Financial Stability Board

Regional Consultative Group for the Americas

Working Group on Shadow Banking Second Report

Notice

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9 October 2015

Financial Stability Board Regional Consultative Group of the Americas Working Group on Shadow Banking SECOND REPORT

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1. Introduction

"Shadow banking" can broadly be described as "credit intermediation involving entities and activities outside the regular banking system".¹ Although intermediating credit through non-bank or market-based channels has advantages, specifically in terms of innovation, efficiency, diversification and competition, such channels can also become a source of systemic "bank-like" risk. Systemic risk arises when these intermediation activities have bank-like risk characteristics (e.g., maturity and liquidity transformation, accompanied by leverage). This vulnerability is magnified when the banking system has material exposures or connections to these activities.

Effective monitoring of the shadow banking sector, and its connections with other areas of the financial sector, is important for strengthening overall financial stability oversight and for mitigating the build-up of systemic risks. Monitoring shadow banking and transforming it into more resilient market-based credit intermediation through balanced and effective regulation and supervision is a key financial reform priority for the G20 and the Financial Stability Board (FSB).²

The FSB set out its initial recommendations to enhance the oversight and regulation of the shadow banking system in its report to the G20 in October 2011.³ Since then, the FSB has conducted four annual shadow banking monitoring exercises. The 2014 exercise used end-2013 data for 25 jurisdictions and the euro area as a whole, bringing the coverage of the monitoring exercise to about 80% of global GDP and 90% of global financial system assets.⁴

The exercise was conducted by the FSB Analytical Group on Vulnerabilities (AGV), the technical working group of the FSB Standing Committee on Assessment of Vulnerabilities (SCAV), using quantitative and qualitative information, and followed a similar methodology as that used for the 2011, 2012 and 2013 exercises. Its primary focus was on a "macro-mapping" based on national Flow of Funds and Sector Balance Sheet data (hereafter Flow of Funds), that looks at all non-bank financial intermediation to ensure that data gathering and surveillance cover the areas where shadow banking-related risks to the financial system might arise. The 2013 and 2014 exercises narrowed the scope of the monitoring by filtering out non-bank financial

¹ Some authorities or market participants prefer to use other terms such as "market-based financing" instead of "shadow banking". The use of the term "shadow banking" is not intended to cast a pejorative tone on this system of credit intermediation. However, the FSB is using the term "shadow banking" as this is the most commonly employed and, in particular, has been used in the earlier G20 communications.

For a recent update on progress to date of the FSB's work on shadow banking, see *Transforming Shadow Banking into Resilient Market-based Financing: An Overview of Progress and a Roadmap for 2015*, available at: <u>http://www.financialstabilityboard.org/wp-content/uploads/Progress-Report-on-Transforming-Shadow-Banking-into-Resilient-Market-Based-Financing.pdf</u>

³ See <u>http://www.financialstabilityboard.org/wp-content/uploads/r_111027a.pdf</u>

⁴ See *Global Shadow Banking Monitoring Report 2014*, available at: <u>http://www.financialstabilityboard.org/wp-content/uploads/r_141030.pdf</u>. Information on the data underlying this report can be found at: <u>http://www.financialstabilityboard.org/wp-content/uploads/sb_monitoring_dataset.pdf</u>

activities within consolidated banking groups and those activities that do not represent credit intermediation (e.g. equity investment funds). As a result, this narrower measure more accurately reflects the size and composition of the shadow banking sector.

At its 3rd meeting in December 2012 in Bermuda, the Regional Consultative Group for the Americas of the FSB (RCGA) decided to perform a similar shadow banking monitoring exercise at the regional level to achieve a better understanding of the scope and impacts of shadow banking in these jurisdictions, in particular in those that do not participate in the AGV monitoring exercise. A key objective of this exercise was to identify specific characteristics of the shadow banking sector in the Americas. Three potential areas of emphasis were initially considered: non-bank credit intermediation (via finance companies, credit card companies, etc.), non-bank deposit-taking institutions, and the nature and size of shadow banking in international financial centers (IFCs). The RCGA set up a working group (WGSB) to design and conduct a shadow banking monitoring exercise based on the AGV exercise.⁵ The WGSB prepared its first report for the RCGA meeting in Rio de Janeiro in December 2013 and then presented it to the FSB Plenary in London in March 2014. The report was released on the FSB website in August 2014.⁶

