responses; national flow of funds data.

86 The banking system’s share of total financial system assets since 2003 also varied within Asia, with banks’ shares increasing in Australia and Japan, while decreasing in most other economies (both within the RCGA and globally). It is observed that decreased banks’ asset shares in RCGA economies did not correspond to an equal increase in OFIs’ asset shares.

Trends of selected OFI subsectors in Asia

87 The activities of three OFI subsectors namely, (i) finance companies, (ii) MMFs and (iii) SFVs, have been a focus in the Global Report, due to the roles they played in the global financial crisis in some jurisdictions. Since the crisis, there has been considerable variation regionally in changes of their total assets (Exhibit 18).

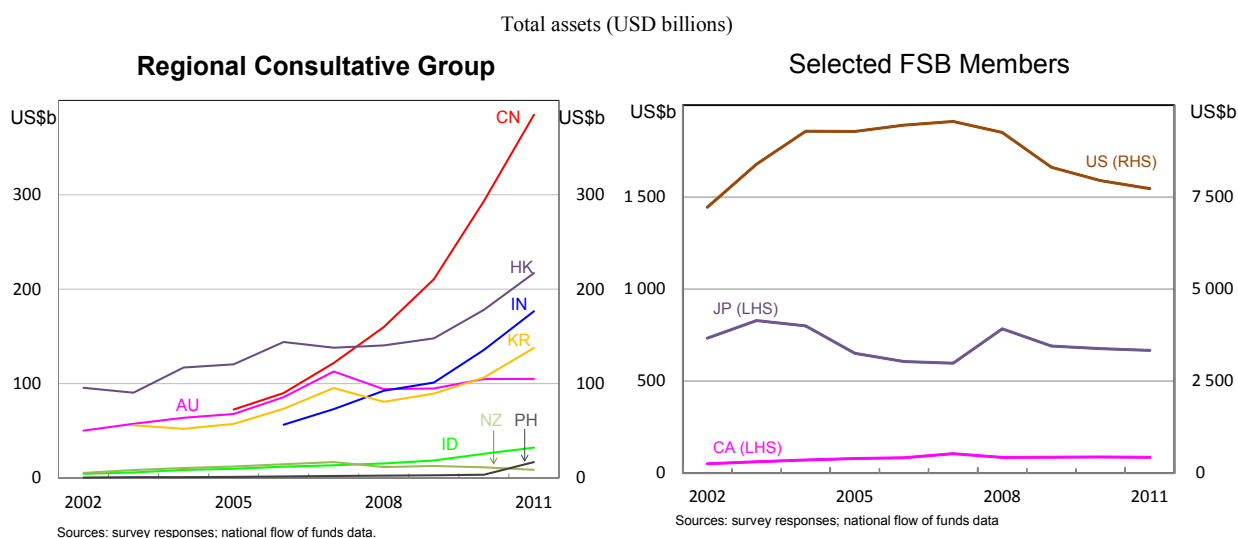
Exhibit 18 Change in Total Assets (2008-2011)



Sources: World Bank; survey responses; national flow of funds data

- 88 Finance companies in RCGA member jurisdictions appear resilient. While the size of finance companies declined in Japan and New Zealand on a total assets basis, strong growth was evident in China, Hong Kong, India, Indonesia, and Korea.
- 89 The strong growth of finance companies in Asia was noted in the Global Report, with the compound annual growth rate of finance companies over the period 2007-2011 in China (33 percent), Hong Kong (12 percent), India (25 percent) and Indonesia (24 percent) highlighted.
- 90 The total assets of finance companies within Asia (ex-Japan) remain far smaller when compared with the US, which has the largest finance company sector (in terms of total assets).
- 91 Large post-crisis increases in the asset size of some entities in emerging markets in part reflect the small size of the markets in 2008, with the Philippines exhibiting a 577 percent increase in the assets of finance companies (off a very small base) and Pakistan and Indonesia a greater-than-400 percent increase²⁵ in MMFs' assets. Indonesia's rapid growth in MMF assets followed a substantial decline over 2004-2005, with MMF assets only surpassing their 2004 totals in 2011.

Exhibit 19 Finance Companies

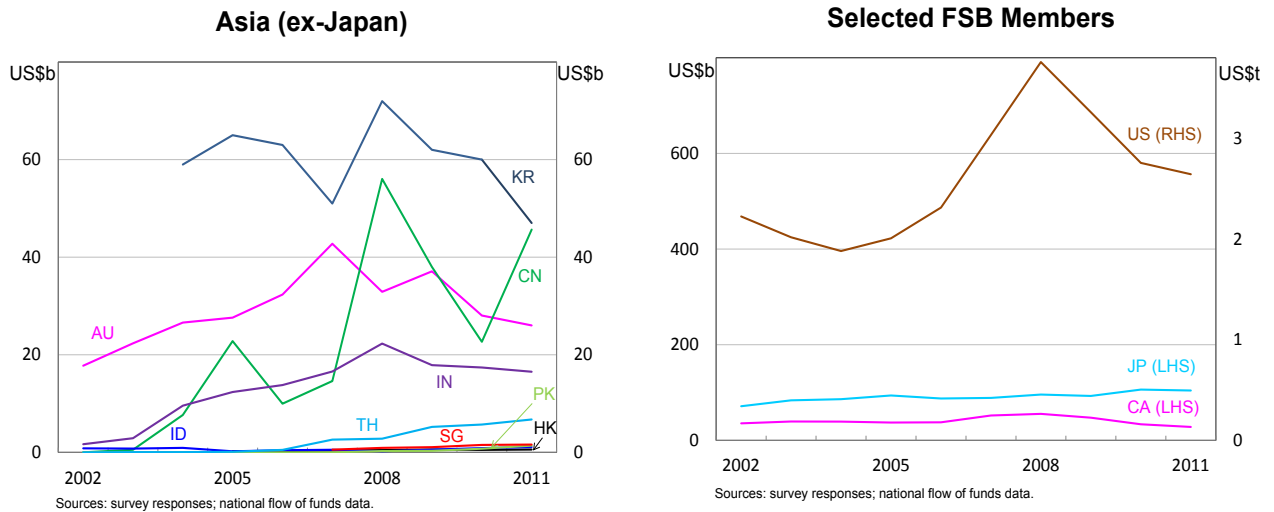


- 92 Analysis of longer-term trends based on MMFs' total assets reveals a more detailed picture of their growth (Exhibit 20). In 2011, Japan reported the largest MMF sector among RCGA members on a total assets basis, followed by Korea, China and Australia, yet the scale of these remain small compared to larger markets such as the US.

²⁵ This is a calculation of change in total assets since the crisis – i.e. based on SCAV data of the total 2011 MMF assets-2008 MMF assets/2008 total assets.

93 Japan's MMF sector experienced only a relatively moderate decline in size following the onset of the crisis, and has since surpassed its pre-crisis peak, although measured in JPY, the size of Japan's MMF assets remain smaller relative to the pre-crisis level. China's MMF sector has largely recovered since a decline following the onset of the crisis, whereas in Korea and Australia, the MMF sector's total assets remain well below their former peaks.

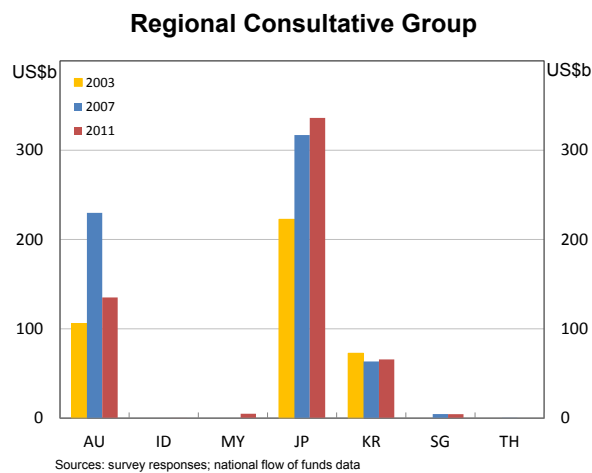
Exhibit 20 Money Market Funds



94 Within Asia, SFVs are largest in Japan, Australia, and Korea (Exhibit 21). While a decrease in the assets of SFVs is observable in Australia since the crisis, in some economies (including Japan and Korea), SFV activity has continued to grow. Nonetheless, in many jurisdictions (including RCGA members), SFVs remain small, both before and after the crisis.

Exhibit 21 Structured Finance Vehicles

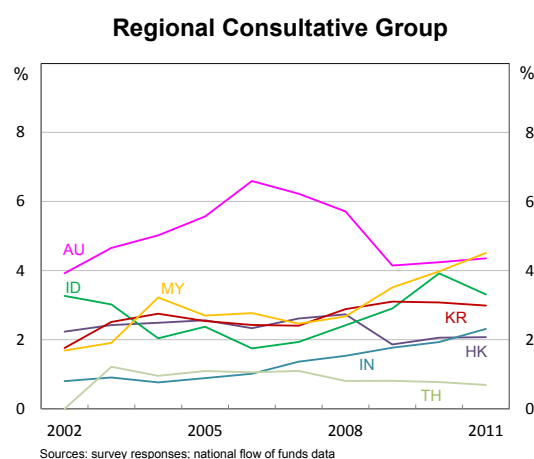
Total assets (USD billions)



Links to the Banking system

- 95 The FSB has raised concerns about the potential for systemic risks to arise due to the interconnectedness between certain OFI entities and the regular banking system, whereby risks in either banks or OFI entities could spill-over to each other. The following provides an analysis of the connections between banking systems and OFIs in Asia.
- 96 Banking systems in RCGA jurisdictions have a small portion of their assets with OFIs (measured as bank's assets with OFIs as a share of total banking sector assets), most with less than five percent. Among RCGA jurisdictions, Malaysia, Australia and Indonesia have the largest share of OFI assets in their banking systems (around 3-5%),

Exhibit 22 Percent of total banking sector assets with Other Financial Intermediaries



- 97 While the share of banks' assets allocated to OFIs has declined in many markets since 2008, it has increased in others, including India and Malaysia. In terms of share of banks' lending, lending to non-OFI sectors comprises a much more substantial share of the banks' total lending than to OFI sectors in most RCGA economies. Limited data was available regarding banks' funding sourced from OFIs. Available data suggests that OFIs in a number of jurisdictions, including Australia and Indonesia, rely on funding from the banking sector. As such, should there be any disruption in the banking sector, this could lead to funding difficulties for OFIs in a number of economies.

II. DEFINITION OF SHADOW BANKING IN ASIA

98 In April 2011, the FSB published a background note entitled “Shadow Banking – Scoping the issues”²⁶, which defined the “shadow banking” as “credit intermediation involving entities and activities (fully or partially) outside the regular banking system”. The FSB proposed a two-stage approach for monitoring the shadow banking system:

- (1) Firstly, authorities should cast the net wide, looking at all non-bank credit intermediation to ensure that data gathering and surveillance cover all the activities within which shadow banking-related risks might arise.
- (2) Secondly, authorities should narrow the focus, concentrating on the subset of non-bank credit intermediation where maturity/liquidity transformation and/or flawed credit risk transfer and/or leverage create important risks.

A. Members' definition of shadow banking in Asia

99 None of the 15 surveyed members²⁷ have *formally* defined the term “shadow banking” within their jurisdiction.

100 Most members could see value in having a global definition of shadow banking to help mitigate potential risks of regulatory arbitrage. Some members indicated that it would be useful to define “shadow banking” within their jurisdictions, in particular, there appears to be appetite for authorities to have/develop a practical guide as to which unregulated entities and activities within their jurisdictions may pose systemic risks.

101 Some members expressed concerns that the current FSB definition for monitoring purposes was too broad and the diversity of financial systems globally may render the application of one definition inappropriate. Few members made any reference to the second step of the two-stage approach, which, as suggested by the FSB, could be used by authorities to narrow the focus for policy purposes in monitoring shadow banking, or on those elements of non-bank credit intermediation most likely to give rise to systemic risk or regulatory arbitrage concerns.

102 Given the broad scope of the FSB’s definition of shadow banking, some members expected that, if applied locally, such a definition would cast the net wide and capture a substantial portion of NBFIs, many of which may not pose systemic risks or may be already regulated for prudential purposes. If such a broad definition of shadow banking is to be applied for prudential purposes, implications should be evaluated carefully in light of other criteria.

103 Members interpret the FSB’s definition on shadow banking differently. Some jurisdictions interpret “credit intermediation” in such a way to only include investment in debt instruments, while others include investments in equity or other financial assets.

²⁶ Supra, footnote 5

²⁷ Singapore indicated that it has a definition for shadow banking which is similar to that of the FSB. China indicated that they are working on the definition of shadow banking in China pursuant to FSB’s recommendation and the definition is expected to come out soon.

The former is consistent with the FSB’s approach.

B. Identifying shadow banking by members in practice

104 Even though none of the surveyed members have formally defined “shadow banking”, it would appear that, in practice, members do consider a range of criteria, which may be broadly consistent with the FSB’s two-stage approach in defining shadow banking. These criteria include reviewing:

- (1) the economic substance of NBFIs;
- (2) the credit intermediation activities of NBFIs;
- (3) the involvement of NBFIs in maturity/liquidity transformation, leverage and credit risk transfer activities;
- (4) the connection of NBFIs with regulated financial entities;
- (5) the creation of systemic risks by NBFIs;
- (6) the extent that systemic risks are mitigated;
- (7) the existing prudential regulation of NBFIs;
- (8) the regulatory regimes in place and adequacy of oversight; and
- (9) the potential risks of regulatory arbitrage posed by NBFIs.

105 Surveyed members have adopted different approaches to categorize shadow banking. Australia²⁸, Cambodia, China, India, Japan, Korea, Pakistan and Thailand cast the net wide for monitoring purposes, reviewing most NBFIs as potential “shadow banks” before assessing the varied risks posed by their activities and whether they are subject to the appropriate regulatory regime. Hong Kong, Indonesia, Malaysia, Singapore and the Philippines consider that NBFIs activities are not “shadow banking” activities if:

- (1) the NBFIs are subject to an appropriate regulatory regime;
- (2) the risks generated by their activities are not considered systemic; or
- (3) they do not carry out credit intermediation activities.

106 Although the criteria applied by members to identify shadow banking may be similar, the rigour in the application and the combination of criteria applied for scoping purposes appears different between members, leading to potentially different outcomes. Some examples of the criteria applied by members to identify shadow banking are set out below:

- (1) Australia: where the OFIs are not prudentially regulated and carry out credit intermediation

²⁸ Australia has a clear delineation between those NBFIs that are part of the regular banking system and essentially considered banking institutions (credit unions, building societies) and remaining NBFIs which are only considered shadow banks where credit intermediation is involved.

- (2) Hong Kong: where the OFIs create significant systemic risks (i.e. where they predominantly undertake maturity/liquidity transformation and are susceptible to runs) and these risks are not effectively mitigated by regulation or supervision
- (3) China: where entities and activities outside the regular banking system are involved in credit intermediation with the functions of liquidity and credit transformation, which would create systemic risks or regulatory arbitrage²⁹
- (4) Indonesia: where the OFIs are involved in maturity transformation, leverage and credit risk transfer, are not subject to prudential supervision and regulation, and their failure or distress would create systemic risk
- (5) The Philippines: where the OFIs providing credit facility and financing are outside the regular banking system and therefore, not subject to the same level of regulatory and supervisory requirements as banks
- (6) Malaysia: whether the OFIs transform maturity and liquidity, facilitate excessive leverage, raise risks of regulatory arbitrage; the nature, scope, and scale of activities and their connections to regulated financial entities

107 All members emphasised the importance that national authorities should have the discretion to apply the global definition locally, so as to allow for jurisdiction-specific circumstances, including domestic regulatory and supervisory frameworks, market characteristics (both activities and risks) and inter-linkages with the rest of the financial system. Any shadow banking policy recommendations should allow jurisdictions to tailor a regulatory approach which is relevant and appropriate to the risks in the domestic market. Members also noted the important role played by NBFIs in supporting economic development in emerging and developing markets in Asia and are of the view that any definition of shadow banking with prudential consequences should be carefully crafted so as not to unduly inhibit financing for development. Further clarification of the applicability of the FSB's definition of shadow banking in other developing markets including Asia may be useful.

²⁹ Source: People's Bank of China. *Financial Stability Report 2013*, page 174. See footnote 19.

III. DISTINCTION BETWEEN NBFIs AND SHADOW BANKING

108 In order to examine the distinction between NBFIs and shadow banking, the Working Group invited members to conduct a shadow banking risk mapping exercise across the NBFIs identified in their jurisdictions based on two sets of indicators developed by the FSB: (i) the systemic risk indicators (SRs)³⁰ and (ii) the proposed assessment framework developed by FSB Workstream 3 to categorise shadow banking based on five economic functions (EFs)³¹.

Systemic risk indicators

- SR 1 Maturity transformation – the extent to which short-term liabilities are used to fund long-term assets for credit provision by financial entities and/or a credit intermediation chain
- SR 2 Liquidity transformation – the degree of liquidity transformation supporting credit provision within entities and/or a credit intermediation chain
- SR 3 Credit risk transfer – the off-balance sheet exposures (e.g. guarantees, commitments and credit derivatives) provided by financial institutions and entities that constitute part of a credit intermediation chain
- SR 4 Leverage – the degree of leverage within entities and/or within a credit intermediation chain

Economic Functions

- EF 1 Management of collective investment vehicles with features that make them susceptible to runs (e.g. credit investment funds with stable NAV features, leveraged credit hedge funds)³²
- EF 2 Loan provision that is dependent on short-term funding (e.g. finance companies with short-term funding structure or that take deposits)
- EF 3 Intermediation of market activities that is dependent on short-term funding or on secured funding of client assets (e.g. securities brokers whose funding is heavily dependent on wholesale funding)
- EF 4 Facilitation of credit creation (e.g. credit insurers, financial guarantee insurers)
- EF 5 Securitisation-based credit intermediation and funding of financial entities (e.g. securitisation vehicles)

109 Broadly, NBFIs in the Asian region can be categorised as one of the following:

³⁰ [Supra](#), footnote 6

³¹ [Supra](#), footnote 3

³² In the survey conducted by the Working Group, the wording of EF1 used was “Management of client cash pools with features that make them susceptible to runs”, based on WS3 consultation paper issued on 18 November 2012, which is slightly different from the updated wording in WS3’s paper published in August 2013.

- (1) Insurance companies and pension funds – NBFIs that are considered not to be part of traditional credit intermediation.
- (2) PFIs – government-owned financial institutions normally providing specialised services.
- (3) OFIs – all residual financial intermediaries not falling into the above categories.

Insurance companies and pension funds

110 All surveyed members with insurance companies in their jurisdictions do not consider insurance company activities as shadow banking activities. Some members do not consider that insurance companies directly undertake credit intermediation, while others report that insurance companies are regulated to the same level as banks in certain jurisdictions. However, an exception is that all members agreed that insurance companies, to a certain extent, facilitate credit creation (i.e. EF 4) via types of credit insurance and financial (mortgage) guarantees. Similarly, pension funds should not be categorised as shadow banking because they do not engage in credit intermediation.

Public financial institutions

111 The majority of surveyed members do not consider PFIs as shadow banking because they do not create significant systemic risks or regulatory arbitrage concerns or are guaranteed by the government.

Credit unions / Cooperatives (CUCs)

112 Seven jurisdictions (Australia, India, Japan, New Zealand, Korea, Malaysia, and Philippines) reported having credit unions in their jurisdictions. None of them identified CUCs as shadow banking, except the Philippines. The Philippines consider that CUCs generate risks arising from maturity and liquidity transformation as well as leverage and that they are involved in activities including loan provisions that rely on short-term financing (i.e. SR 1, 2 and 4). Non-bank CUCs in the Philippines are generally not subject to prudential regulations.

113 Australia and Japan explained that CUCs are entities that conduct banking business and are subject to the same prudential framework as banks, which effectively addresses risks. Although CUCs in Australia generate risks arising from maturity and liquidity transformation, and leverage (i.e. SR 1, 2 and 4), they are considered banking institutions (or authorised deposit-taking institutions) by the prudential regulator and as such, are subject to the same prudential framework as banks. Therefore CUCs are not identified as shadow banks in Australia.

114 In Korea, CUCs are involved in managing client cash and providing loans that rely on short-term financing (i.e. EF 1 and 2), however, they are not identified as shadow banking because CUCs in Korea raise funds mainly from their members and take deposits from members and offer loans to them. CUCs in Korea also have deposit insurance funds. Similarly in Malaysia, CUCs generate risks arising from maturity and

liquidity transformation, and leverage (i.e. SR 1, 2 and 4), but they are not identified as shadow banking as their financing activities are funded through members' contributions, which are relatively long term in nature, and they are regulated by Malaysia Co-operative Societies Commission.