The first report documented the WGSB's work on the following tasks:

- The design and conduct of a shadow banking "macro-mapping" monitoring exercise for jurisdictions in the RCGA based on the AGV exercise to ensure comparability;
- Region-specific analysis of the nature of shadow banking, its connections to the rest of the financial sector, and especially to the traditional banking sector, and potential risks from these connections; and
- Recommendations to improve the oversight of the shadow banking sector in the region.

To carry out these tasks, the standard AGV template was modified to better reflect the financial sector in the Americas; in particular, the role of public sector financial institutions was identified and investment funds were split into money market mutual funds, private investment funds and public investment funds. A second template was developed to capture offshore shadow banking activities in IFCs and their relationship with the onshore financial system. This template was motivated by the activities of several jurisdictions in the RCGA that provide significant offshore financial services as IFCs.⁷ These activities represent an important gap in the FSB's global

⁵ The Terms of Reference of the WGSB are included in Annex 1.

⁶ FSB Regional Consultative Group for the Americas Report on Shadow Banking in the Americas, available at: <u>http://www.financialstabilityboard.org/wp-content/uploads/r_140822b.pdf</u>. A summary of this report is included in Annex 5 of the Global Shadow Banking Monitoring Report 2014.

⁷ These IFCs include: Bahamas, Barbados, Bermuda, British Virgin Islands, Cayman Islands, and Panama. Cayman Islands, Panama and Uruguay were WGSB members and completed the first IFC data template. After the first WGSB report, Uruguay decided not to participate in the second IFC monitoring exercise because its IFC activities were not significant.

shadow banking monitoring exercise because large volumes of bank and non-bank credit intermediation activities flow through IFCs. This template provides a starting point from which the global shadow banking monitoring exercise can include IFCs in the future.

The key accomplishments and findings of the WGSB's first report on the RCGA shadow banking monitoring exercise are that it:

- collected valuable data on non-bank credit intermediation in the Americas;
- served as a useful vehicle for disseminating the AGV methodology to non-FSB members;
- represented a first step towards identifying the role of IFCs in global non-bank credit intermediation; and
- identified four types of shadow banking entities in the region that may merit further attention because of the potential risk their activities pose to financial stability: openended investment funds that hold illiquid assets; large and highly leveraged brokerdealers; non-bank deposit-taking institutions; and finance companies.

At the December 2013 meeting, the RCGA decided to continue the work of the WGSB in 2014 and 2015 with Canada and Chile remaining as the co-chairs. Consistent with the recommendation in the 2014 report, the WGSB expanded its membership to include other IFCs, namely Bahamas, Barbados, Bermuda and British Virgin Islands.⁸ The WGSB held a conference call in April 2014 to finalize the work plan for 2014.⁹ This work plan consisted of modifying the two reporting templates (one specific to IFCs) based on the experience from the first exercise, updating the macro-mapping exercise with end-2013 data and conducting two questionnaires, one on non-bank deposit taking institutions and one on broker-dealers.¹⁰ The WGSB held a two-day workshop in Panama in November 2014 to review the results of the monitoring exercise and two questionnaires.

The key findings from the second shadow banking monitoring exercise are:

• banks dominate financial activities in the Americas; however, their share of financial assets has been declining from 2008 due to higher growth in other financial intermediaries (OFIs), and is lower on average than the share for banks in AGV member jurisdictions;

⁸ All RCGA members and some other jurisdictions in the region were invited to join the WGSB. In addition to Bahamas, Barbados, Bermuda and the British Virgin Islands, Argentina also joined the WGSB for the second monitoring exercise. The current membership of the working group is given in Annex 2.

⁹ The WGSB 2014-15 Work Plan is in Annex 3.