Building societies

- 115 Three jurisdictions (Australia, New Zealand and Malaysia) reported having building societies in their jurisdictions, but only Malaysia identified building societies as shadow banking. Australia and New Zealand do not identify building societies as shadow banking despite their involvement in maturity and liquidity transformation and their degree of leverage (i.e. SR1, 2 and 4), as these entities, like CUCs, are treated for prudential purposes as part of the traditional banking sector and therefore subject to the same prudential framework as banks.
- 116 In Malaysia, building societies are identified as shadow banking based on FSB indicators, as these institutions are involved in maturity/liquidity transformation, leverage and are primarily funded by short-term deposits (i.e. SR 1, 2, 4 and EF2). These institutions are not subjected to any formal prudential oversight.

Structured finance vehicles (SFVs)

- 117 Eight jurisdictions (Australia, Japan, Korea, Malaysia, Indonesia, Thailand, India and Singapore) reported having SFVs in their jurisdictions. SFVs in most jurisdictions are involved in securitisation activities (i.e. EF 5), together with a host of other systemic risk indicators.
- 118 All but Indonesia identified SFVs as shadow banking, with Singapore considering that SFVs are shadow banking only to the extent that they intermediate credit (i.e. placing assets backed by liabilities or pooled equity into credit instruments) and where there is none or few prudential regulatory standards or supervisory oversight. Thailand added that SFV's activities pose minimal risk due to several regulatory measures.
- 119 SFVs are not considered shadow banking in Indonesia as they are prohibited from certain activities, including the redemption of asset-backed securities or engaging in borrowing activities. Consequently, their capacity to carry out maturity/liquidity transformation is significantly curtailed.

Primary dealers and portfolio managers

- 120 Primary dealers and portfolio managers are only reported in India. Primary dealers are involved in maturity/liquidity transformation and leverage (i.e. SR 1, 2 and 4) but are not identified as shadow banking as they are reported to be market makers that have access to liquidity assistance from the central bank. In India, portfolio managers manage client cash pools with features that make them susceptible to runs (i.e. EF 1) but they are not classified as shadow banking because they only act as investment facilitators.

Brokers

- 121 Nine jurisdictions (Malaysia, Hong Kong, Korea, India, Indonesia, Japan, Singapore Thailand and the Philippines) reported brokerage activities in their jurisdictions. Australia classifies its brokers as money market corporations. About half of them identify brokers as shadow banking. The Philippines, Malaysia and Hong Kong do not consider brokers as posing material shadow banking risks. In Hong Kong and Malaysia, brokers are mainly funded by shareholders, while the margin loans granted by them to clients are on at-call basis. In Hong Kong, intermediation activities that rely on short term funds (i.e. EF 3) are minimal and the leverage of brokers is insignificant (i.e. SR 4). The Philippines does not consider brokers as posing any regulatory arbitrage concerns.
- 122 On the other hand, Korea, Japan and Thailand consider that brokers undertake a host of economic functions and display certain systemic risk indicators, albeit at minimal level. They classify brokers as shadow banking in line with the FSB's broader definition of shadow banking. Singapore also identifies brokers to be shadow banking as they intermediate credit with little or no prudential and supervisory oversight.

Money market corporations (MMCs)

- 123 Only Australia reported the presence of MMCs which are entities that intermediate between borrowers and lenders and provide investment banking type services. MMCs in Australia give rise to all four systemic risk indicators at a moderate level and intermediate their market activities in part based on short-term funding. (i.e. SR 1 to 4 and EF 3). As such, MMCs are identified as part of Australia's shadow banking sector.

Pawn shops

- 124 Three jurisdictions have data on pawn shop activities (China, Malaysia and the Philippines). China reported 6,084 pawn shops with a pawning balance of USD11.23 billion³³. China has introduced prudential regulations for pawn shops, overseeing their financing channels and leverage, and considers that the risks associated with pawn shops are under control. Both the Philippines and Malaysia identified their pawn shops as having minimal leverage. The Philippines consider pawn shops as shadow banking given that they are involved in loan provision (i.e. EF 2) carried out outside the banking system. Malaysia, however, is of the view that the simple nature of pawn shop activities does not give rise to systemic risks or perform to any great extent any of the economic functions identified by WS3, and as such, are not shadow banking. In addition, pawn broking activities in Malaysia are typically conducted on a small scale to cater for retail needs and are limited to gold as underlying assets.

Mortgage corporations

- 125 Only three jurisdictions (Malaysia, Korea and Thailand) reported that their mortgage corporations are exposed to risks of maturity/liquidity transformation and leverage and

³³ Source: People's Bank of China. *Financial Stability Report 2013*, page 174. Original figure is RMB70.61bn and converted to USD using State Administration of Foreign Exchanges' official exchange rate of 6.2855 on 31 December 2012.

are involved in facilitation of credit creation and securitisation (i.e. SR 1 and 2; EF 4 and 5). Korea does not identify their mortgage corporations as shadow banking as they are public financial institutions guaranteed by the government. In contrast, Malaysia and Thailand consider their mortgage corporations to be shadow banking based on FSB indicators, as they are involved in maturity and liquidity transformation, as well as leverage, and are only subject to limited prudential requirements (SR 1, 2 and 4). Mortgage corporations in Thailand, however, are allowed to engage only in securitisation.

Development financial institutions (DFIs)

126 Only two jurisdictions (Malaysia and Pakistan) reported having DFIs. Pakistan identified DFIs as exhibiting all the relevant systemic risk indicators and performing the relevant economic functions. Pakistan categorises DFIs as shadow banking because they are a part of the financial intermediaries' network and in direct competition with banks due to their activities in borrowing, lending and generating institutional deposits. DFIs in Malaysia generate risks of maturity/liquidity transformation and leverage and are involved in loan provision that rely on short term financing and facilitation of credit creation (i.e. SR 1, 2, 4; EF 2 and 4). However, DFIs in Malaysia are not considered to be shadow banking as they are subject to prudential oversight which effectively mitigates the risks.

Microfinance institutions (MFIs)

127 Seven jurisdictions (Cambodia, China, India, Indonesia, Malaysia, Pakistan³⁴ and the Philippines) reported having MFIs. With the exception of India and the Philippines, these jurisdictions do not identify MFIs as shadow banking. Although MFIs are considered to exhibit many of the systemic risk indicators and perform several of the economic functions identified by WS3, the general view is that they are subject to supervision/regulation or pose minimal systemic risk or regulatory arbitrage concerns. In India, MFIs operate under different legal structures. For-profit companies undertaking MFI activities are registered with the Reserve Bank of India (RBI) as "non-banking financial companies - MFI" and are regulated by the RBI. In China, there are 6,080 small loan companies with a total loan balance of USD94.2 billion³⁵; these are subject to prudential regulations of the relevant authorities, including controls on their financing channels and leverage.

Finance companies

128 Eleven jurisdictions reported having finance companies, but only six jurisdictions (Australia, India, Japan, Korea, Pakistan and the Philippines) categorised finance

³⁴ Data provided by Pakistan for the category of MFIs pertains to "micro finance banks", which are allowed to take deposits, provide micro loans and are prudentially regulated by the State Bank of Pakistan.

³⁵ Source: People's Bank of China. *Financial Stability Report 2013*, page 174. Original figure is RMB592.1bn and converted to USD using State Administration of Foreign Exchanges' official exchange rate of 6.2855 on 31 December 2012.

companies as shadow banking. Finance companies in Australia and Japan are categorised as shadow banking because they are identified as giving rise to many of the systemic risk indicators and are involved in providing loans that rely mainly on short term financing (i.e. SR1 to 4 and EF2). Korea identified finance companies as using leverage as the amount of funding from liabilities (such as bonds or loans) is large. In the Philippines, finance companies are exposed to maturity/liquidity mismatch (i.e. SR1 and 2) and engage in loan provision (i.e. EF 2). However, the said risks are not mitigated by prudential regulatory requirements as is the case with banks.

- 129 In Pakistan, the Modarabas (Sharia compliant finance companies that arrange one party to provide finance to another for the purpose of carrying on a business) are engaged in deposit-taking and lending activities. Because the Modarabas involve all systemic risk indicators and are involved in loan provision, intermediation activities and facilitation of credit creation (i.e. EF 2, 3 and 4), they are categorised as shadow banking.
- 130 Five jurisdictions (China, Hong Kong, Indonesia, New Zealand and Singapore) do not consider finance companies as shadow banking. In Hong Kong, finance companies are involved in maturity and liquidity risk transformation, minimal leverage and to a certain degree, engage in loan provision (i.e. SR 1, 2, 4 and EF 2), but they are not considered shadow banking posing systemic risks given that the scale of their lending activities remains small relative to financial system assets, with no material concerns about leverage, funding structure and interconnectedness with the local banking sector. Indonesia also identifies finance companies as engaging in liquidity transformation and loan provision (i.e. SR 2 and EF 2) but does not categorise them as shadow banking, because they have limited exposure to the financial sector and are subject to prudential supervision. In China, finance companies are reported to be subject to bank-like regulations and are not categorised as shadow banking.

Money market funds (MMFs)

- 131 Nine jurisdictions reported MMFs, but only five of them (Australia, Japan, Korea, Singapore and Thailand) consider MMFs as shadow banking. Although Singapore, Australia and Thailand consider them to be shadow banking, they believe the risks are generally addressed within their existing regulatory or supervisory framework. Singapore points out that MMFs should be identified as shadow banking only to the extent they intermediate credit (i.e. placing assets backed by liabilities or pooled equity into credit instruments) and where there are little or no prudential regulatory standards and supervisory oversight. Japan also considers MMFs to be shadow banking and has examined the detail of the IOSCO recommendations for MMFs taking due account of the structure and the situation of its markets. In June 2013, the Japanese Diet passed the amendment bill to allow managers of MRFs (Japanese MMFs) to compensate losses in MRFs in line with the recommendations. Australia considers that risks posed by MMFs have been mitigated under Australia's regulatory arrangements, and distinguishes MMF activities in Australia from those generally identified by the FSB as posing shadow banking risks. In particular, MMFs in Australia in the main do not offer a stable or

constant “net asset value” (NAV), as such, the value of members’ investments can fluctuate, and hence there is no entitlement to a fixed return. Thailand also noted that MMFs in Thailand only pose risks at a minimal level and all of which are mitigated by several regulatory measures.

- 132 Four jurisdictions (Hong Kong, India, Indonesia and Pakistan) do not consider MMFs as shadow banking. Hong Kong identifies MMFs as generating limited or minimal risks from maturity/liquidity transformation and leverage (i.e. SR 1, 2 and 4). Hong Kong points out that its MMFs make up a small portion of retail investment funds and that the impact on the financial system from a run on these funds is not significant and would be unlikely to pose systemic risks to the global financial system. Furthermore, Hong Kong domiciled MMFs are subject to product regulation and oversight and do not use constant NAV, which has been identified to be more vulnerable to runs. Indonesia considers that MMFs are subject to a supervisory and regulatory regime in its jurisdiction and do not constitute shadow banking. Moreover, these funds are required to comply with the general principle of fair value when valuing the securities held in their portfolio, thus making them less susceptible to runs. India’s view is that MMFs should not be part of shadow banking because they only manage investments on behalf of the public and are not involved in lending or deposit-taking activities.

Collective investment schemes (CIS)

- 133 Eleven jurisdictions reported having CIS in their markets with six jurisdictions (Australia, India, Japan, Korea, Thailand and Singapore) considering CIS to be shadow banking.
- 134 Korea identified CIS as giving rise to liquidity and maturity transformation risks and they manage client cash (i.e. SR 1, 2 and EF 1). Korea categorised CIS as shadow banking, because CIS (except MMFs) in Korea undertake financial intermediation activities mainly through investment in beneficiary certificates and are vulnerable to redemption risks. Singapore identifies CIS as potentially giving rise to maturity and liquidity transformation risks and categorises CIS as shadow banking, but emphasizes that the focus should be only on those that invest in credit instruments. Thailand also identified CIS as having similar risks and categorises CIS as shadow banking but considers that the degree to which CIS are susceptible to a run is minimal.
- 135 Five jurisdictions do not classify CIS as shadow banking (Hong Kong, Indonesia, Malaysia, Pakistan and the Philippines) primarily because risks posed by CIS are either minimal, mitigated, or CIS are already subject to proper regulatory oversight. In Hong Kong, CIS are identified as generating limited maturity/liquidity risk transformation and leverage (i.e. SR 1, 2 and 4) and the risks are perceived to be negligible as many types of CIS are not directly involved in credit intermediation. Hong Kong noted that, unlike bank deposits, CIS in general do not guarantee a return of investors’ capital. Investments in CIS are marked to market and investors are subject to investment risk. From a purely systemic risk perspective, CIS investors themselves capture and mitigate the risks that might be triggered by the distress or default of a CIS. Arguably, CISs play the role of

shock absorbers within the financial sphere. Furthermore, CIS managers in Hong Kong do not operate in the “shadows” as they are subject to regulations and reporting requirements.

- 136 Indonesia is of the view that none of the systemic risk indicators are applicable to their CIS, which are subject to existing regulations that mitigate excessive risk taking. CIS in the Philippines involve investment in debt and equity securities only and are not fund raising schemes. Pakistan identifies their CIS as having certain degree of leverage, but does not categorise CIS as shadow banking as they manage investments on behalf of the public and are not involved in lending and deposit-taking activities. While Malaysia recognises that some large CIS may pose systemic risk due to the size the interconnectedness with the banking system, CIS in Malaysia are highly regulated and subject to reporting requirements and appropriate regulatory oversight.

Hedge funds

- 137 Only three jurisdictions (Korea, Hong Kong and Singapore) provided data on hedge funds. Korea considers hedge funds to be shadow banking as they are identified as generating risks arising from maturity/liquidity transformation and credit risk transfer (i.e. SR 1, 2 and 3). Korea noted that leverage of hedge funds may increase due to the low level of regulation for borrowing. Similarly, Singapore believes that hedge funds should be categorised as shadow banking but only to the extent these entities intermediate credit (i.e. placing assets backed by liabilities or pooled equity into credit instruments) and where there is none or little prudential regulatory standards and supervisory oversight.
- 138 Hong Kong identifies similar risks in hedge funds as Korea but does not consider hedge funds pose material shadow banking risks, because the size of funds managed by licensed hedge fund managers is small in Hong Kong and these managers are subject to licensing requirements and prudential and conduct supervision.

Trust companies

- 139 China identified the presence of trust companies in its jurisdiction. A trust company invests client funds with a specific objective, amount, maturity and interest rates. The funds raised can be extended to companies as loans. Some trust schemes are involved in maturity transformation by rolling short term funds over into medium and long-term projects. The total assets of trust companies in China grew rapidly in the past few years and reached USD 1.5 trillion as at the end of June 2013³⁶. China does not consider trust companies to be shadow banking as they are subject to the national regulator’s prudential oversight, licensing and net capital requirements. The regulatory authority also has oversight of the business operations of trust companies.

³⁶ Source: China Trustee Association, *Main Business Data of Trustee Companies*, 2013 Q2 bulletin. Original figure in RMB, converted to USD using official exchange rate at end of June 2013.

IV. REGULATORY REGIMES OF NBFIs IN ASIA

A. Review of Regulatory and Supervisory Regimes for NBFIs in Asia

- 140 Surveved members consider that, by and large, the NBFIs reported in the survey are subject to appropriate forms of oversight by their respective regulatory agencies including central banks, prudential regulators, market conduct regulators and other government agencies, albeit to a varying degree.
- 141 The regulatory approach applied to NBFIs is dependent on the type of authorities (and regulatory objectives) that have oversight over a particular NBFi. Broadly, these authorities can be classified into two categories – (i) regulators with explicit regulatory mandates and objectives such as financial regulators (e.g. central banks, prudential regulators, market conduct regulators) and (ii) authorities that do not have an explicit regulatory mandate but undertake regulation of certain NBFIs as part of a broader mandate (e.g. government ministries and agencies).
- 142 For NBFIs that are regulated by a financial regulator (or regulators), surveyed members have indicated a range of regulatory policies and measures for regulating NBFIs which relate to:
- (1) registration and licensing or approval of establishment of entity and activity;
 - (2) permissible activities, instruments and investments;
 - (3) corporate governance;
 - (4) risk management, compliance and internal control systems;
 - (5) prudential standards, limits, restrictions on assets, capital, liquidity and leverage;
 - (6) transparency and public disclosure;
 - (7) market conduct; and
 - (8) consumer, investor and depositor protection.
- 143 For NBFIs subject to oversight by government ministries or agencies, members indicated that they are regulated under the purview of the legislation enacted to create and govern the NBFIs and their activities, which usually covers licensing requirements, standards for market conduct and governance. In addition to the regulatory perimeters set out by the respective legislation, the regulatory approach is closely related to the developmental objective of the respective government ministries and agencies at each point in time. As such, the policy tools and measures can vary between government agencies and between jurisdictions.

B. Supervisory and Regulatory Powers

- 144 In evaluating the extent of supervisory and regulatory powers of authorities over NBFIs, members were surveyed on their powers and practices covering data collection, supervisory inspections, power to take enforcement actions, consumer protection (or

depositor/ investor protection as the case may be).

- 145 Most jurisdictions report that the powers to collect data and information exist for a majority of the NBFIs. However the applicability, practice and type of data and information collected varies between jurisdictions and within jurisdictions when dealing with different NBFIs. Some regulators require the NBFIs to submit data and information periodically, whereas others only request data and information on a case by case or need basis. The granularity and depth of data and information collected also varies between jurisdictions (e.g. financial statements, data on business operations, financial returns, internal controls, liquidity and solvency positions).
- 146 Most jurisdictions report having the authority to conduct inspections on NBFIs if deemed necessary. However, in some jurisdictions, not all NBFIs are subjected to on-going supervisory inspections as is typically the case for banking institutions. All jurisdictions report the ability to take enforcement actions against NBFIs if necessary. Enforcement actions may be taken in the event of non-compliance, breach of legislation or illegal activity.
- 147 Two jurisdictions report depositor, investor or consumer protection being available for every NBFIs in their jurisdiction. However some jurisdictions note that while there is no explicit protection regime for particular NBFIs, generalised protection regimes is embedded in the relevant legislation or regulations applicable to them.
- 148 Only a few jurisdictions report having a comprehensive resolution regime already in place for all NBFIs. Broadly speaking, jurisdictions do not have a comprehensive resolution regime for all the NBFIs and note that this is an area that could require further reform as appropriate. Some jurisdictions are currently working on developing resolution regimes.

C. Other regulatory measures and enhancements

- 149 The survey indicates that members continue to enhance regulation and supervision of NBFIs. Some members have embarked on various initiatives to address potential risks emanating from the shadow banking system. The measures introduced thus far have been wide ranging – from enhancing existing or introducing new regulations for targeted non-bank financial entities/activities, enhancing inter-agency coordination and cooperation, to broader legislative changes empowering authorities to collect necessary data and information, and to implement other regulatory measures for NBFIs.
- 150 Measures taken by members to strengthen existing regulatory or supervisory regimes include:
- (1) Australia issued proposals to strengthen the regulation of debenture-issuing finance companies.
 - (2) Indonesia reported regulatory enhancements are underway for insurance firms, finance companies and financial guarantee companies (FGCs).
 - (3) Korea reported plans to enhance regulations for finance companies, credit unions

and co-operatives, mutual savings banks and credit service providers.

- (4) The Philippines reported proposals are being developed to enhance prudential requirements for NBFIs, which include corporate governance, disclosure and capital adequacy requirements.
- (5) Singapore has introduced revisions to its Collective Investment Schemes (CIS) Code to implement additional safeguards on the use of financial derivatives and securities lending, to strengthen counterparty and collateral requirements and to enhance the registration and licensing regime for hedge fund managers.
- (6) Hong Kong has strengthened requirements for Securities and Futures Commission authorized structured funds and synthetic ETFs, in particular enhancing transparency, counterparty and collateral management requirements.
- (7) India established an expert working group to undertake a comprehensive review of non-bank financial companies. Various recommended changes in prudential requirements and corporate governance standards are being examined.
- (8) China's banking regulator (CBRC) has issued a circular to regulate the wealth management products (WMPs) launched by commercial banks³⁷. WMPs are mainly off-balance products that gather funds from clients and invest them in various ways according to their product statement. WMPs can also be used to buy trust products issued by trust companies, which would then use the funds to extend loans to companies. For companies that have difficulties in securing loans from banks, trust company lending is an alternative source of financing. A WMP may pool funds from different WMPs together to achieve maturity transformation. To limit the risks arising from WMPs, the CBRC circular sets a restriction that the total amount of funds in WMPs that invest in non-standard debt-based assets cannot exceed 35 percent of the total assets of WMPs, or 4 percent of a bank's total assets, whichever is lower. Further, to enhance transparency, funds of each WMP can only be used as described in the product offering documents of the WMP. As an ongoing effort to monitor the application of the funds raised, banks are required to implement more stringent internal controls and increase information disclosure to investors when launching these products.
- (9) In Malaysia, Securities Commission Malaysia has strengthened the intensity of its review on CIS disclosures as well as its oversight of fund management companies. This includes the introduction of a Client Asset Report Requirement, performed by external auditors in conjunction with the statutory audit exercise. It has also implemented a comprehensive risk assessment methodology, which factors qualitative, quantitative and self-assessment components for fund management companies.

³⁷ *The Circular on the Regulation of the Investment and Operation under Wealth Management Business by Commercial Banks.* The circular can be accessed via CBRC's website:
http://www.cbrc.gov.cn/govView_2B22741AFBC446CF890636DACAB71166.html

- 151 Some RCGA members have introduced new regulatory or supervisory requirements:
- (1) In Hong Kong, the Securities and Futures Commission, together with other local regulators, are currently in the process of developing a resolution regime for major licensed corporations and clearing houses.
 - (2) In Pakistan, the regulatory framework for various NBFIs such as Micro Finance Banks, Modarba (shariah compliant finance company) and mutual funds have been strengthened. Additionally, rules pertaining to Takaful (shariah-compliant insurance) have been issued to improve risk mitigation, rating procedures, solvency standards and formulation of shariah advisory board.
- 152 Some members have taken steps to strengthen regulation by enhancing monitoring and/or inter-agency coordination and cooperation:
- (1) In China, the central bank has started to use liquidity and interest rate tools to urge commercial banks to improve their liquidity management and reduce leverage.
 - (2) In the Philippines, work is underway to improve existing information sharing arrangements among the financial regulators to strengthen regulation and supervision of financial conglomerates. Financial regulators also agreed to develop common governance standards and adopt measures to ensure consistent implementation.
 - (3) India established the Financial Stability and Development Council to strengthen and institutionalise the mechanism for maintaining financial stability, including enhancing inter-regulatory coordination and macro-prudential supervision.
 - (4) In Australia, the Reserve Bank has been presenting, for several years now, an annual review of shadow banking developments to the Council of Financial Regulators (which is a forum bringing together the key financial sector regulators as well as the Australian Treasury).
- 153 Some authorities have reported enhancements to their legislative framework to strengthen oversight of NBFIs:
- (1) In 2013, Indonesia passed laws on microfinance institutions giving a mandate to the Financial Services Authority (OJK) to regulate and supervise microfinance institutions. The law will be enacted in 2015.
 - (2) Malaysia recently passed the new Financial Services Act 2013 which empowers Bank Negara Malaysia (BNM) to subject a NBFI to on-going regulation and supervision should an entity be deemed to pose or likely to pose risks to financial stability. Meanwhile, the Central Bank of Malaysia Act 2009 accords BNM with the necessary powers to collect information from NBFIs to facilitate financial stability assessment as well as issue orders requiring entities to undertake appropriate measures in the interest of financial stability.
 - (3) New Zealand is introducing new legislation to enhance the regulation of non-

bank deposit takers (NBDTs), such as credit unions, building societies and finance companies, which will enable the Reserve Bank of New Zealand to implement a licensing regime for NBDTs and formalise its current regulatory/supervisory roles over such institutions.

V. RISKS OF SHADOW BANKING IN ASIA

A. How do RCGA members monitor shadow banking risks?

- 154 Generally, members identify and measure potential risks arising from shadow banking by analysing relevant data and information obtained from various sources. Among the 15 surveyed jurisdictions in Asia, the various types of NBFIs identified in their jurisdictions are in most cases subject to some form of oversight. Therefore, the data and information needed for risk assessment is typically sourced from the regular returns submitted (i.e. through regulatory reporting), periodic surveys (India, Japan, Pakistan and Malaysia), thematic reviews, supervisory assessment and regular engagement with the NBFIs.
- 155 In the case of new or innovative NBFIs for which there are practical difficulties in gathering relevant data, some members consider that market intelligence may be used to assist with the assessment of potential risks to financial stability. In some jurisdictions, domestic regulators have mechanisms in place to collaborate and exchange information in relation to NBFI activities. Where the NBFIs are not subject to formal oversight but are subsidiaries of regulated financial institutions, financial data and information of the NBFIs can be obtained via their regulated parents or through consolidated supervision.
- 156 With regard to approaches of risk assessment, members generally apply micro and/or macro approaches to assess the extent of risks posed by shadow banking activities of NBFIs to financial stability. Relevant authorities generally undertake a risk assessment of individual NBFIs at the entity level using various metrics (e.g. leverage ratio, maturity mismatches of assets and liabilities), and in some jurisdictions, the NBFI's compliance with relevant prudential rules/regulations (Hong Kong, India, Japan, Thailand, Pakistan, China and Korea). In addition, central banks also undertake macroprudential surveillance at the system-wide level to assess the extent of risks posed by the shadow banking sector to the banking system and to the financial system as a whole. This macro risk assessment usually involves the use of financial indicators (e.g. leverage, credit risk, asset prices, market and funding liquidity risk), trend analysis, scenario analysis and stress testing (Malaysia, Thailand and Korea). If there is any significant change in risk profiles and/or trends in particular (e.g. change in funding or operations behaviour), authorities may consider whether a policy response is necessary to address any emerging risks identified. Some member indicated that different types of NBFIs have very different risk profiles and customized regulatory measures are needed to control the relevant risks (China).
- 157 In general, RCGA members have risk assessment mechanisms in place for identifying, assessing and monitoring shadow banking in their respective jurisdictions. Members' approaches to assess entity-level as well as broader financial stability risks are generally consistent with the FSB's two-stage approach in monitoring shadow banking risks. The risk matrices and financial indicators used also echo existing work undertaken by the FSB, in particular the work of its shadow banking WS3 on identifying shadow banking entities other than money market funds.

B. Potential risks emanating from shadow banking in Asia

- 158 RCGA members were asked to identify the key potential shadow banking risks in their respective markets. Members identified a number of direct risks arising from within the shadow banking sector, as well as indirect risks stemming from the interconnectedness of markets, spill-over risks and regulatory arbitrage.
- 159 The two key potential risks arising directly from the shadow banking sector identified by surveyed members were: leverage risk and maturity and liquid mismatch. India, Japan, Korea, Malaysia, Pakistan, the Philippines and Thailand identified one of these risks as posing significant potential risks arising in their shadow banking sector.

Leverage risk

- 160 The pro-cyclical nature of leverage means that firms will tend to increase their leverage during good times and when credit conditions change, highly leveraged firms may come under stress. This condition could lead to the fire-sale of assets.
- 161 A build-up of leverage in the shadow banking sector can be facilitated by active market intermediation and the use of securities financing transactions such as repurchase agreements (repos) and securities lending. Unlike the regular banking sector, the shadow banking sector may not be subject to regulatory caps (e.g. leverage ratio requirements) on their balance-sheet. Japan, Korea and Thailand consider leverage to pose a major risk to their shadow banking sectors. Leverage in securities firms was identified as the biggest shadow banking risk in Korea due to its rate of increase in recent years.

Maturity and liquidity mismatch

- 162 Like banks, some shadow banking entities undertake maturity and liquidity mismatch in their day-to-day operations. As short-term funding is used to support longer term investments, they are exposed to liquidity and funding risks similar to those faced by traditional banks. Any disruption in market conditions (of money markets or the banking sector) may have an adverse effect on the shadow banking sector.
- 163 China, India, Japan, Malaysia, Pakistan, the Philippines and Thailand identified maturity or liquidity mismatch as a major potential risk in their jurisdictions. However, in India the bank borrowings of non-bank finance companies is increasing gradually and reliance on short-term markets through issue of commercial paper is relatively lower.

Indirect risks from interactions between shadow banking entities and regular banks

- 164 Potential risks stemming from the interconnectedness between banks and shadow banking entities can take the form of direct credit exposures and funding dependence on each other.
- 165 Interconnectedness in the financial system may allow financial distress to flow more readily between entities. Linkages with the traditional banking system create channels of transmission for financial stress from the shadow banking sector to the traditional banking sector and vice-versa. The traditional banking sector's exposure to risks in the

shadow banking sector is of particular concern in Asian jurisdictions where most financial systems remain dominated by banks.

- 166 The risks arising from the spill-over effect from the shadow banking sector to the regular banking sector were listed as a potential risk by Australia, India, Korea, Malaysia and the Philippines. Korea indicated that this exposure had been rapidly increasing since 2005.
- 167 Pakistan highlighted the dependence of shadow banks' on bank funding, with bank funding seen as an important source of funding for shadow banks to meet their financial obligations as they fall due. In particular, shadow banking entities in Pakistan such as leasing companies, investment banks and Modarabas are highly dependent on bank funding.

Regulatory arbitrage

- 168 Given that some shadow banking entities perform a role similar to banks (e.g. credit intermediation), there may be incentives for financial activities to move from the regular banking system to the shadow banking sector to avoid more stringent bank regulations and oversight.
- 169 India, Malaysia and the Philippines have identified regulatory arbitrage as a potential risk in their shadow banking sectors. Malaysia and the Philippines have noted that in their jurisdictions, shadow banks are not subject to the same underwriting criteria that are imposed on banks. As such, this has allowed shadow banking entities to gain a competitive advantage, allowing them to offer credit with more favourable conditions to customers in the domestic context.
- 170 New Zealand indicated that while it does not currently face material shadow banking risks, disintermediation could arise from the implementation of macroprudential tools (loan-to-value ratio (LVR) restrictions on residential mortgages). The LVR restrictions apply to all registered banks in New Zealand, including their overseas branches; however, these restrictions do not apply to non-bank financial institutions, and foreign banks may utilise indirect ways of financing lending to New Zealand residents that avoided the restrictions.

C. Potential impact of shadow banking risk to the region

- 171 Surveyed members indicated that the potential impact of shadow banking risks identified in their jurisdictions on the region from a stability perspective is none or negligible. While some of the potential shadow banking risks identified by members may be perceived as "major" domestically, they are perceived as insignificant or not systemic from a regional stability perspective.
- 172 Some members believed that the cross-border impact would be insignificant due to the relatively small size of their shadow banking sectors. India, Japan, Korea, Malaysia, Pakistan and Thailand are of the view that there is limited cross-border exposure due to a focus on localised investment and provided the following examples:

- (1) In India, there are explicit regulations in place to ring-fence non-bank financial corporations from risks of cross-border linkages, minimising contagion risks.
 - (2) In Japan, CIS (MMF/MRFs, bond investment trusts and stock investment trusts) invest a significant portion of their assets in Japanese sovereign bonds, and finance companies primarily extend loans to domestic SMEs and low-income individuals within the jurisdiction, hence generating limited cross-border risks.
- 173 Based on the surveyed responses provided, the potential impact of shadow banking risks beyond the Asian region is very limited. Only three members (Australia, Malaysia and Singapore) suggested possible cross-border activities:
- (1) Australia’s money market corporations are akin to investment banks in other jurisdictions for the sector as a whole, cross-border assets and liabilities account for a noticeable share of balance sheets for these entities.
 - (2) Malaysia’s larger NBFIs have small overseas exposures (primarily in Asia and Europe) through investments in capital markets and properties.
 - (3) In Singapore, a significant proportion of funds managed by funds managers in Singapore source their business or customers from outside the Asia-Pacific region, and they are invested primarily in the Asia-Pacific region³⁸.

D. Do Asian jurisdictions face the same shadow banking risks as other jurisdictions, such as the EU/US?

- 174 None of the surveyed members considered that Asian jurisdictions face the same shadow banking risks as other regions. All members expressed the view that shadow banking risks faced by Asia are different to those in the US or EU, consequently, while the risks identified for NBFIs in these markets may be a useful reference for Asia, they are not as relevant to Asia to warrant similar policy responses.
- 175 Overall, the size of NBFIs in Asia is relatively small compared to more advanced economies. In general, OFIs assets in Asia account for less than 15 percent of the total financial systems in Asia, which is significantly below the global average of 25 percent, as reported in the Global Report. In certain sectors identified by the FSB as shadow banking areas, such as securitisation, MMFs and securities lending and repos, the number of market participants in Asia and the number of transactions are generally much lower as compared to the US and EU. In particular, MMFs form only a small portion of the funds management industry in Asia and are generally perceived as having very limited systemic implications or risk of “runs” as compared to the US. Singapore indicated that it does not face the same risks in relation to MMFs as other jurisdictions as it does not permit the public offering of constant-net-asset-value (CNAV) MMFs (which are susceptible to runs). Also, the risks relating to securitisation activities would differ given the lack of activity in domestic Singaporean securitisation markets.

³⁸ Information based on a survey of a sample of other investment funds, MMFs, hedge funds and broker dealers conducted by Singapore.

- 176 The majority of RCGA members are emerging or developing markets measured against international benchmarks. Many capital and equity markets in Asia are still at an early stage of development. In general, products offered in growth markets are less complex in nature, target the domestic market and have very limited systemic significance.
- 177 In Asia, banks remain the dominant providers and facilitators of credit-intermediation. NBFIs do not play a primary or systemic role in credit intermediation. In most jurisdictions, there are a large number of very small NBFIs which provide financial services to specific sectors often populated by small domestic companies, to fill the credit void as these sectors may not have access to bank finance. This high number of small NBFIs is a unique feature in Asia as distinct from the US and the EU.

E. Challenges in monitoring and mitigating shadow banking risks

Data availability and granularity

- 178 A key challenge faced by members is the ability to collect relevant data/information needed for shadow banking risk assessments. Insufficient data on some NBFIs appears to be a common issue across a number of jurisdictions (Hong Kong, Japan, China, Malaysia and the Philippines). Limited available quantitative information makes it difficult to gauge the size of shadow banking activities and the extent of risks posed to financial stability. For instance, China indicated that it is currently conducting a nationwide research project to assess the scope, size and risks of its shadow banking sectors, so as to build the basis for corresponding policy responses. Further, the lack of structured/granular data for monitoring and risk assessment of NBFIs is also an issue, particularly for sectors that have a large number of small entities such as money lenders and pawn brokers (Malaysia).
- 179 Some members consider that data collection should be cost-effective. For example, Malaysia emphasised that some types of NBFIs are high in numbers but relatively small in size and may not be systemic in nature, and as such, there is a need to strike a balance between risk monitoring and the intensity/granularity of information required.

Ability to identify emerging risks to financial stability posed by new and innovative shadow banking activities/entities

- 180 Given the evolving nature of shadow banking activities, some members highlighted the importance of having the ability to identify new and innovative shadow banking activities or entities, and assess the extent of shadow banking risks posed by these new activities or entities (Australia and Indonesia). One example observed is the increased issuance of deposit-like instruments by NBFIs to solicit retail funding to support their credit intermediation activities (India).

Fragmented oversight of NBFIs in the domestic context

- 181 Different types of NBFIs are currently subject to different regulatory regimes imposed by their respective domestic regulators, even though some of their business activities

pose similar shadow banking risks. Effective cooperation and coordination among various domestic regulatory agencies is therefore needed to ensure that policy measures applied to different types of NBFIs are consistent to minimise the opportunities for regulatory arbitrage (India, Indonesia, Malaysia and the Philippines). For example, in some jurisdictions, finance companies undertake the same lending activities as banks but are not subject to similar prudential requirements; these finance companies are usually subject to less stringent underwriting standards than banks.

Maintaining a right balance to avoid over regulation and inhibiting growth

- 182 The regulatory framework for shadow banking should be able to strike a balance between strengthening the regulatory oversight of shadow banking activities/entities and the social and economic benefits brought about by non-bank credit intermediation activities. In other words, prudential and other regulatory measures should be proportionate to the risks posed without unduly restricting financial sector growth (Indonesia, Korea and Singapore).

VI. RELEVANCE OF FSB RECOMMENDATIONS ON SHADOW BANKING TO ASIA

A. Overall adequacy of FSB's policy recommendations to address shadow banking risks in Asia

- 183 The majority view is that the FSB's integrated set of policy recommendations on shadow banking is applicable to all jurisdictions/markets, including Asia. Most members consider that it is essential that each jurisdiction has the flexibility to exercise national discretion in applying these recommendations in a manner consistent with domestic settings, taking into account existing regulatory measures and the extent of risks posed, given the differences in financial market structure, stages of financial market development and hence the sophistication of financial markets across jurisdictions (Australia, Hong Kong, Japan, India, Malaysia, Thailand, Singapore, Korea and the Philippines).
- 184 The FSB's policy recommendations should be directed at addressing systemic risks posed by shadow banking entities to ensure that regulatory measures applied are proportionate to the risks posed and do not inhibit economic development (Indonesia, Malaysia).
- 185 Due to the evolving nature of shadow banking activities, new and innovative shadow banking activities/entities may pose emerging risks that may not be addressed by the FSB's current policy recommendations. It would therefore be appropriate if the FSB's shadow banking policy framework is reviewed and updated, if necessary, to ensure that it is responsive to emerging risks posed by new and innovative shadow banking activities/entities over time (Australia).
- 186 The FSB's policy recommendations should have due regard to other related policy initiatives developed by other international standard-setting bodies (e.g. securitisation policy proposals considered by the Basel Committee) in order to avoid potential overlaps and inconsistencies in the implementation of the recommendations.

B. Relevance and applicability of FSB's policy recommendations to Asia

- 187 RCGA members were invited to assess the relevance of FSB's policy recommendations on shadow banking in their jurisdictions by reference to the work of WS2 to WS5.

WS2 – Money market funds (MMFs)

- 188 WS2 is mandated to work towards reducing MMFs' susceptibility to runs. In October 2012, IOSCO issued 15 policy recommendations to establish common standards for the regulation and management of MMFs across jurisdictions. These recommendations cover (i) the general regulatory framework; (ii) fund valuation; (iii) liquidity management; (iv) stable NAV; (v) use of credit ratings; (vi) disclosure to investors; and (vii) MMFs' practices in relation to repos.

- 189 IOSCO recognizes the importance of flexibility in implementing these recommendations, as markets vary between jurisdictions in terms of size, features and systemic relevance of MMFs. Accordingly, the implementation of the recommendations may vary, depending on local conditions and circumstances, the existing domestic legal and regulatory structures, and the likely effects that the implementation of these recommendations will have on domestic market etc.
- 190 The majority view is that IOSCO's policy recommendations for MMFs are generally applicable to Asia (Australia, Hong Kong, India, Japan, Korea, Malaysia, New Zealand, Pakistan, the Philippines, Singapore and Thailand). Most members indicate that they will carefully consider these recommendations and decide whether or not to incorporate them as part of their regulatory regimes. This is because MMFs do not exist on the same scale or exhibit similar characteristics across jurisdictions. As such, implementation of IOSCO's policy recommendations may be considered less relevant or not a priority task in jurisdictions where the size of its MMF market is relatively small (the Philippines), or given the specific structure and scale of a jurisdiction's MMF market (Japan). Some RCGA members have expressed concerns over specific recommendations as set out in the following paragraphs.

Extending the perimeter of regulation to products similar to MMFs (Recommendation 3)

- 191 Given the range of investment products offered may be quite diverse in nature, any additional requirements imposed should address the unique nature and risk of specific financial products. Therefore, extending MMF-like regulations may not necessarily be appropriate in other circumstances beyond MMFs (Singapore).

Liquidity management (Recommendation 7 and 8)

- 192 India and Pakistan indicate that they do not impose regulatory requirements for MMFs to conduct stress tests on a periodic basis (Recommendation 8), however each asset management company is required to establish a system of internal controls and risk management to ensure that liquidity risk is adequately managed (India).

Stable NAV (Recommendation 10)

- 193 Several members emphasised the inapplicability of this recommendation because MMFs are not permitted to offer a stable or constant net asset value (NAV) (Thailand and Singapore); there is no such fund in some jurisdictions (Pakistan and Hong Kong); and the asset value of a MMF is calculated using fair market value (Indonesia). Australia noted that the use of variable NAV has the benefit of reducing the impact of maturity and interest rate risk since the unit price reflects the market value.

Practices in relation to repos (Recommendation 15)

- 194 The recommendation that regulators should develop guidelines to strengthen the policy framework applicable to the use of repos by MMFs appears less relevant to jurisdictions where the size of their MMF market is small (Hong Kong).

WS3 – Other shadow banking entities and activities

195 The objective of the work of WS3 is to establish a forward-looking, high-level policy framework that allows authorities to detect and assess the sources of shadow banking risks in the non-bank financial space (other than MMFs) from a financial stability perspective and to apply appropriate policy measures, if necessary, to mitigate financial stability risks.

196 The WS3's policy framework was published on 29 August 2013³⁹, taking into account responses to the consultation paper with draft policy recommendations of November 2012. The final policy framework consists of three elements:

- (1) *Assessment based on the framework of five economic functions (or activities)* – Authorities to determine whether NBFIs in their jurisdictions are involved in non-bank credit intermediation that may pose systemic risks, by assessment based on the five economic functions (EFs): (1) management of collective investment vehicles⁴⁰ with features that make them susceptible to runs; (2) loan provision that is dependent on short-term funding; (3) intermediation of market activities that is dependent on short-term funding or on secured funding of client assets; (4) facilitation of credit creation (e.g. through credit insurance); and (5) securitisation-based credit intermediation and funding of financial entities. This process will enable authorities to identify sources of shadow banking risk in NBFIs in their jurisdictions from a financial stability perspective.
- (2) *Adoption of policy tools* – NBFIs which are identified as posing shadow banking risks should be subject to oversight, by reference to the overarching principles (covering regulatory perimeter, information collection, disclosure, actions drawing on policy tools). Authorities may refer to the menu of optional policy tools and apply appropriate tools to mitigate financial stability risks as they think best fits the NBFIs concerned, the structure of the markets in which they operate and the degree of financial stability risks posed by such entities in their jurisdictions.
- (3) *Information sharing process* – Authorities will share information through the FSB, in order to maintain consistency across jurisdictions in applying the policy framework, minimise gaps and detect new adaptations and innovations in financial markets.

197 Among the 15 surveyed jurisdictions in Asia, most are of the view that WS3's policy recommendations are applicable to their jurisdictions.

198 Several members are concerned that some policy tools are less effective or relevant to them in some instances. For example, for EF 1 (e.g. restrictions on maturity of portfolio assets, limits on asset concentration and holding of liquidity buffers):

- (1) Some of the policy tools proposed to manage “run” risk or liquidity risk under EF

³⁹ Supra, footnote 3

⁴⁰ Supra, footnote 6. The draft version of EF1 namely “Management of client cash pools with features that make them susceptible to runs” was used in the questionnaire to RCGA members.

1 may not be applicable to hedge funds and credit investment funds. Hedge funds usually manage their liquidity profiles via other tools, like prior redemption notice, lockup period, redemption gate, and suspension of redemptions etc. (Hong Kong).

- (2) Certain tools could be overly prescriptive which could limit the ability of credit investment funds to invest based on their mandates (Singapore).
 - (3) The use of redemption gates and redemption fees are considered less effective since these policy tools, if employed, could send negative signals to the market and may lead to pre-emptive runs (Thailand).
 - (4) Further, it is suggested that there should be prudential rules to manage the quality of assets invested by credit investment funds. This policy tool may be relevant for a market where there is a limitation on the level of asset concentration as the market is less deep and wide (Thailand).
 - (5) In some cases, the scale of certain shadow banking activities (e.g. securitisation) is limited in a jurisdiction and/or certain specific shadow banking activities (e.g. re-hypothecation of government securities and corporate bonds) are not allowed in a jurisdiction (India).
- 199 Members consider that there is a need to recognise that NBFIs have a key role to play in some jurisdictions – such as broadening access to financing via provision of basic financial services to individuals, SMEs and micro financing enterprises and hence contributing to the socio-economic and financial sector developments of the jurisdiction – and thus it is important that the policy design strikes a balance between ensuring financial stability and promoting economic development (Malaysia).
- 200 It is also suggested that the FSB’s policy framework may put more emphasis on the systemic importance of an NBFI as one of the factors that needs to be considered when adopting a specific policy tool. Adoption of relevant toolkits should avoid imposing undue regulatory burdens on NBFIs that play important socio-economic roles but are not systemically important, hence their failures are manageable (Indonesia). Furthermore, the policy framework should provide policy options to limit spill-over effects due to a severe distress or failure of a shadow bank (Indonesia).

WS4: Securitisation

- 201 IOSCO issued a report on securitisation in November 2012, reviewing the implementation of reforms, especially those related to (i) retention requirements, and (ii) measures that enhance transparency and standardisation of securitisation products, and set out its policy recommendations in these areas⁴¹. IOSCO clearly indicated that the principles and recommendations are intended to operate as a toolbox for consideration by securities regulators to develop securitisation regulations to achieve the outcomes of incentive alignment, transparency and disclosure standardisation.

⁴¹ Supra, footnote 9

- 202 Based on the survey responses provided by nine jurisdictions (Australia, India, Japan, Korea, Malaysia, Pakistan, the Philippines, Singapore and Thailand), it appears that IOSCO's recommendations would generally be applicable to Asia subject to some calibration.
- 203 Some members consider that since securitisation markets in Asia are relatively small in size and with less complex structures, any potential systemic risks posed by securitisation activities are considered to be low and manageable (Malaysia and Thailand).
- 204 Further study/analysis is needed to consider how these recommendations can be implemented, taking into account the specific structure and situation of a jurisdiction's securitisation market (Japan) and the relation of these recommendations to the prudential treatment of securitised products under the banking laws (Singapore), as well as to strike a balance between maintaining financial stability and allowing sufficient scope for a jurisdiction's securitisation market to further develop (Malaysia).
- 205 Due to differing stages of financial market development across jurisdictions, implementation of IOSCO's policy recommendations may not be a priority task for a jurisdiction given the small size and less complex nature of its securitisation market. For example, in the case of the Philippines, a series of structural and legal reforms are still being pursued to create an enabling environment for the development of its securitisation market. Hence, compliance with IOSCO's recommendations is not considered a priority initiative at present.
- 206 Thailand does not impose risk retention requirements on an originator. However, several risk retention techniques, such as repurchase agreements between originator and an SPV and the purchase of the junior tranches by originators, have been widely adopted in various securitisation deals in Thailand. Therefore, there does not appear to be a need to implement mandatory risk retention requirements in Thailand at present.
- 207 In respect of Recommendation 4 (developing standard asset level templates to improve the detail of information made available to investors), Australia suggested that IOSCO could usefully consider developing general principles for standard asset level templates for policymakers and regulators to guide convergence across jurisdictions.
- 208 In respect of Recommendation 5 (disclosure to assist investors to make informed investment decisions), Australia noted that its securitisation market is largely a wholesale or institutional market. As such, detailed disclosure requirements in Australia may not be necessary, unless retail investors were to become more heavily involved in the market.

WS5 - Securities lending and repos

- 209 WS5 issued a public consultation report setting out 13 policy recommendations to address the financial stability risks associated with securities lending and repo transactions in November 2012. The final policy recommendations in most areas were

published on 29 August 2013⁴². These recommendations aim to enhance transparency, strengthen regulation of securities financing transactions, and improve the market structure for securities lending and repo markets, with the objective of minimising the risks of regulatory arbitrage or undue distortion of markets, as well as ensuring consistency with other international regulatory initiatives. At the time that the RCGA survey was conducted, WS5's policy recommendations were not finalised and hence the survey was based on the proposed recommendations as of November 2012. However, where appropriate, the final recommendations of WS5 have been taken into account in this section.

- 210 The comments received from most developing economies in RCGA suggest that WS5's policy recommendations are not fully relevant to their securities lending and repo markets. Certain jurisdictions shared the view that not all of the policy recommendations are applicable to them, given the current size and composition of their securities financing markets and the regulatory frameworks already in place. There are also concerns that applying some of the recommendations may cause unintended consequences for the development of a jurisdiction's securities lending and repo markets.
- 211 Policy recommendations pertaining to: transparency, disclosure and reporting (Recommendations 1 to 5); re-hypothecation of client assets (Recommendations 7 and 8) and the establishment and use of a central counterparty (CCP) (Recommendation 10), are perceived by certain jurisdictions as costly or impractical to implement, taking into account national circumstances. Some members also expressed concerns with regard to the implementation of policy recommendations on minimum haircuts since the FSB's work in this area is on-going.

Transparency, Disclosure and Reporting (Recommendations 1-5)

- 212 WS5 previously proposed that trade repositories (TRs) be used to collect transaction level data in securities lending and repos and called for authorities to conduct feasibility studies on the establishment of TRs. Some members were particularly concerned with the effectiveness and costs implication of this proposal, given the relatively small size, insignificant and domestic nature of securities financing activities in their markets (Indonesia, Malaysia, the Philippines, Singapore and Thailand). Members were pleased that these proposals have been removed in the final recommendation published on 29 August 2013. Members consider that the existing data collection and reporting practices to regulatory authorities are viable alternatives, as currently, they effectively serve the purpose of capturing the relative risks posed by securities financing transactions to the financial system and for disclosing relevant information to the public.
- 213 Singapore and Thailand suggest that, overall, the recommendations for collection of market data should focus more on data that is most useful to the authorities in terms of implementation, i.e. detecting and addressing risks to financial stability; and allow jurisdictions to choose their own methodology for collecting data (e.g. data reporting systems or infrastructures such as TRs) so that there will not be undue burdens on the

⁴² Supra, footnote 4.

markets and regulatory resources.

- 214 Public disclosure is likewise affected by the current size and liquidity of the securities lending and repo markets of each jurisdiction. As raised by Singapore, publication of data, whether specific to any market segment, jurisdiction or even on an aggregated basis, could have a negative impact on market functionality or development. Thailand is of the view that public disclosure may lead to competitiveness problems since detailed disclosure may be more burdensome for small players compared to large players. Therefore, reporting only high-level data may be more appropriate.

Re-hypothecation of client assets (Recommendations 7-8)

- 215 These policy recommendations may not be applicable to all jurisdictions. In the case of India, re-hypothecation of government and corporate bonds in the repo market is not allowed.

Evaluate the proposal of introducing CCPs to mitigate systemic risks (Recommendation 10)

- 216 The purpose of “mitigating systemic risks” has been added to the revised final recommendation for authorities to evaluate the costs and benefits of introducing CCPs in their inter-dealer repo markets. This strong nexus with systemic risk was welcomed by RCGA members who have limited activities in securities lending and repos with no systemic significance. The Philippines and Singapore are of the view that the introduction of a CCP for all securities lending and repo transactions may not be cost-effective, or commercially viable given the small size of their securities financing markets. In Singapore, the existing infrastructure for depository, clearing and settlement of securities (i.e. the Central Depository (Pte) Limited) is already functioning as a CCP for some securities lending transactions in listed equities..
- 217 Aside from cost, Singapore is also concerned that that while central clearing may reduce credit exposures through multi-lateral netting, it could also result in greater concentration of risks of securities financing markets at a clearing house. Furthermore, central clearing could increase the use of collateral transformation services, to meet clearing houses’ demand for high quality collateral. This may result in unintended consequences and higher prices for high-quality collateral.

Proposed regulatory framework for haircuts on non-centrally cleared securities financing transactions

- 218 Recommendations on haircuts for securities financing transactions are currently undergoing consultation. RCGA members welcome the proposed exclusions from the scope of application: securities financing received by financial entities which are subject to direct capital and liquidity regulation; transactions performed in any operation with central banks; and transactions backed by government securities⁴³.
- 219 As the proposed recommendations are not yet final, some members remain concerned

⁴³ Supra, footnote 4, p.26

that proposed recommendations regarding haircuts may be deemed counterproductive in certain aspects (Indonesia and Japan). Over-regulating the sovereign (government) bond repo market may cause unintended consequences on the liquidity and functioning of the securities financing market. To avoid overlap, duplication and conflict, the FSB should consider the regulatory changes contemplated and those which are in the process of implementation, such as the Basel III framework and their cumulative impact. Indonesia supports the option set out in the proposed recommendation, to carve out domestic sovereign bonds from haircut requirements so as to be consistent with Basel III rules.

220 Some RCGA members are in favour of excluding sovereign bonds from numerical haircut floors. Government bond markets are considered core funding markets in most RCGA jurisdictions and can be central to their monetary policy transmission mechanism, hence caution must be observed when imposing haircuts. In this respect, members are pleased to note that the FSB recognises that imposing numerical haircut floors on these transactions could have a large negative impact on the liquidity and functioning of core funding markets.

221 Given the early stage of development of its capital market, Malaysia expressed concerns that numerical haircut floors may bring about unintended consequences such as:

- (1) less incentives for market participants to improve risk management practices and to use internal models (*also Indonesia*);
- (2) increased recourse to central bank's liquidity, if haircuts levels differ significantly;
- (3) implication on the liquidity of collateral instruments in the secondary market;
- (4) impediment of the development of domestic repo and securities lending markets in emerging economies which are at various stages of development; and
- (5) suppressed leveraging activity via repo and securities lending markets.

ANNEX A - CASE STUDY ON CIS BY HONG KONG

Collective investment schemes in Hong Kong

Hong Kong collective investment schemes⁴⁴ (CIS) have a total of USD56 billion in assets under management (AUM). As in some other international markets, CIS is an important component of non-bank financial intermediaries (NBFIs) in Hong Kong. The CIS landscape in Hong Kong, however, is distinct in a number of respects. This case study assesses the extent to which Hong Kong CIS perform the economic functions and carry the risks generally associated with shadow banking activities.

CIS in Hong Kong

Hong Kong CIS employ a full range of investment strategies. Index funds contribute more than 50% of the total AUM of Hong Kong CIS. Money market funds, which are more often associated with the functions and risks of shadow banking, make up only 1% of the AUM of Hong Kong CIS.

| By type | No. of Hong Kong CIS ¹ | % | Total NAV (USD million) ² | % |
|------------------------|-----------------------------------|--------------|--------------------------------------|-------------|
| Index (including ETFs) | 71 | 23.3% | 32,141 | 57.4% |
| Equity | 72 | 23.6% | 9,239 | 16.5% |
| Fund of funds | 27 | 8.9% | 5,723 | 10.2% |
| Diversified | 19 | 6.2% | 4,256 | 7.6% |
| Bond | 42 | 13.8% | 4,036 | 7.2% |
| Money market | 7 | 2.3% | 540 | 1% |
| Guaranteed | 1 | 0.3% | 91 | 0.1% |
| Sub-total | 239 | 78.4% | 56,026 | 100% |
| Umbrella Structure | 66 | 21.6% | - | -% |
| Total | 305 | 100% | 56,026 | 100% |

Source: Securities and Futures Commission. Notes: (1) As of 31 March 2013. (2) As of 31 December 2012.

⁴⁴ In this case study, the term CIS refers to Hong Kong-domiciled collective investments schemes authorized by the Securities and Futures Commission under section 104 of the Securities and Futures Ordinance for offer to the Hong Kong public.

Economic nature of CIS

When analysing CIS for shadow banking functions and risks, it is important to first consider the economic nature of CIS.

From a purely systemic perspective, CIS contain a specific shock absorber feature that differentiates them from banks. In particular, CIS shareholders are typically ultimate investors who bear both upside rewards and downside risks from movements in the value of the underlying assets. They absorb the effects that might be triggered by the loss or even the distress of a CIS, thereby mitigating the eventual contagion through counterparty and market channels in the broader financial system.

While managers are responsible for CIS' day-to-day investment management, ultimately, investors make the investment decisions. The withdrawal of a CIS from a particular market, for example, in many cases mirrors investors' redemption of their investment in the CIS. Often, CIS reflect, rather than cause, market volatility or trends.

Notwithstanding the above, the Financial Stability Board (FSB) has identified a number of CIS-specific shadow banking risks in its recent publications. The rest of this case study considers these risks and analyses their relevance to the Hong Kong CIS market.

Regulatory arbitrage and transparency

The FSB has raised concerns that shadow banking intermediaries and instruments may create regulatory arbitrage opportunities, as they are not subject to the same prudential regulation as bank and are not bound by capital requirements commensurate with the risks. The FSB has also stressed the need to enhance regulatory reporting and market transparency, in order to understand and manage the risks posted by the sector.

Hong Kong CIS are highly regulated and transparent. All Hong Kong CIS are subject to the eligibility and disclosure requirements of the Securities and Futures Commission (SFC) Code on Unit Trusts and Mutual Funds. Most Hong Kong CIS publish their latest offer/redemption prices or net asset value (NAV) daily⁴⁵, and all of them publish at least two financial reports each year. Certain types of CIS have to provide additional disclosure. For instance, synthetic ETFs replicating index performance through derivatives should on a daily basis disclose the gross and net exposures to each of their counterparties and the value, nature and composition of collateral received. Where necessary, the SFC can demand more granular data, such as financial exposures to other financial institutions.

Investment funds that are exposed to run risks

The FSB has pointed out that certain types of investment funds are particularly susceptible to runs. They include investment funds that have a very low risk investment objective or invest in

⁴⁵ Hong Kong CIS are required to publish at least once a month their latest offer/redemption prices or NAV. In practice, most of them do so daily.

relatively illiquid assets, such as money market funds (MMFs). MMFs often maintain a relatively stable NAV and may give investors an expectation that their investments enjoy an implicit guarantee and are fully redeemable upon demand. The FSB stated that these investment funds may face serious run risk if they are perceived to be at risk of loss. Often, such a run does not have contagion effects on the broader credit market. In some cases, such as in 2008 when the financial market was already under strain, a run at a limited number of funds could result in market-wide panic, and cause or exacerbate overall credit market conditions.

MMFs are common mainly in the US and Europe. MMFs and their related shadow banking risk have little relevance to Hong Kong. Of the over 300 CIS in Hong Kong, only 7 (or 2.3%) are MMFs. Their aggregated AUM total USD540 million (or 1% of total Hong Kong CIS AUM).

More generally, Hong Kong CIS are subject to requirements that could help prevent or discourage runs. Managers of Hong Kong CIS are required to manage investor liquidity, or the potential mismatch between assets and investor liquidity to meet redemption demands. For example, there are caps on a CIS's holding of illiquid assets (15% of NAV) and securities issued by any single issuer (10% of NAV). There are also limits on leverage. Hong Kong CIS may not borrow more than 25% of their NAVs. In exceptional circumstances where redemptions cannot be met, a manager may temporarily impose liquidity management tools such as swing pricing, anti-dilution levies, deferral of redemptions, or temporary suspensions. These tools are aimed at preventing and limiting the impact of a run. During the financial crisis in 2008, Hong Kong CIS saw no major liquidity issue and experienced no prolonged suspension of dealing.

Banks' use of CIS to fund their illiquid assets

The FSB pointed out that banks may be able to use investment funds to finance their illiquid assets. For example, some banks are derivative counterparties to synthetic ETFs. When entering into a derivative transaction, a synthetic ETF makes a cash payment to the derivative issuing bank. In return, the bank posts collateral to the ETF. Such collateral may be illiquid assets that banks cannot otherwise use to obtain finance in the wholesale market. Through the derivative transaction, the bank effectively swaps its illiquid assets for cash. The FSB states that this allows the bank to raise additional funding and increase the system's leverage.

Hong Kong has a number of synthetic ETFs. Their AUM represents about 28.5% of the total AUM of Hong Kong ETFs, or about 16.2% of that of all Hong Kong CIS. Synthetic ETFs in Hong Kong are subject to robust regulations on their collateral policy. They must achieve 100% collateralisation of their counterparty exposure. Collateral should be of good quality and subject to haircuts. These measures limit the extent to which banks can use derivative transactions with CIS to fund their illiquid assets. This mitigates the shadow banking risks pointed out by the FSB.

CIS and securities lending and repo

The FSB has considered investment funds' role in the securities lending and repo market. Some prime brokers lend cash to leveraged investment funds' through reverse repo and margin

financing. As well, some prime brokers lend securities to investment funds that engage in short-selling to cover these funds' short positions. Such cash/securities lending is secured against the assets/cash that these investments funds deposit with the prime brokers. Prime brokers generally have the right to re-hypothecate such assets/cash. Likewise, the parties that receive the re-hypothecated assets/cash typically have the right to reuse them. The FSB pointed out that investment funds' demand for cash/securities involve a chain of repo and securities lending activities. Such activities increase the interconnectivity, opacity and leverage of the financial system.

In Hong Kong, most CIS do not engage in securities lending and repo transactions. Also, regulations cap borrowing of CIS at 25% of their net asset values, and ban short selling if it results in a CIS's liability to deliver securities exceeding 10% of its NAV. Shadow banking risks associated with these activities have little relevance to Hong Kong CIS.

ANNEX B - CASE STUDY ON FIXED INCOME FUNDS BY THAILAND

Thailand's Experience on Daily Redemption Fixed-Income Funds

Summary

In later half of 2003, up to 65 percent of fixed-income funds in Thailand invested in fixed income instruments. The majority of fixed income funds (80%) were set up as daily redemption funds. Relaxation of capital control by central bank resulted in substantial capital outflows to foreign debt instruments which, in turn, increased yields in local bonds. Several fixed-income funds in Thailand which provided a feature of redeemable upon demand or within a short timeframe experienced panic redemptions resulted from such significant shifts in yields which made the investors perceive that their investment in funds were at risk of experiencing a losses.

With asset-liability mismatch, and lack of liquidity, those fixed-income funds were in trouble. Several mitigants to these risks have been undertaken by the industry to resolve the panic redemption situation. Tools for managing redemption pressures in stressed market conditions which are addressed by FSB in the consultative policy framework (e.g. side pockets or suspension of redemption) were available for the CIS operator; however, Thailand ultimately chose to adopt alternative measures, such as to set up new term-funds to acquire the corporate bond positions sold or liquidated by the daily-redemption funds which experienced panic redemption pressures as to alleviate system-wide panic and potential herd behaviour by investors. These chosen alternative measures have proven to be successful in Thailand since then.

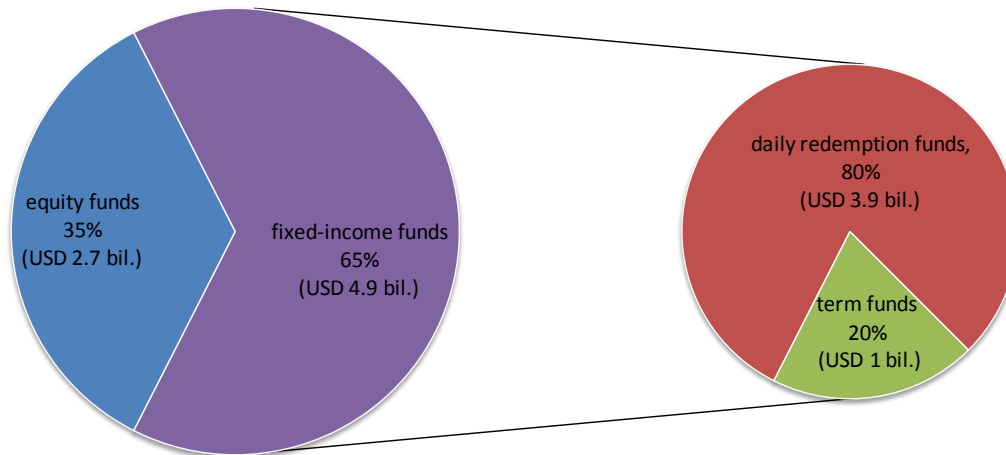
1. Thai Mutual Funds Industry in 2003

At the end of September 2003, the net asset value of mutual funds in Thailand was approximately USD 7.6 billion. Of these mutual funds, fixed-income funds and equity funds were 65 percent and 35 percent of the total net asset value of mutual funds respectively.

As for fixed-income funds, 38 percent of the total portfolio invested in corporate bonds, and 15 percent in bills of exchange. These bills of exchange did not have a guarantee by a financial institution, hence making them similar to corporate bonds in nature. As a result, the investment of corporate bonds and other fixed income instruments with features similar to corporate bonds made up to 51 percent of the total Thai fixed income funds, or USD 4.8 billion. At the same time, government bonds and treasury bills only accounted for 12 percent of the total portfolio of Thai fixed income funds.

Classified by redemption policy, there were two types of fixed income funds: 1) funds that could be redeemed daily (these funds equalled to about 80% of the total NAV of fixed income funds), and 2) funds that could be redeemed at pre-determined intervals e.g. weekly, fortnightly, monthly, quarterly, semi-annually, and annually.

**Figure 1: Breakdown of mutual funds by investment and redemption types
(as of 30 September 2003)**



Source: SEC Thailand (2003)

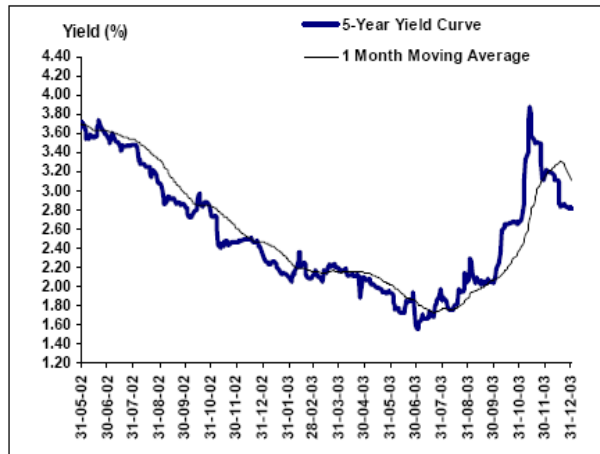
2. Issues and Facts

Problems arising from managing mutual funds whose portfolios were heavily invested in fixed income instruments: assets-liabilities mismatch, and the lack of liquidity.

The Thai mutual fund industry was highly competitive. Mutual funds had to answer investors' needs such as having high liquidity (almost equivalent to deposit), principal protection, and steady return. Hence, most mutual funds in Thailand were set up to invest mainly in fixed income instruments, and offered daily redemption. In order to achieve higher returns, the majority of fixed income instruments invested in by mutual funds were corporate bonds. Offered through private placements with smaller issue size and lower credit ratings (possibly lower than A), these corporate bonds had lower liquidity, compared to government bonds. Therefore, fixed income funds holding illiquid corporate bonds, could face asset-liability mismatch where they held assets with long-term maturity, but had daily redemption obligations. This maturities mismatch may cause liquidity problems, especially when there were high and frequent redemptions and the funds were not able to liquidate the corporate bonds in time.

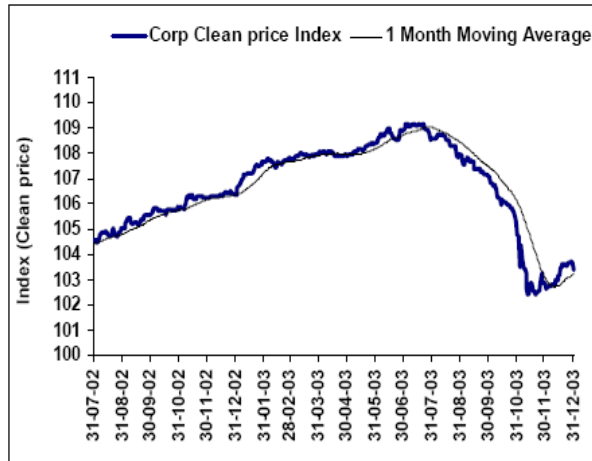
An example of this was in 2003, when the Bank of Thailand relaxed its capital control rules and enabled institutional investors to make more investments in foreign fixed income instruments. As a result of this policy, investors moved their investments from Thai fixed income instruments to foreign debt, which offered higher returns. As yields on local fixed income investment were rising significantly, the NAV of fixed income funds, calculated using the market price of fixed income instruments, started to decrease dramatically. As their funds' NAV was going down, a number of anxious investors, who were afraid of losing their money, started to make redemptions of fixed income funds. Between August 2003 and 12 November 2003, the value of redemptions was USD 1,817 million or an average of USD 35 million per day.

Figure 2 : 5-year yield movement



Source: Thai Bond Markets Association (2003)

Figure 3 : Investment-grade Corporate Bond Index



Source: Thai Bond Markets Association (2003)

As the funds were not able to dispose of corporate bonds at reasonable prices to accommodate short term substantial redemptions, a number of asset management companies (AMCs or CIS operators) had to obtain more liquidity, or were forced to sell corporate bonds at a discount.

3. Solutions

3.1 By AMCs

The AMCs had previously anticipated this situation and solutions in the mutual fund management scheme (equivalent to “trust deed”). AMCs could impose a range of measures, which complied with SEC’s regulations, including stopping taking orders (including orders to buy and to redeem), winding down the funds, delaying payment and setting aside fixed income securities that lack liquidity. These methods complied with the recommendation in tools for managing redemption pressures in stressed market conditions addressed by FSB in the consultative policy framework on November 18, 2012

Despite having prescribed the possibility of applying the afore-mentioned measures or tools for managing redemption pressures in the mutual fund management scheme, AMCs, upon discussion with many parties involved, decided not to take any of the said actions as they were concerned that they could cause further panic among investors and damage market confidence in the asset management industry.

In particular, regarding the use of redemption gates to manage redemption pressures in stressed market conditions is not applicable in the Thai market since the SEC Thailand and the industry consider that the imposition of gates can send negative market signals which may cause pre-emptive runs and can lead investors to redeem similar funds out of fear that they may in turn also to impose gates. Moreover, the imposition of redemption fees is not applicable in the Thai market given that there is a risk that the fear of fees being imposed can send a negative signal to the market and lead to a pre-emptive run.

Thus, AMCs decided to solve fixed income funds' liquidity problems with the following processes:

- (1) Adjusting portfolios of fixed income funds by decreasing the investment proportion in long-term government or corporate bonds, and increasing investment in treasury bills or short-term debts with high liquidity in order to reduce the impact of interest rate changes;
- (2) Selling mutual funds' debt securities in secondary markets to meet redemption;
- (3) Establishing two new funds:
 - a. Open-ended, daily redemption fund investing in short-term debt securities
 - b. Close-ended, principal-protected fund investing in short-term debt securities (with maturities of one year or less),

These funds offered to buy near maturity, short-term debt securities from funds that were facing liquidity problems;

- (4) Getting support from their parent companies i.e. commercial banks, who announced that they were ready to give full financial supports to AMCs. The banks' assistance included buying illiquid debt securities from the funds, and purchasing the investment units of new fixed-income funds whose purpose was to acquire the high credit quality corporate bond positions sold or liquidated by the distressed daily-redemption funds.

The situation improved upon applying the measures above. Investors' confidence was regained, and redemption levels started to get back to normal.

3.2 By the SEC Thailand

Following this incident, the SEC Thailand made the following changes on fixed income funds' regulation to prevent future liquidity problems which may impact the mutual fund industry.

- (1) Amending redemption rule.

The SEC permitted AMCs to impose exit fees, which could be deemed extra cost for investors and could reduce pre-maturity redemption. In addition, this was a safeguard for other unit-holders of mutual funds.

- (2) Determining that redemption policy must be consistent with the fixed income funds' investment policy and liquidity in order to avoid asset-liability mismatch.
 - a. Only fixed income funds which invested more than 80 percent of NAV in debt securities that were liquid were allowed to offer daily redemption.
 - b. Fixed income funds which invested in liquid debt securities between 50 percent and 80 percent of NAV could offer redemption no more frequently than monthly. In addition, unit-holders must submit redemption orders within pre-specified periods.
 - c. Fixed income funds which held liquid debts less than 50 percent of NAV must be set up as close-ended funds and were allowed to offer auto redemption on certain periods.
- (3) Imposing rules on liquidity requirements on fixed income funds in order to prevent asset-liability mismatch. Types and definitions of liquid assets were prescribed and they must be maintained so that redemptions could be met. Mutual funds with frequent redemption must maintain *tier I* liquid assets of no less than 20 percent of NAV. (Tier I assets included cash, bank deposits, treasury bills, government or Bank of Thailand (BOT) bonds with maturities of less than three years, and debt securities with less than seven days maturity) In addition, the total of tier I and tier II assets must not be lower than 60 percent of NAV whereas tier II assets included government or BOT bonds with less than ten years maturity, and debt securities with less than 14 days maturity.

The above preventative measures have proven to be useful as there have been no further liquidity problems in the fixed income funds market and unit-holders' confidence in the mutual fund industry has been regained.

Even though SEC Thailand and the AMCs had the powers under the SEC Thailand regulation or as specified in the fund document to apply certain tools for managing redemption pressures proposed by the FSB in the relevant policy recommendations of Nov 2012, SEC Thailand and the industry chose not to use those tools in 2003 but to adopt alternative measures as mentioned above, taking into account industry needs and the regulatory regime specific to the national circumstances. The use of such alternative measures has proven to be very successful in Thailand until today.

ANNEX C – CASE STUDY ON NBFIs BY MALAYSIA

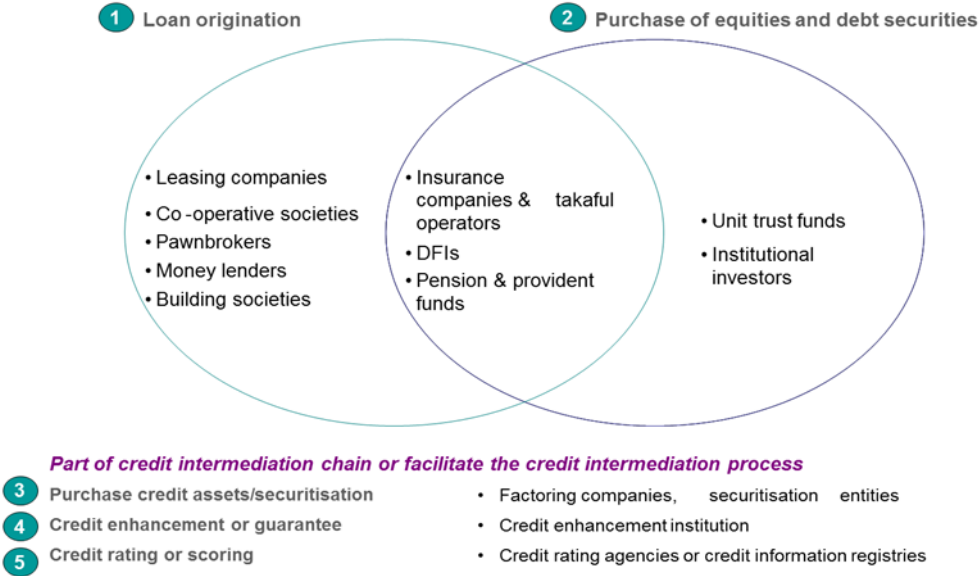
Non-bank Financial Intermediaries in Malaysia

The focus on shadow banking is a relatively new area for many central banks and supervisory authorities. For Malaysia, this began with the enactment of the new central bank legislation, the Central Bank of Malaysia Act 2009, which provides Bank Negara Malaysia (Bank) with an explicit set of powers to collect information and where necessary, to impose measures including providing liquidity assistance, all for purposes of preserving financial stability. In doing so, the Bank has developed a monitoring framework to facilitate the capturing of developments of non-bank financial intermediaries (NBFIs) and assess the nature of risks and inter-linkages to the financial sector. The Bank leverages on the Financial Stability Board (FSB) definition as a starting point before expanding the net wider, given the structure of the domestic market, to identify other entities beyond the FSB definition that may potentially pose systemic risks. In this regard, the term NBFIs is more appropriate to be applied in Malaysian context compared to ‘shadow banking’ term, especially when the coverage for identification and monitoring of shadow banking activities is extended beyond the five economic functions/activities and risks associated with shadow banking activities that the FSB proposed for the purpose of macro-mapping exercise. Since then, the Bank has progressively been enhancing its understanding of the nature, characteristics and risks associated with NBFIs and their activities.

Based on the broad definition⁴⁶ issued by the FSB, non-bank credit intermediation in the context of Malaysia comprises (i) origination of loans; (ii) purchase of debt securities; (iii) securitisation; (iv) issuance of credit guarantee or enhancement; and (v) issuance of credit scoring or rating. In addition, there are also non-bank entities which undertake activities other than credit intermediation, such as the provision of equity funding that are also associated with shadow banking risks and are interconnected with the financial system. Based on these considerations, NBFIs in Malaysia encompass a wide-range of entities, ranging from those that undertake primarily traditional lending activities such as credit cooperatives, moneylenders, pawnbrokers and leasing companies to those that facilitate intermediation through the provision of credit enhancement, such as bond guarantee (Chart 1).

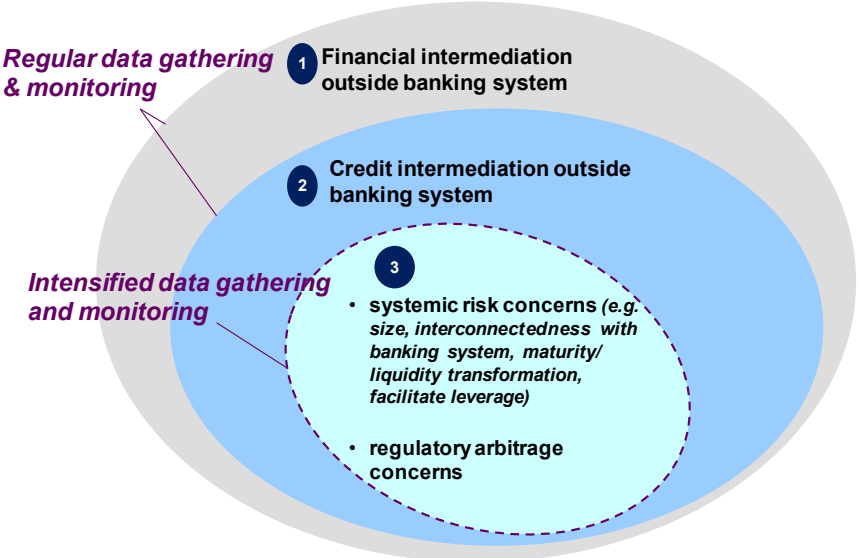
⁴⁶ The FSB broadly describes the “shadow banking system” as “credit intermediation involving entities and activities (fully or partially) outside the regular banking system” or non-bank credit intermediation in short.

Chart 1: Non-bank financial intermediation activities and entities in Malaysia



The Bank’s monitoring framework for NBFIs comprises (i) submission of balance sheet and maturity profile of assets and liabilities on an annual interval by entities that undertake credit intermediation and other financial intermediation activities (circle 1 and 2 in Chart 2); and (ii) for those that have been identified to pose systemic risk concerns, more extensive monitoring is done in terms of coverage, granularity and frequency of information submission (circle 3 in Chart 2). Entities that are under the purview of other supervisory authorities (e.g. Malaysia Co-operative Societies Commission and Securities Commission Malaysia) are monitored through engagements with the respective supervisory authorities.

Chart 2: Monitoring framework for NBFIs



The Bank considers a range of factors in identifying potential risks to financial stability that may emanate from the activities of NBFIs. These include the risk indicators recommended by the FSB, namely entities' involvement in maturity and liquidity transformation, imperfect credit risk transfer, leverage and regulatory arbitrage concerns. Additionally, the Bank also considers other systemic risk factors such as the size and complexity of the activities, lack of substitutability and interconnectedness with the banking system. The inclusion of these traditional factors is to reflect the specific developmental nature and role of some of the entities and diversity in regulatory objectives and mandates of the different supervisory authorities. Based on these factors, NBFIs in Malaysia are assessed to have low propensity to transmit shocks to the financial system. This is based on the following:

i. Other financial intermediaries⁴⁷ (OFIs) in Malaysia account for a relatively smaller share of the financial system

The financial system in Malaysia continues to remain predominantly bank based, where banking institutions account for 49.5%⁴⁸ of total assets of the financial system. Apart from provident and pension funds and insurers and takaful operators which collectively account for 21.2% of total assets of the financial system, OFIs account for only 18.0% of total assets of the financial system, smaller than the global average of 25%⁴⁹. These OFIs are generally highly dispersed, with relatively small and basic operations and asset size.

ii. Low complexity of activities

Activities undertaken by NBFIs in Malaysia are mainly concentrated in the traditional provision of loans and purchase of plain vanilla debt securities and equities (Chart 3). Unlike the situations in developed markets, securitisation and credit enhancement activities remain small, accounting for 3.2% of non-bank financial intermediation activities. Reliance on securitisation for funding purposes is very low given the prolonged environment of ample liquidity in the financial system and high savings rate. Customer deposits remain the predominant source of funding for banks, accounting for 74% of banks' funding. Asset-backed securitisation activities have continued to be low (2012: RM13.9 billion or 1.4% of total debt securities outstanding, 2011: RM15.7 billion or 1.9% of total debt securities outstanding). Credit guarantees are primarily provided to enhance access to financing for small and medium enterprises (SMEs) whilst credit enhancement is commonly used for bond issuance where both accounted for only a small fraction of the bond market (1.6% of total bonds outstanding).

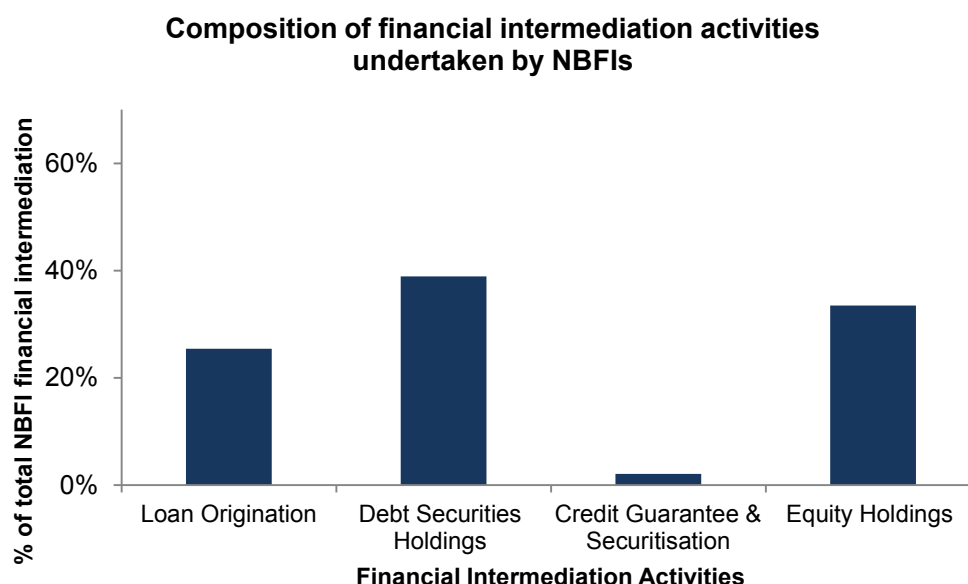
Complex market-based funding structures, such as structured investment vehicles (SIVs) and asset-backed commercial paper conduits involving maturity or liquidity transformation are not common in Malaysia. This reduces the susceptibility of NBFIs to the drying up of market liquidity, unlike the experience of some advanced economies particularly the U.S. during the global financial crisis.

⁴⁷ OFIs comprise financial institutions other than banks, central bank, public financial institutions, pension funds, insurers and takaful operators.

⁴⁸ Includes major DFIs that are prudentially regulated by the Bank under the Development Financial Institutions Act 2002

⁴⁹ Global Shadow Banking Monitoring Report 2012 http://www.financialstabilityboard.org/publications/r_121118c.pdf.

Chart 3: Composition of financial intermediation activities undertaken by non-banks



iii. NBFIs generally place low reliance on capital markets and bank borrowings to fund their intermediation activities

While the Malaysian bond market has grown in size and depth over the years, reliance on debt securities by NBFIs to fund credit activities remains relatively low. For the larger NBFIs, the majority of the financial activities are funded primarily from member contributions whilst for the remaining, the main source of funding is from internally-generated funds. Private debt securities issued by NBFIs amounted to RM32.1 billion or 3.2% of outstanding debt securities as at end-2012. The use of collateralised funding such as repurchase agreement and securities lending to construct highly leverage positions is almost non-existent.

iv. Direct asset-liability inter-linkages with banking system remains well-contained

Risk transmissions from NBFIs to the financial system are primarily through (i) deposit placements with banking institutions; and (ii) credit exposures in the form of financing facilities extended or banks' holdings of debt securities issued by the NBFIs. The potential impact of mobility of deposits by NBFIs on banks remains manageable, as such deposit placements are generally spread out across a number of banking institutions. The low concentration minimises withdrawal shocks to banks. While lending to and holdings of debt securities issued by NBFIs by the banking institutions have continued to expand in recent years, the risk exposures remain manageable, accounting for only 3.6% of total outstanding loans and debt securities held by the banking system.

v. Bulk of non-bank financial intermediaries and activities are subject to oversight by authorities

In Malaysia, the bulk of non-bank financial intermediation activities and/or entities are subject to some form of oversight either by the central bank, other supervisory authorities and government agencies. Depending on the mandates of the respective authorities, the extent and focus of regulatory oversight varies from prudential to consumer protection

and market development. Insurers, takaful operators and major development financial institutions (DFIs) are prudentially regulated by the Bank. Activities of fund management entities (including unit trust fund managers), securitisation and other capital market activities are subject to investor protection framework by the Securities Commission Malaysia. The other major authority is the Malaysia Co-operative Societies Commission which is responsible for the progress of co-operative societies' movement in Malaysia. The establishment, management and operations of statutory provident and pension funds are governed by their own specific legislations, which are administered by the respective ministries. Smaller entities such as moneylenders and pawnbrokers, while are regulated to protect consumers, are subject to the licensing and registration regimes by the Ministry of Urban Wellbeing, Housing and Local Government.

In developing the appropriate policy toolkits for shadow banks, the FSB recommended for authorities to make reference to the list of overarching principles⁵⁰, which amongst others include the need for authorities to define (and keep up to date) the regulatory perimeter and collection of information needed to assess the extent of risks posed by shadow banking. Recent enhancements to the legislative framework further strengthened the capacity of the Bank, as the authority responsible for financial stability, to undertake ongoing monitoring and undertake necessary measures to manage risks to financial stability that may emanate from NBFIs. The Central Bank of Malaysia Act 2009 accords the Bank with the necessary powers to collect information on non-bank entities which are not regulated by the Bank for the purpose of monitoring emerging risks in the financial system, and where appropriate, issue financial stability directives (including macroprudential measures) to contain the risks. Under the new Financial Services Act 2013 and Islamic Financial Services Act 2013, an entity which is not under the supervision or oversight of the Bank and is engaging in financial intermediation activities, can be subjected to ongoing regulation and supervision by the Bank if it is determined to pose or likely to pose a risk to overall financial stability. Efforts have also been accorded towards strengthening inter-agency cooperation arrangements that would enhance exchange of information and policy coordination and implementation through formal and informal channels. These include memorandum of understanding (MoU) and periodical engagements. The Bank has so far signed MoUs with the Securities Commission Malaysia and Malaysia Co-operative Societies Commission.

The potential systemic risk implications of NBFIs are assessed to be low at present. To a large extent, NBFIs in Malaysia play a complementary role to banks in broadening the access to financing via provision of basic financial services to specific market segments as well as contribute towards the development of domestic capital market and hedging platforms. Given the significance of developmental roles of NBFIs in Malaysia, the oversight framework of such entities has been carefully designed to strike a balance between sustaining the contribution of these entities towards financial inclusion and economic and financial development, and preserving financial stability. Due considerations on the trade-off are also critical to avoid overregulation that may potentially undermine the ability of these entities to achieve the intended social and economic objectives. Importantly, the regulations need to be agile and commensurate with the size and complexity of these entities and activities.

⁵⁰ Strengthening Oversight and Regulation of Shadow Banking Policy: Framework for Strengthening Oversight and Regulation of Shadow Banking Entities (29 August 2013) http://www.financialstabilityboard.org/publications/r_130829c.pdf.

**APPENDIX A – MEMBERS OF THE WORKING GROUP ON SHADOW
BANKING**

FSB Regional Consultative Group for Asia

Working Group on Shadow Banking

List of members

| | |
|------------------|---|
| Co-chairs | <p>Ashley Ian Alder Chief Executive Officer Securities and Futures Commission, Hong Kong</p> <p>Muhammad bin Ibrahim Deputy Governor Bank Negara Malaysia</p> |
| Australia | <p>Mustafa Yuksel Manager, International Relations, Financial Stability Department Reserve Bank of Australia</p> |
| | <p>Anupam Sharma Analyst, G20 Division Australian Treasury</p> |
| China | <p>Tingting Huang Deputy Director BIS Division, International Department People's Bank of China</p> |
| | <p>Jianhua Li Director, Non-bank Financial Institution Supervision Department China Banking Regulatory Commission</p> |
| Hong Kong | <p>Kelly Yeung Consultant, Banking Policy Department Hong Kong Monetary Authority</p> |
| India | <p>Smt. Mangala Vaidyanathan General Manager, Department of Non-Banking Supervision Reserve Bank of India</p> |

| | |
|--------------------|---|
| Indonesia | <p>Linda Maulidina Hakim (until May 2013) Director, Department of Banking Research and Regulation Bank of Indonesia</p> <p>Yati Kurniati (starting May 2013) Director, Group of Macroprudential Research and Regulation, Department of Macroprudential Policy Bank of Indonesia</p> |
| | <p>Andra Sabta Director, Finance Companies Financial Services Authority</p> |
| Japan | <p>Hitoshi Sasaki Director, Financial System and Bank Examination Department Bank of Japan</p> |
| | <p>Risa Ohkawa Economist, Financial System and Bank Examination Department Bank of Japan</p> |
| Korea | <p>Joon Suk Bae Head, Financial System Research Team Macroprudential Analysis Department Bank of Korea</p> |
| Malaysia | <p>Ahmad Shahril Mohd Shariff Deputy Director, Financial Surveillance Bank Negara Malaysia</p> |
| Philippines | <p>Maria Christina S. Mangay-ayam Assistant Manager, Office of the Managing Director Bangko Sentral ng Pilipinas</p> |
| Thailand | <p>Ruchukorn Siriyodhin Assistant Governor, Financial Institutions Policy Group Bank of Thailand</p> |

| | |
|---|--|
| | <p>Lavaron Sangsanit Executive Director Financial System and Financial Institutions Policy Bureau Fiscal Policy Office Ministry of Finance</p> |
| <p>IOSCO Asia-Pacific Regional Committee Members</p> | |
| Korea | <p>Heekyung Song Deputy Director, Capital Market Division Financial Services Commission</p> |
| | <p>Jieun Hyun Deputy Director, International Finance Division Financial Services Commission</p> |
| Thailand | <p>Ekapon Sawaengsri Director of Research Department Securities and Exchange Commission</p> |
| | <p>Mayuree Zazzarino Assistant Director, International Relations Securities and Exchange Commission</p> |
| | <p>Wipawee Hempornwisarn Assistant Director of Research Department Securities and Exchange Commission</p> |
| | <p>Pariya Techamuanvivit Director, International Relations Strategy and International Affairs Department Securities and Exchange Commission</p> |
| FSB | <p>Jason George Member of the FSB Secretariat</p> |

APPENDIX B – MEMBERS OF SUB-GROUPS UNDER THE WORKING GROUP

FSB Regional Consultative Group for Asia Working Group on Shadow Banking Members of Sub-groups

| | | |
|------------|--|---|
| SG1 | Profile of shadow banking in Asia | Reserve Bank of Australia Bank of Korea |
| SG2 | Definition of shadow banking | Reserve Bank of Australia Bank of Thailand |
| SG3 | Regulatory regimes of NBFIs | Reserve Bank of India Bangko Sentral ng Pilipinas |
| SG4 | Distinction between shadow banking and NBFIs | Australian Treasury Bank of Indonesia Ministry of Finance Thailand |
| SG5 | Risks emanating from shadow banking | Australian Treasury Hong Kong Monetary Authority |
| SG6 | Applicability of FSB recommendations on shadow banking in Asia | Hong Kong Monetary Authority Securities and Exchange Commission, Thailand Bangko Sentral ng Pilipinas |

APPENDIX C – LIST OF PARTICIPANTS IN THE SURVEY

FSB Regional Consultative Group for Asia Participants in the survey

| | |
|--------------------|---|
| Australia | Reserve Bank of Australia Australian Treasury |
| Cambodia | National Bank of Cambodia |
| China | People’s Bank of China China Banking Regulatory Commission |
| Hong Kong | Securities and Futures Commission Hong Kong Monetary Authority |
| India | Reserve Bank of India |
| Indonesia | Bank of Indonesia Indonesian Financial Services Authority |
| Japan | Bank of Japan |
| Korea | Bank of Korea Financial Services Commission |
| Malaysia | Bank Negara Malaysia |
| New Zealand | Reserve Bank of New Zealand |
| Pakistan | State Bank of Pakistan |
| Philippines | Bangko Sentral ng Pilipinas |
| Singapore | Monetary Authority of Singapore |
| Thailand | Bank of Thailand Securities and Exchange Commission |
| Vietnam | State Bank of Vietnam |

APPENDIX D – WORKING GROUP SURVEY QUESTIONNAIRES

Questionnaire on Shadow Banking in Asia

In November 2012, the Financial Stability Board (FSB) Regional Consultative Group for Asia (RCGA) decided to form a Working Group on Shadow Banking (WGSB) to conduct a study into Shadow Banking in Asia. The objectives and scope of the study are set out in the Terms of Reference.

RCGA members are requested to complete this questionnaire. Only one submission is required from each jurisdiction. Jurisdictions with more than one RCGA members should coordinate internally to submit one set of answers to the questionnaire. This questionnaire contains three sections, each with a different submission date.

| Section | Contents | Submission date |
|---------|--|-----------------|
| A | (1) Key economic and financial indicators (2) Basic profile of Non-Bank Financial Intermediaries (NBFIs) in the financial system | 8 March 2013 |
| B | Detailed profile of NBFIs, including size, characteristics, assets and liabilities and linkages with the banking system | April 2013 |
| C | Regulatory and supervisory regime for NBFIs, definition of Shadow Banking, Shadow Banking risks to financial stability and issues and challenges in managing risks | May 2013 |

Questions regarding this questionnaire can be addressed to Mr Ahmad Shahril Mohd Shariff (Tel: +603-26982072, email: ashahril@bnm.gov.my) and Miss Grace Lam (Tel: +852 22311753, email: gpylam@sfc.hk).

| | |
|------------------------|---|
| Jurisdiction | : |
| Agency name | : |
| Contact Person | : |
| Contact details (tel.) | : |
| (email) | : |

Section A

1. Key Economic and Financial Indicators

Please provide data as at end-2012. Where 2012 data is unavailable, please provide 2011 data and indicate accordingly.

| | |
|--|--------------------------------------|
| Jurisdiction : | |
| Nominal Gross Domestic Product: | USD |
| Percentage of Gross Domestic Product (GDP) by Economic Activity- | |
| (i) Agriculture : | % |
| (ii) Mining and quarrying : | % |
| (iii) Construction : | % |
| (iv) Services : | % |
| <i>Of which-Financial Sector:</i> | % |
| (v) Other : | % |
| Nominal Gross National Income : | USD |
| GDP Per Capita: | USD |
| Population: | |
| Labour Force: | |
| Lending Interest Rate from end 2002-2012 | <i>Please attach in excel format</i> |
| Central Bank Reserve Requirement Ratio from end 2002-2012 | <i>Please attach in excel format</i> |
| Exchange Rate (against USD) at end 2012 | |
| Size of Major Financial Markets - | |
| (i) Bond Market (Bonds outstanding): | USD |
| (ii) Equity Market (Market Capitalization): | USD |
| (iii) Money Market (Outstanding Value): | USD |
| <i>(Optional)</i> | |
| <i>Commercial bank branches per 100,000 adults</i> | |
| <i>Deposit accounts with commercial banks per 1,000 adults</i> | |
| <i>Loan accounts with commercial banks per 1,000 adults</i> | |

Basic Profile of Non-Bank Financial Intermediaries (NBFIs) in Financial System

- 2.1. Please complete **Annex 1** and the supplementary questions below. Further explanation on completing Annex 1 can be found in the explanatory notes in Annex 1.

Supplementary Questions

- 2.2. If additional types of financial institutions are added in Annex 1 (where XXX are marked), please provide a brief description of their principle activities and business model (generation of revenues and type/source of funding) in the template below –

| Category | Additional Institutions | Principal Activities and Business Model |
|-------------------------------|-------------------------|---|
| Public Financial Institutions | XXX | |
| Other Financial Institutions | XXX | |

- 2.3. The term “Finance Companies” covers a wide spectrum of business models that vary across countries in Asia. Please provide details of Finance Companies in the table below.

| Finance Company categorized as : | Number of institutions | Deposit Taking (Y/N) | Description of primary activities |
|----------------------------------|------------------------|----------------------|-----------------------------------|
| Credit Card Company | | | ** |
| Consumer Finance/Credit Company | | | ** |
| Auto Loan Company | | | ** |
| Leasing company | | | ** |
| Factoring company | | | ** |
| <i>please add categories</i> | | | |
| XXX | | | |

** Note: Jurisdictions may wish to use the space to highlight any special features or characteristics of the institutions which are unique to your jurisdiction

- 2.4. *In Asia, “Other Financial Institutions” (OFIs) may help to provide services to fill particular gaps in the economy or to provide financial services to underserved segments in the economy.*

In assessing the statement above, the WGSB would like to adopt a broad brush approach in profiling the concentration of involvement of OFIs in term of customer base and geographical locations. Please fill in the table below by inserting 1, 2 or 3 to indicate the extent of involvement being Minimal, Moderate or Largely, respectively. Any additional comments regarding specific OFIs on filling gaps for underserved segments of the economy may be added in the Note column.

| Proxy of involvement | Interpretation (indicative only) |
|----------------------|--|
| 1 | Minimal – Less than 10% of the OFI’s business activities |
| 2 | Moderate – 10% to 50% of the OFI’s business activities |
| 3 | Largely – More than 50% of the OFI’s business activities |

| Other Financial Institutions (OFIs) | 1. Customer groups | | Sub-categories | | | | | | | | | | | 2. Geographical location** | | | 3. Notes |
|-------------------------------------|--------------------|------------|--|---------------|-------------|----------------------------------|--------|-------|---------------------------------|----------|---------------|--------------|-------------------------|----------------------------|------------|-------|----------|
| | | | Customer Group- Individuals Income Level** | | | Customer Group- Business Size ** | | | Customer Group- Business Sector | | | | | | | | |
| | Individuals | Businesses | Low Income | Medium Income | High Income | Small | Medium | Large | Agriculture | Services | Manufacturing | Construction | Others (please specify) | Rural | Semi Urban | Urban | |
| Collective Investment Schemes (CIS) | | | | | | | | | | | | | | | | | |
| CIS of which are Money Market Funds | | | | | | | | | | | | | | | | | |
| Finance companies | | | | | | | | | | | | | | | | | |
| Structured Finance Vehicles | | | | | | | | | | | | | | | | | |
| Hedge Funds | | | | | | | | | | | | | | | | | |
| Other Investment Funds | | | | | | | | | | | | | | | | | |
| Pawn Brokers | | | | | | | | | | | | | | | | | |
| Credit Unions & Co-operatives | | | | | | | | | | | | | | | | | |
| Building Societies | | | | | | | | | | | | | | | | | |
| Microfinance Institutions | | | | | | | | | | | | | | | | | |
| Brokerage Companies | | | | | | | | | | | | | | | | | |
| XXX | | | | | | | | | | | | | | | | | |

* Jurisdictions should follow their respective definition of income levels, business size and geographical location to best reflect the structure of each jurisdiction

Questionnaire on Shadow Banking in Asia - Annex 1

Basic Profile of shadow banking entities and activities in [Jurisdiction] - Data as at [date]

| Indicators/Categories | Financial institutions | | | | | | | | | | | | | | | | | | | | | |
|--|------------------------|-------|---------------------|---------------|-------------------------------|-----|-----|-----|-------------------------------------|-------------------------------|------------------------------|-------------------|-----------------------------|-------------|------------------------|--------------|-------------------------------|--------------------|----------------------------|---------------------|-----|--|
| | Central Bank | Banks | Insurance Companies | Pension Funds | Public Financial Institutions | XXX | XXX | XXX | Other Financial Institutions (OFIs) | Collective Investment Schemes | Of which: Money market funds | Finance Companies | Structured Finance Vehicles | Hedge Funds | Other Investment Funds | Pawn Brokers | Credit Unions & Co-operatives | Building Societies | Micro-finance Institutions | Brokerage Companies | XXX | |
| Item 1: Number of institutions | | | | | | | | | | | | | | | | | | | | | | |
| 1.1 Total number of institutions | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 Of which: Number of institutions that take deposits | | | | | | | | | | | | | | | | | | | | | | |
| 1.3 Of which: Foreign Owned | | | | | | | | | | | | | | | | | | | | | | |
| Item 2: Activities undertaken by the respective financial institutions (please indicate ✓ where relevant and indicate number of institutions if possible): | | | | | | | | | | | | | | | | | | | | | | |
| 2.1 Management of client cash pools | | | | | | | | | | | | | | | | | | | | | | |
| 2.2 Loan provision | | | | | | | | | | | | | | | | | | | | | | |
| 2.3 Intermediation of market activities | | | | | | | | | | | | | | | | | | | | | | |
| 2.4 Facilitation of credit creation | | | | | | | | | | | | | | | | | | | | | | |
| 2.5 Securitisation and funding of financial entities | | | | | | | | | | | | | | | | | | | | | | |
| 2.6 Other activities (please specify) | | | | | | | | | | | | | | | | | | | | | | |
| Item 3: Roles and mandates | | | | | | | | | | | | | | | | | | | | | | |
| Please indicate the purpose or mandate to address the following: 3.1 Market Gaps 3.2 Economic Development 3.3 Socio-economic Development 3.4 Financial Development 3.5 Other (please specify) | | | | | | | | | | | | | | | | | | | | | | |

Explanatory Notes:

Notes on Categories of Financial Institutions (FIs)

- Financial institutions refer to all institutions listed (Central Bank, Banks, Insurance Companies, Pension Funds, Public Financial Institutions and Other Financial Institutions) and their subcategories
- For additional categories of FIs (marked as XXX above), please state the names of the subcategories and insert additional columns where necessary. Please also provide details of their activities and business model in Section 2.2 of the Questionnaire

3. Public Financial Institutions (PFIs) as a broad category refer to institutions with public support or funding. Examples of PFIs are Fannie Mae/Freddie Mac in the US, Japan Housing Loan Corporation in Japan.
4. More details on the types of finance companies are addressed under the supplementary questions in Section 2.3 of the Questionnaire

Notes on Indicators

Item 1 - Please fill in the number of FIs for each category, the number that take deposits and number that are foreign owned

Item 2 - Please insert √ where the FIs perform the economic activities and indicate of number of FIs where possible

- Provision is made for jurisdictions to add activities unique to your jurisdiction under "other activities", should there be more activities, please add rows as needed
- Examples of activities for:
- **Management of client cash pools:** mutual funds, unit trusts, trusts etc.
- **Loan provision:** extension of consumer finance, auto finance, home finance, equipment finance etc.
- **Intermediation of market activities:** securities broking, prime brokerage service etc.
- **Facilitation of credit creation:** financial guarantee, provision of mortgage insurance etc.
- **Securitisation and funding of financial entities:** funding of illiquid assets by raising funds from the market etc.

For some explanation of the five economic activities, please refer to the FSB Consultation Paper on A Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities dated 18 November 2012 (http://www.financialstabilityboard.org/publications/r_121118a.pdf)

Item 3 - Please explain if the FIs have a specific mandate or role to play. If so, please give reasons and provide details.

- Examples of mandates and roles for:
- **Market gaps:** To fill in credit voids or financial services that are not covered by other financial institutions in the financial system
- **Economic Development:** To help develop or promote certain sectors in the economy (e.g. SMEs, Science and Technology Sector, Agriculture etc.)
- **Socio-economic Development:** To enhance the social welfare of agents in the economy (e.g. student loans, social housing financing etc.)
- **Financial development:** To help develop specific areas in the financial sector (e.g. public venture capital, credit guarantee for certain financial products etc.)

General Notes

1. If certain values are not available to be separated from another category (e.g. insurance and pension funds), input data into first category (i.e. insurance) and make a note in the other corresponding category (i.e. pension funds)
2. Where an accurate number of FIs is unavailable, please provide either a range or an estimation
3. Where there are exceptional cases which jurisdictions feel need explanation please make a note in the cell

Section B



1. Detailed profile of NBFIs, including size, characteristics, assets and liabilities and linkages with the banking system

1.1 Please complete **Annex 2** and **Annex 3** and the supplementary questions in sections 1.2 to 1.4

Where necessary, jurisdictions are welcomed to provide notes/comments to clarify responses provided in the questionnaire

Further explanation on completing Annex 2 and 3 can be found in the explanatory notes in each annex.

Supplementary Questions

1.2 The purpose of this section is to identify the extent that the activities of financial institutions contribute towards systemic risks based on the key systemic risk factors identified by the FSB. Please mark None, Minimally, Moderately or Largely, based on each jurisdictions' own interpretation, in respect of each of these risk factors and provide brief explanation. Illustrated examples are provided for reference.

| Key systemic risk factors identified by FSB ¹ | Description and Illustrated Examples | | | | | | Insurance Companies | Pension Funds | Public Financial Institutions | | |
|--|---|-------------------------------------|-------------|---|-----------------------------|-------------------|-------------------------------|--------------------|-------------------------------|---------------------|-----|
| | | | | | | | | | XXX | XXX | XXX |
| 1. Maturity Transformation | <p>"Maturity transformation" is the activity of issuing short term liabilities (e.g. deposits) and transforming them into medium–long term assets (e.g. loans).</p> <p><i>E.g. "Largely" could mean that the principle activity of providing long-term home financing (average maturity of 25 years) is funded primarily by short term deposits, where deposits with maturity of less than 3 months account for bulk of total deposits accepted</i></p> | | | | | | | | | | |
| 2. Liquidity Transformation | <p>"Liquidity transformation" is the issuing of liquid liabilities to finance illiquid assets. An asset is illiquid when it cannot be easily converted into cash without a loss in nominal value.</p> <p><i>E.g. "Moderately" could mean that whilst institutions are dependent on deposits as source of funding, they have a fairly balanced composition of assets comprising illiquid mortgage loans and tradable securities</i></p> | | | | | | | | | | |
| 3. Leverage | <p><i>E.g. "Minimally" could mean that financing activities are predominantly funded by shareholders fund. Borrowings are very small</i></p> | | | | | | | | | | |
| 4. Imperfect credit risk Transfer | <p>When institutions attempt to transfer credit risk, they may acquire other risks (such as counterparty credit risk, operational risk or liquidity risk) or not have fully transferred the credit risk ("imperfect credit risk transfer")</p> <p><i>E.g. "Minimally" could mean that financing activities are largely based on originate-to-hold model. A few institutions sell assets to another entity and provides the entity with liquidity facility secured against the asset but such transactions are very small and not widespread</i></p> | | | | | | | | | | |
| Key systemic risk factors identified by FSB ¹ | Other Financial Institutions (OFIs) | | | | | | | | | | |
| | Collective Investment Schemes (CIS) | CIS of which: Money Market Funds | Hedge Funds | Other Investment Funds (please specify) | Structured Finance Vehicles | Finance Companies | Credit Unions & Co-operatives | Building Societies | Micro-finance Institutions | Brokerage Companies | XXX |
| 1. Maturity Transformation | | | | | | | | | | | |
| 2. Liquidity Transformation | | | | | | | | | | | |
| 3. Leverage | | | | | | | | | | | |
| 4. Imperfect credit risk Transfer | | | | | | | | | | | |

¹ For further details on systemic risk factors, please refer to FSB Report – Shadow Banking: Strengthening Oversight and Regulation (http://www.financialstabilityboard.org/publications/r_111027a.pdf)

1.3 The WGSB wishes to study the extent of which NBFIs are part of a banking group (e.g. bank-owned special purpose vehicles, subsidiaries of a bank etc.). In assessing the statement above, for each type of financial institutions below please indicate the number of institutions (and their total assets) that are part of a larger banking group

| (a) | Insurance Companies | Pension Funds | Other Financial Institutions (OFIs) | | | | | | | | | | | |
|--|---------------------|---------------|-------------------------------------|---|-------------|---|-----------------------------|-------------------|--------------|-------------------------------|--------------------|---------------------------|---------------------|-----|
| | | | Collective Investment Schemes (CIS) | <i>CIS of which: Money Market Funds</i> | Hedge Funds | Other Investment Funds (please specify) | Structured Finance Vehicles | Finance Companies | Pawn Brokers | Credit Unions & Co-operations | Building Societies | Microfinance Institutions | Brokerage Companies | xxx |
| Number of NBFIs that are part of a banking group | | | | | | | | | | | | | | |
| <i>Total number of NBFIs</i> | | | | | | | | | | | | | | |
| <i>% of NBFIs that are part of a banking group (based on number of institutions)</i> | | | | | | | | | | | | | | |
| Total asset size of NBFIs that are part of a banking group (USD Million) | | | | | | | | | | | | | | |
| <i>Total asset size of NBFIs</i> | | | | | | | | | | | | | | |
| <i>% of NBFIs that are part of a banking group (based on asset size)</i> | | | | | | | | | | | | | | |

1.4 Apart from funding and ownership relationships, are there other linkages between NBFIs with the banking sector that could potentially transmit risks in your jurisdiction (e.g. exposure to common classes of assets **through holding of equities and debt securities that banks also hold, provision of support via guarantees**)? Please explain linkages (if any).

Annex 2- Questionnaire on Non-Bank Financial Intermediaries in Asia
Asset Size of Financial Institutions in [Jurisdiction] - Data as at [date]

| | Exchange rate against USD at Year end | Nominal GDP (in USD million) | XXX | Brokerage Firms | Microfinance Institutions | Building Societies | Credit Unions & Co-operatives | Pawn Brokers | Structured Finance Vehicles | Finance Companies | Other Investment Funds <i>(please specify)</i> | Hedge Funds | CIS of which: Money Market Funds | Collective Investment Schemes (CIS) | Other Financial Institutions <i>[Summed value]</i> | Liabilities to Banks | Assets to Banks | XXX | Liabilities to Banks (e.g. PFI's borrowings from banks, acceptance of deposits from banks etc) | Assets to Banks (e.g. PFI's investment in equity and debt securities issued by banks, deposit placement with banks, lending to banks etc) | XXX | Liabilities to Banks (e.g. pension funds' borrowings from banks, acceptance of deposits from banks etc) | Assets to Banks (e.g. pension funds' investment in equity and debt securities issued by banks, deposit placement with banks, lending to banks etc) | Liabilities to Banks (e.g. insurance companies' borrowings from banks, acceptance of deposits from banks etc) | Assets to Banks (e.g. insurance companies' investment in equity and debt securities issued by banks, deposit placement with banks, lending to banks etc) | Liabilities to OFIs (e.g. banks' borrowings from OFIs, acceptance of deposits from OFIs etc) | Assets to OFIs (e.g. banks' investment in equity and debt securities issued by OFIs, deposit placement with OFIs, lending to OFIs etc) | |
|------|---------------------------------------|------------------------------|-----|-----------------|---------------------------|--------------------|-------------------------------|--------------|-----------------------------|-------------------|---|-------------|----------------------------------|-------------------------------------|---|----------------------|-----------------|-----|--|---|-----|---|--|---|--|--|--|--|
| 2002 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2004 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2005 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2006 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2007 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2008 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2009 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2010 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2011 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Explanatory Notes

For categories of financial institutions please ensure consistency with categories added/submitted by jurisdictions in Annex 1

Please fill in total assets in USD millions for each category of financial institutions (Central Bank, Banks, Insurance Companies, Pension Funds, Public Financial Institutions and Other Financial Institutions) for the years above in the cells shaded in grey

Please sum up the total assets of all public financial institutions added under XXX in each year in the cells shaded in blue

Please sum up the total assets of all other financial institutions (grey cells under OFIs) in each year in the cells shaded in red

Please sum up the total assets of all financial institutions in the cells shaded in orange

Please fill in the nominal GDP and exchange rate of your currency against USD at each year end in the cells shaded in green

Where indicated, please fill in asset and liabilities of institutions to OFIs or to banks

If certain values are not available to be separated from another category (e.g. insurance and pension funds), input data into first category (i.e. insurance) and make a note in the other corresponding category (i.e. pension funds)

If data is unavailable, please fill "N/A"

Annex 3- Questionnaire on Non-bank Financial Intermediaries in Asia
Characteristics of Assets and Liabilities in [Jurisdiction] - Data as at [date]

| | Banking Institutions | | Insurance Companies | | Pension Funds | | Public Financial Institutions | XXX | | *Other Financial Institutions | Collective Investment Schemes (CIS) | | CIS of which: Money Market Funds | | Hedge Fund | | | |
|--|--|---|--|---|--|--|-------------------------------|--|---|-------------------------------|--|---|--|---|--|---|--|---|
| | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions)(if data is available) | | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) | | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) |
| | | | | | | | | | | | | | | | | | | |
| ASSETS | | | | | | | | | | | | | | | | | | |
| A Cash balances and deposits | | | | | | | | | | | | | | | | | | |
| <i>Of which deposits placed with:</i> | | | | | | | | | | | | | | | | | | |
| (a) Banking institutions | | | | | | | | | | | | | | | | | | |
| (b) Non-bank financial institutions | | | | | | | | | | | | | | | | | | |
| <i>Of which deposits have the following maturity:</i> | | | | | | | | | | | | | | | | | | |
| (a) Short term (< 1 year) | | | | | | | | | | | | | | | | | | |
| (b) Long term (> 1 year) | | | | | | | | | | | | | | | | | | |
| B Loans/financing | | | | | | | | | | | | | | | | | | |
| <i>Of which loans/financing provided to:</i> | | | | | | | | | | | | | | | | | | |
| (a) Individuals | | | | | | | | | | | | | | | | | | |
| (b) Businesses (non-financial) | | | | | | | | | | | | | | | | | | |
| (c) Public sector | | | | | | | | | | | | | | | | | | |
| (d) Banking institutions | | | | | | | | | | | | | | | | | | |
| (e) Non-bank financial institutions | | | | | | | | | | | | | | | | | | |
| <i>Of which loans/financing provided have the following maturity:</i> | | | | | | | | | | | | | | | | | | |
| (a) Short term (< 1 year) | | | | | | | | | | | | | | | | | | |
| (b) Long term (> 1 year) | | | | | | | | | | | | | | | | | | |
| C Investment in Debt Securities | | | | | | | | | | | | | | | | | | |
| <i>Of which debt securities held have the following maturity:</i> | | | | | | | | | | | | | | | | | | |
| (a) Short term (< 1 year) | | | | | | | | | | | | | | | | | | |
| (b) Long term (> 1 year) | | | | | | | | | | | | | | | | | | |
| D Investment in equities | | | | | | | | | | | | | | | | | | |
| E Investment in properties | | | | | | | | | | | | | | | | | | |
| F Other Assets (please specify in a note) | | | | | | | | | | | | | | | | | | |
| G Off-balance sheet assets (please specify exposure type in a note) | | | | | | | | | | | | | | | | | | |

| LIABILITIES AND SHAREHOLDERS' EQUITY | | | | | | | | | | | | | | | |
|--------------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| A | Capital, reserves & retained earnings | | | | | | | | | | | | | | |
| B | Acceptance of Deposits | | | | | | | | | | | | | | |
| | <i>Of which deposits accepted from:</i> | | | | | | | | | | | | | | |
| (a) | Individuals | | | | | | | | | | | | | | |
| (b) | Businesses (non-financial) | | | | | | | | | | | | | | |
| (c) | Public sector | | | | | | | | | | | | | | |
| (d) | Banking institutions | | | | | | | | | | | | | | |
| (e) | Non-bank financial institutions | | | | | | | | | | | | | | |
| C | Loans/financing | | | | | | | | | | | | | | |
| | <i>Of which loans/financing obtained from :</i> | | | | | | | | | | | | | | |
| (a) | Banking institutions | | | | | | | | | | | | | | |
| (b) | Non-bank financial institutions | | | | | | | | | | | | | | |
| | <i>Of which loans/financing obtained have the following maturity:</i> | | | | | | | | | | | | | | |
| (a) | Short term (< 1 year) | | | | | | | | | | | | | | |
| (b) | Long term (> 1 year) | | | | | | | | | | | | | | |
| D | Issuance of corporate debt securities | | | | | | | | | | | | | | |
| | <i>Of which corporate debt securities issued have the following maturity:</i> | | | | | | | | | | | | | | |
| (a) | Short term (< 1 year) | | | | | | | | | | | | | | |
| (b) | Long term (> 1 year) | | | | | | | | | | | | | | |
| E | Issuance of asset-backed securities | | | | | | | | | | | | | | |
| | <i>Of which asset-backed securities have following maturity:</i> | | | | | | | | | | | | | | |
| (a) | Short term (< 1 year) | | | | | | | | | | | | | | |
| (b) | Long term (> 1 year) | | | | | | | | | | | | | | |
| F | Other liabilities (please specify in a note) | | | | | | | | | | | | | | |
| G | Off-balance sheet liabilities(please specify exposure type in a note) | | | | | | | | | | | | | | |

| | Other Investment Funds <i>(please specify)</i> | | Structured Finance Vehicles | | Finance Companies | | Pawn Brokers | | Credit Unions & Co-operations | | Building Societies | | Microfinance Institutions | | Brokerage Companies | |
|--|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|
| | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) | Indication of size/significance (i.e. 1,2,3,4 or i, ii, iii - see explanatory notes below) | Total Value (USD Millions) (if data is available) |
| ASSETS | | | | | | | | | | | | | | | | |
| A Cash balances and deposits | | | | | | | | | | | | | | | | |
| <i>Of which deposits placed with:</i> | | | | | | | | | | | | | | | | |
| (a) Banking institutions | | | | | | | | | | | | | | | | |
| (b) Non-bank financial institutions | | | | | | | | | | | | | | | | |
| <i>Of which deposits have the following maturity:</i> | | | | | | | | | | | | | | | | |
| (a) Short term (< 1 year) | | | | | | | | | | | | | | | | |
| (b) Long term (> 1 year) | | | | | | | | | | | | | | | | |
| B Loans/financing | | | | | | | | | | | | | | | | |
| <i>Of which loans/financing provided to:</i> | | | | | | | | | | | | | | | | |
| (a) Individuals | | | | | | | | | | | | | | | | |
| (b) Businesses (non-financial) | | | | | | | | | | | | | | | | |
| (c) Public sector | | | | | | | | | | | | | | | | |
| (d) Banking institutions | | | | | | | | | | | | | | | | |
| (e) Non-bank financial institutions | | | | | | | | | | | | | | | | |
| <i>Of which loans/financing provided have the following maturity:</i> | | | | | | | | | | | | | | | | |
| (a) Short term (< 1 year) | | | | | | | | | | | | | | | | |
| (b) Long term (> 1 year) | | | | | | | | | | | | | | | | |
| C Investment in Debt Securities | | | | | | | | | | | | | | | | |
| <i>Of which debt securities held have the following maturity:</i> | | | | | | | | | | | | | | | | |
| (a) Short term (< 1 year) | | | | | | | | | | | | | | | | |
| (b) Long term (> 1 year) | | | | | | | | | | | | | | | | |
| D Investment in equities | | | | | | | | | | | | | | | | |
| E Investment in properties | | | | | | | | | | | | | | | | |
| F Other Assets (please specify in a note) | | | | | | | | | | | | | | | | |
| G Off-balance sheet assets (please specify exposure type in a note) | | | | | | | | | | | | | | | | |

| LIABILITIES AND SHAREHOLDERS' EQUITY | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| A Capital, reserves & retained earnings | | | | | | | | | | | | | | | |
| B Acceptance of Deposits | | | | | | | | | | | | | | | |
| <i>Of which deposits accepted from:</i> | | | | | | | | | | | | | | | |
| (a) Individuals | | | | | | | | | | | | | | | |
| (b) Businesses (non-financial) | | | | | | | | | | | | | | | |
| (c) Public sector | | | | | | | | | | | | | | | |
| (d) Banking institutions | | | | | | | | | | | | | | | |
| (e) Non-bank financial institutions | | | | | | | | | | | | | | | |
| C Loans/financing | | | | | | | | | | | | | | | |
| <i>Of which loans/financing obtained from :</i> | | | | | | | | | | | | | | | |
| (a) Banking institutions | | | | | | | | | | | | | | | |
| (b) Non-bank financial institutions | | | | | | | | | | | | | | | |
| <i>Of which loans/financing obtained have the following maturity:</i> | | | | | | | | | | | | | | | |
| (a) Short term (< 1 year) | | | | | | | | | | | | | | | |
| (b) Long term (> 1 year) | | | | | | | | | | | | | | | |
| D Issuance of corporate debt securities | | | | | | | | | | | | | | | |
| <i>Of which corporate debt securities issued have the following maturity:</i> | | | | | | | | | | | | | | | |
| (a) Short term (< 1 year) | | | | | | | | | | | | | | | |
| (b) Long term (> 1 year) | | | | | | | | | | | | | | | |
| E Issuance of asset-backed securities | | | | | | | | | | | | | | | |
| <i>Of which asset-backed securities have following maturity:</i> | | | | | | | | | | | | | | | |
| (a) Short term (< 1 year) | | | | | | | | | | | | | | | |
| (b) Long term (> 1 year) | | | | | | | | | | | | | | | |
| F Other liabilities (please specify in a note) | | | | | | | | | | | | | | | |
| G Off-balance sheet liabilities(please specify exposure type in a note) | | | | | | | | | | | | | | | |

Explanatory Notes

For categories of financial institutions please ensure consistency with categories added/submitted by jurisdictions in Annex 1

The WGSB would like to adopt a broad brush approach in profiling the assets and source of funding of financial institutions, including counterparties in which the institutions are exposed to and maturity of the assets and liabilities

***Where jurisdictions are of the view that a particular type of OFIs (e.g. finance companies) undertakes a diverse range of activities and would be difficult to generalise the characteristics of assets and liabilities for that particular type of OFI, jurisdictions may add additional columns to segregate institutions or provide notes to give further explanation**

Please fill in Annex 3 by inserting 1, 2, 3 and 4 to proxy the size/significance of the various types of assets and source of funding (numbered A, B, C, etc) to the institutions' balance sheet as being None, Minimal, Moderate or Largely, respectively

| Proxy | Indication of size/significance | Interpretation (indication only) |
|-------|---------------------------------|--|
| 1 | None | Institution does not have this assets or source of funding |
| 2 | Minimal | Less than 10% of the institutions' assets or source of funding |
| 3 | Moderate | 10% to 50% of the institutions' assets or source of funding |
| 4 | Largely | More than 50% of the institutions' assets or source of funding |

Within the individual type of assets and liabilities, insert i, ii and iii to proxy the size/significance of institutions' exposures in these types of asset or liability to particular counterparties or maturity buckets and as being Minimal, Moderate or Largely, respectively

| Proxy | Indication of size/significance | Interpretation (indication only) |
|-------|---------------------------------|---|
| i | Minimal | Less than 10% of the institutions' exposure in this type of asset or liability is to this counterparty or in this maturity bucket |
| ii | Moderate | 10% to 50% of the institutions' exposure in this type of asset or liability is to this counterparty or in this maturity bucket |
| iii | Largely | More than 50% of the institutions' exposure in this type of asset or liability is to this counterparty or in this maturity bucket |

Working Group on Shadow Banking in Asia - Questionnaire - Section C

Section C contains questions which require members to provide answers in respect of each type of NBFIs identified in their jurisdictions. We would like to emphasise that it is important for member to provide details to their answers. Members are invited to add notes where necessary. An outline of Section C and a list of NBFIs with abbreviations are appended below for ease of reference.

| Sections | Scope |
|----------|---|
| C1 | Regulatory and supervisory regime for NBFIs |
| C2 | Definition of shadow banking |
| C3 | Distinction between shadow banking and Non Bank Financial Intermediaries (NBFIs) activities |
| C4 | Potential risks of shadow banking and challenges in managing risks |
| C5 | Relevance of FSB recommendations on shadow banking to Asia |
| C5-1 | Money Market Funds |
| C5-2 | Securitisation |
| C5-3 | Securities lending and repos |
| C5-4 | Other shadow banking entities (other than money market funds) |

| List of NBFIs (non exhaustive) | Abbreviation |
|---|--------------|
| Insurance companies | IC |
| Pension Funds | PF |
| Public Financial Institutions | PFI |
| Other Financial institutions including: | OFI |
| Collective Investment Schemes (CIS) | CIS |
| CIS of which Money Market Funds (MMF) | MMF |
| Hedge Funds (HF) | HF |
| Other Investment Funds (please specify) | OIF |
| Finance Companies (FC) | FC |
| Structured Finance Vehicles (SFV) | SFV |
| Pawn Brokers (PB) | PB |
| Credit Unions and Cooperatives (CUC) | CUC |
| Building Societies (BS) | BS |
| Microfinance Institutions (MFI) | MFI |
| Brokerage Firms (BF) | BF |
| Any other NBFIs (please specify) | |

C1 Regulatory and supervisory regime for NBFIs and gaps in regulation

Please list the NBFIs identified in your jurisdiction and answer the questions below.

| TABLE C1 Regulatory Regime | | | | | |
|----------------------------|---|-----------------|--|--|--|
| | Questions | NBFI identified | | | |
| 1 | Is the NBFI regulated or prudentially supervised? Y/N. | | | | |
| 2 | Please provide the names of the oversight authorities or administrators of the respective regulation. | | | | |
| 3 | Please give a brief description of the regulatory regime and measures applicable to the NBFI. <i>Members may wish to consider these aspects (non exhaustive): (a) registration or licensing, (b) market conduct and (c) prudential requirements – capital and liquidity requirements, corporate governance, risk management etc.</i> | | | | |
| | As a minimum, does the authority have powers to take the following regulatory measures in respect of the NBFI? Y/N. Please provide details. | | | | |
| 4 | <ul style="list-style-type: none"> Collect relevant data and information | | | | |
| 5 | <ul style="list-style-type: none"> Carry out supervisory inspections | | | | |
| 6 | <ul style="list-style-type: none"> Take enforcement actions or impose administrative sanctions | | | | |
| 7 | <ul style="list-style-type: none"> NBFI is subject to a depositor/investor/policyholder/consumer protection regime | | | | |
| 8 | <ul style="list-style-type: none"> NBFI itself is subject to a resolution regime⁵¹ | | | | |
| 9 | <ul style="list-style-type: none"> Any other regulatory measures members wish to highlight | | | | |
| | Please answer the following questions in respect of each of the NBFI. Please give | | | | |

⁵¹ For background on the FSB resolution regime, please refer to the FSB's "Key Attributes of Effective Resolution Regimes for Financial Institutions" published in October 2011, accessible through this link http://www.financialstabilityboard.org/publications/r_111104cc.pdf, and the report "Resolution of Systemically Important Financial Institutions: Progress Report" published in November 2012, accessible through this link http://www.financialstabilityboard.org/publications/r_121031aa.pdf

| details. | | / / / / / | | | |
|----------|--|-----------|--|--|--|
| 10 | Do you think the regulatory measures address the existing risks created by the NBFIs? | | | | |
| 11 | Do you think the regulatory measures are flexible and adaptable enough to capture innovations and mutations of NBFIs which could lead to emerging risks? | | | | |
| 12 | Do you think the regulatory measures are proportionate to the risks the NBFIs poses to the financial system? | | | | |
| 13 | Do you think the regulatory measures are implemented effectively? | | | | |
| 14 | Overall, do you consider the regulatory regime applicable to the NBFIs adequate? | | | | |
| 15 | Please describe areas of regulation that you have recently enhanced or intend to enhance | | | | |

C2 Definition of shadow banking

| TABLE C2 Definition of shadow banking | | |
|--|---|----------|
| 16 | Is there a definition on shadow banking in your jurisdiction? | Yes / No |
| 17 | <ul style="list-style-type: none"> If yes, please state the definition. Please also clarify the nature of the definition, whether it is a legal, working, proposed definition or others. | |
| 18 | <ul style="list-style-type: none"> If no, what is your understanding and interpretation of shadow banking, having regard to the nature of your market? | |
| 19 | <ul style="list-style-type: none"> How do you scope in entities or activities as shadow banking in your jurisdiction? | |
| 20 | Would it be useful to define “shadow banking” in your jurisdiction? | |
| <p>The FSB defines “Shadow Banking System” as “credit intermediation involving entities and activities (fully or partially) outside the regular banking system” or non-bank credit intermediation in short.</p> | | |
| 21 | How does the FSB definition differ from the definition or scope of shadow banking in your jurisdiction? | |
| 22 | Should a single definition on shadow banking be used globally? Please give reasons. | |
| 23 | Please give us your view on the applicability of the FSB’s definition of shadow banking from a regional perspective. | |
| 24 | What are the unique features of the Asian or emerging markets that should be taken into account in defining or scoping shadow banking for Asia? | |

C3 Distinction between shadow banking and NBF1 activities

The purpose of this section is to identify the distinction between shadow banking and NBF1 activities. As FSB has already undertaken much work in this area through the Task Force on Shadow Banking and the five shadow banking work-streams, our survey methodology is primarily based on the systemic risk indicators (SRI) and shadow banking risk indicators (SBI) by five economic functions (EFs) identified by the FSB. These indicators are briefly indicated below. Please answer the questions in Table C3.

| Systemic risk indicators⁵² | | Shadow banking risk indicators⁵³ | |
|--|---|--|--|
| SRI | Sources of key systemic risks | SBI by EFs | Sources of shadow banking risks |
| SR1 | Maturity transformation – Short-term liabilities that are used to fund long-term assets for credit provision by financial entities and/or a credit intermediation chain. | EF1 | Management of client cash pools with features that make them susceptible to runs (e.g. credit investment funds with stable NAV features, leveraged credit hedge funds) |
| SR2 | Liquidity transformation – Liquidity transformation that supports credit provision within entities and/or a credit intermediation chain. | EF2 | Loan provision that is dependent on short-term funding (e.g. finance companies with short-term funding structure or that take deposits) |
| SR3 | Credit risk transfer – Off-balance sheet exposures (e.g. guarantees, commitments, credit derivatives, and liquidity puts) provided by financial institutions and entities that constitute part of a credit intermediation chain, including the provision of implicit support to other entities. | EF3 | Intermediation of market activities that is dependent on short-term funding or on secured funding of client assets (e.g. securities brokers whose funding is heavily dependent on wholesale funding) |
| SR4 | Leverage – Leverage within entities and/or within a credit intermediation chain. | EF4 | Facilitation of credit creation (e.g. credit insurers, financial guarantee insurers) |
| | | EF5 | Securitisation and funding of financial entities (e.g. securitisation vehicles) |

⁵² Please refer to the FSB report entitled “Shadow Banking: Strengthening Oversight and Regulation, Recommendations of the FSB” published on 27 October 2011 for further details of the systemic risk factors, accessible through this link: http://www.financialstabilityboard.org/publications/r_111027a.pdf

⁵³ Please refer to the FSB report entitled “A Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities” published on 18 November 2012 for further details of the five shadow banking risk indicators by economic functions, accessible through this link: http://www.financialstabilityboard.org/publications/r_121118a.pdf

| TABLE C3 Distinction between NBFIs and shadow banking | | | | | | | |
|---|--|--|--|--|--|--|--|
| Please list the NBFIs in your jurisdiction and in respect of each of them, identify the applicable SRI and EFs. Please provide details. | | | | | | | |
| Questions | NBFI identified | | | | | | |
| Please identify the SRI and EFs for each NBFI in your jurisdiction (Y/N) and provide a brief description. | | | | | | | |
| 25 | SR1 - Maturity transformation | | | | | | |
| 26 | SR2 - Liquidity transformation | | | | | | |
| 27 | SR3 - Credit risk transfer | | | | | | |
| 28 | SR4 - Leverage | | | | | | |
| 29 | EF1 - Management of client cash pools with features that make them susceptible to runs | | | | | | |
| 30 | EF2 - Loan provision that is dependent on short-term funding | | | | | | |
| 31 | EF3 - Intermediation of market activities that is dependent on short-term funding or on secured funding of client assets | | | | | | |
| 32 | EF4 - Facilitation of credit creation | | | | | | |
| 33 | EF5 - Securitisation and funding of financial entities | | | | | | |
| 34 | Please list any other indicators or economic functions used in your jurisdiction in scoping or identifying shadow banking activities. | | | | | | |
| 35 | Please describe the regulatory measures to mitigate the above SRI, EFs or other indicators for the respective NBFIs. Members may wish to refer to the FSB's proposed toolkits ⁵⁴ for each of the EFs. | | | | | | |

⁵⁴ Please refer to the FSB report "Strengthening Oversight and Regulation of Shadow Banking: An Integrated Overview of Policy Recommendations" published on 18 November 2012 for further details of the policy toolkits, accessing through this link: http://www.financialstabilityboard.org/publications/r_121118.pdf

| | | | | | | | |
|---------------------------------------|---|------------------|---------------|--|--------------------------------------|--|--|
| 36 | Do you consider that the current regulatory measures for the NB FI are effective in mitigating the above SRI or risks arising from the EFs? | | | | | | |
| 37 | Should the respective NBFIs be scoped in as "shadow banking"? Y/N. Please give reasons. | | | | | | |
| Please answer the following questions | | | Please select | | Please give reasons for your answers | | |
| 38 | Is there any process in your jurisdiction to identify NBFIs with systemic or shadow banking risks? | Yes / No | | | | | |
| 39 | FSB's systemic and shadow banking risk indicators (SRI and EFs) are useful indicators to identify NBFIs for further monitoring. | Agree / Disagree | | | | | |
| 40 | SRI and EFs are appropriate indicators to be used in your jurisdiction. | Agree / Disagree | | | | | |
| 41 | Systemic and shadow banking risks can be mitigated by an effective regulatory regime. | Agree / Disagree | | | | | |
| 42 | NBFIs with systemic or shadow banking risks but are subject to an effective regulatory regime are not "shadow banking" in substance. | Agree / Disagree | | | | | |

C4 Potential risks of shadow banking and challenges in managing risks

| TABLE C4 Potential risks of shadow banking and challenges in managing risks | | | | |
|--|---|-----|-----|-----|
| 43 | What are the three top/largest shadow banking risks in your market? Please list them in order of importance. | (1) | (2) | (3) |
| 44 | Why are they the top/largest shadow banking risks in your market? | | | |
| 45 | How are these risks quantified? | | | |
| 46 | How are these risks monitored? | | | |
| 47 | How do you propose to mitigate these risks? | | | |
| 48 | What is the potential impact of these risks for the region? | | | |
| 49 | What are the key challenges faced by your jurisdiction in managing shadow banking risks? | | | |
| 50 | Does your jurisdiction face the same shadow banking risks as other jurisdictions, such as Europe/US? Please explain | | | |
| 51 | Does shadow banking in your jurisdiction have cross border inter-linkages with other economies in the region or globally? Please explain the nature of the exposure and region in which the institutions have exposure to (e.g. Yes – have sizeable investments in debt securities in Asia, Yes – financing activities primarily funded through issuance of short-term commercial paper in U.S .) | | | |
| 52 | Would the FSB policy recommendations on shadow banking be applicable to all markets (Asia and globally)? Please give reasons. | | | |

C5 Relevance of FSB recommendations on shadow banking to Asia

| Section | Activities | |
|----------------|-------------------------------|--|
| C5-1 | Money Market Funds | Please complete these sections if the relevant activities are identified in your jurisdiction. |
| C5-2 | Securitisation | |
| C5-3 | Securities lending and repos | |
| C5-4 | Other shadow banking entities | Please complete this section if any of the NBFIs in your jurisdiction undertakes the economic functions as specified in Part C3. |

| TABLE C5-1 Money Market Funds | | |
|---|--|--|
| The FSB requested IOSCO to develop policy recommendations in respect of Money Market Funds in October 2011. IOSCO published the “Final Report – Policy Recommendations for Money Market Funds”⁵⁵ in October 2012. | | |
| 53 | IOSCO published 15 policy recommendations for Money Market Funds. Please highlight any specific recommendations that are not applicable to your market. Please give reasons. | |

| TABLE C5-2 Securitisation | | |
|---|---|--|
| In response to the FSB’s request for IOSCO to examine the need for policy actions in relation to securitisation, IOSCO published the report entitled “Final Report – Global Developments in Securitisation Regulation” on 16 November 2012⁵⁶. | | |
| 54 | IOSCO published 10 policy recommendations for securitisation regulation. Please highlight any specific recommendations that are not applicable to your market. Please give reasons. | |

⁵⁵ Please refer to the IOSCO report entitled “Final Report – Policy Recommendations for Money Market Fund” published in October 2012 for details of final recommendations on MMFs, accessible through this link: <http://iosco.org/library/pubdocs/pdf/IOSCOPD392.pdf>

⁵⁶ Please refer to the IOSCO report entitled “Final Report – Global Developments in Securitization Regulation” published on 16 November 2012 for details of final recommendations on securitization, accessible through this link: <http://iosco.org/library/pubdocs/pdf/IOSCOPD394.pdf>

| TABLE C5-3 Securities lending and repos | |
|---|--|
| The FSB published the “Consultative Document on strengthening oversight and regulation of shadow banking - a policy framework for addressing shadow banking risks in securities lending and repos” on 18 November 2012⁵⁷. | |
| 55 | The FSB proposed 13 recommendations in addressing shadow banking risk in securities lending and repos. Please highlight any specific proposed recommendations that are not applicable to your market. Please give reasons. |

| TABLE C5-4 Other shadow banking entities (other than Money Market Funds) | |
|---|--|
| The FSB published the “Consultative document Strengthening Oversight and Regulation of Shadow Banking Entities – A policy framework for Strengthening Oversight and Regulation of Shadow Banking Entities” on 18 November 2012⁵⁸. | |
| 56 | The FSB proposed a framework of toolkits to mitigate shadow banking risks for each of the five economic functions. Please highlight any specific toolkits that are not applicable to your market. Please give reasons. |

⁵⁷ Please refer to the FSB report entitled “Consultative Document on Strengthening Oversight and Regulation of Shadow Banking, a policy framework for addressing shadow banking risks in Securities Lending and Repos” published on 18 November 2012 for details of proposed policy recommendations, accessible through this link: http://www.financialstabilityboard.org/publications/r_121118b.pdf

⁵⁸ Please refer to the FSB consultative report entitled “A Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities” published on 18 November 2012 accessible through this link: http://www.financialstabilityboard.org/publications/r_121118a.pdf

APPENDIX E – TABLES FOR SECTION I – PROFILE OF NBFIS IN ASIA

Table 1 Emerging or Developing Economies in RCGA

| | RCGA member jurisdictions | IOSCO Emerging Markets Committee Members | OECD - DAC List of ODA recipients | IMF Developing economies | ADB List of developing member countries** |
|-----|--|--|-----------------------------------|--------------------------|---|
| 1. | Japan | | | | |
| 2. | Philippines | ✓ | ✓ | ✓ | ✓ |
| 3. | Australia | | | | |
| 4. | Cambodia | | ✓ | ✓ | ✓ |
| 5. | China | ✓ | ✓ | ✓ | ✓ |
| 6. | Hong Kong | | | | |
| 7. | India | ✓ | ✓ | ✓ | ✓ |
| 8. | Indonesia | ✓ | ✓ | ✓ | ✓ |
| 9. | Korea | ✓ | | | |
| 10. | Malaysia | ✓ | ✓ | ✓ | ✓ |
| 11. | New Zealand | | | | |
| 12. | Pakistan | ✓ | ✓ | ✓ | ✓ |
| 13. | Singapore | | | | |
| 14. | Sri Lanka | ✓ | ✓ | ✓ | ✓ |
| 15. | Thailand | ✓ | ✓ | ✓ | ✓ |
| 16. | Vietnam | ✓ | ✓ | ✓ | ✓ |
| | Number of emerging or developing economies | 10 | 10 | 10 | 10 |

Sources: IOSCO; OECD; IMF/ World Bank; Asian Development Bank

* IMF's World Economic Outlook Report, April 2012 and World Bank data

** ADB as of as at 27 May 2013

Table 2 Activities Undertaken by Various NBFIs in Asia^

| Activities | Other financial institutions | | | | | | | | | | | |
|--|-------------------------------|----------------------|----------|-------------|--------------------------------|-------------------|--------------|-------------------|-------|--------------------------|----|-------------------------|
| | CIS | <i>Of which MMF</i> | HF | OIF | FC | SFV | PB | CUC | BS | MFI | | |
| Management of client cash pools | AU,HK ID,JP KR,PK PH,SG TH,MY | AU,HK ID,JP KR,SG TH | HK KR SG | CN JP PK MY | | | | KR | | | | |
| Loan provision | KR | KR | KR | IN | AU,CN HK,IN ID,JP KR,SG MY, PH | | IN, KR,PH MY | AU,IN,JP KR,PH MY | AU MY | KH, HK, IN,ID, PK MY, PH | | |
| Intermediation of market activities | KR | | | PK | HK | | | | | PK | | |
| Facilitation of credit creation | | | | IN | IN | | | | | HK, PK | | |
| Securitisation and funding of financial entities | | | | | KR,MY | AU ID JP SG TH MY | | | | | | |
| Other activities | | | | | SG | | | | | | | |
| Activities | Other financial institutions | | | | | | | | | | | |
| | VC | SHG | MSB | SFC | CSP | LG | MD | MB/IB | DFI | MC | SS | BC |
| Management of client cash pools | IN | | KR | KR | | | | KR | MY | | | AU,JP,KR,PH TH |
| Loan provision | | IN | KR | KR | KR | PK | PK | KR,PK | PK MY | | | KR,TH,MY,PH |
| Intermediation of market activities | | | | | | PK | PK | PK,PH | PK | | | AU,HK,ID,JP,KR PH,TH,MY |
| Facilitation of credit creation | | | | | | PK | PK | KR,PK | PK MY | MY | | AU |
| Securitisation and funding of financial entities | | | KR | | | | | | PK | MY | | AU,JP,KR |
| Other activities | MY | | | | | | | | | | MY | |

^It is recognised that complete or accurate information/data of some OFIs may not be available. Where complete or accurate information/data is unavailable, members may have responded to the survey on a best effort basis or exercised judgement in identifying the OFIs' involvement in the various activities in their respective jurisdictions

IC: Insurance Companies; PF: Pension Funds; PFIs: Public Financial Institutions; CIS: Collective Investment Schemes; MMF: Money Market Funds; HF: Hedge Funds; OIF: Other Investment Schemes; FC: Finance Companies; SFV: Structured Finance Vehicles; PB: Pawn Brokers; CUC: Credit Union & Cooperatives; BS: Building Society; MFI: Microfinance; VC: Venture Capitalist; SHG: Self Help Groups; MSB: Mutual Savings Bank; SFC: Securities Finance

Company; CSP: Credit Service Provider; LG: Leasing; MD: Modarabas; MB/IB: Merchant & Investment Banks; DFI: Development Financial Institutions; MC: Mortgage Corporation; SS: Social Security; BC: Brokerage Company (including dealers)