¹⁰ The FSB AGV exercise excludes non-bank deposit taking institutions, such as cooperatives, on the basis that their risks are adequately regulated and supervised. The WGSB felt that because these financial institutions play an important role in several jurisdictions in the region and represent a potential destination for risk migration from banks, they deserve further study.

- the size of the OFI sector relative to GDP is heterogeneous across the WGSB jurisdictions and is larger in economies with most developed financial sectors;
- the OFI sector in several jurisdictions have exhibited positive growth rates since the global financial crisis;
- the largest subsector of OFIs in the region are investment funds money market funds and public and private funds;
- in several jurisdictions, the links between OFIs and domestic banks are significant; and
- the offshore assets of the IFCs in the Americas are significant at USD 4.6 trillion, and the relative importance of various offshore financial entities (banks, insurers and private funds) varies by IFC.

The key findings from the questionnaire on non-bank deposit taking institutions are:

- on average, non-bank DTIs represent a small share of national financial assets in the Americas, but they are important in some jurisdictions and in general they are growing rapidly;
- their linkages with the domestic banking system seem relatively low, though data limitations prevent obtaining a clearer picture of these linkages at this time;
- non-bank DTIs are often, but not always, regulated and supervised by domestic banking authorities;
- regulatory requirements, including those relating to capital, liquidity, and leverage differ across banks and non-bank DTIs, both within and across countries; and
- as countries move forward in adopting Basel III requirements for their banks, the growing gap between bank and non-bank regulatory requirements represent a potential source of regulatory arbitrage, which deserves continued monitoring.

The key findings from the questionnaire on broker-dealers are:

- broker-dealers are an important part of financial system in some jurisdictions;
- they are regulated and supervised in all reporting jurisdictions but there is a lack of regulation in specific areas, for instance, maturity and/or foreign currency exposures;
- broker-dealers are usually highly leveraged and bear significant liquidity/maturity risk, often using short-term repurchase agreements as an important source of financing;
- some jurisdictions have started to change their regulatory frameworks to establish backstop facilities, enhanced crisis management and resolution regimes, and liquidity requirements similar to banks.

2. Methodology for the "macro-mapping" exercise

This section describes the methodology of the macro-mapping exercise carried out by the WGSB. Data are reported for 17 jurisdictions, five more than the last monitoring exercise but

two of those new jurisdictions only reported data for the offshore market.¹¹ Information is based on annual flow of funds data or administrative data from financial intermediaries over the period 2002-13.¹²

Data was submitted by individual jurisdictions using a template based on the AGV model, so as to ensure comparability with FSB member jurisdictions (see Annex 4). This template seeks to cast a wide net and measure all financial assets held by each group of institutions using an entity-based approach.¹³ The WGSB followed the AGV approach and associated OFIs with the shadow banking sector.¹⁴

There are four differences between the WGSB template and the AGV template. First, investment funds are split into money market funds, public funds and private funds.¹⁵ This contrasts with the AGV template that divides investment funds into money market funds, hedge funds and other funds categories. The WGSB believed that the private funds category reflected the characteristics of hedge funds, while capturing other funds with very similar characteristics that are not labeled as "hedge funds" in participating jurisdictions.¹⁶ Second, the WGSB template seeks information on the role of the public sector in financial markets in the Americas by including a specific column for development banks, and by asking jurisdictions to report the share of public sector ownership in commercial banks. Although these are not part of the shadow banking system, the WGSB considered that having these data could prove useful for understanding the size and dynamics of the OFI sector in the region. Third, the template explicitly asks for information on assets in non-bank credit card companies because they are important nonbank financial entities in several jurisdictions. Fourth, the WGSB template does not ask about real estate investment trusts (REITs) and trust companies but future exercises should consider their inclusion.

¹¹ The five new jurisdictions are: Argentina, Bahamas, Barbados, Bermuda and British Virgin Islands. The Bahamas and British Virgin Islands only completed the IFC template

¹² To aggregate national data into U.S. dollars, market exchange rates are used.

¹³ The FSB's workstream on other shadow banking entities has been working on a new data collection and monitoring approach based on shadow banking activities rather than on entities. The reasons for this approach are: the wide variety of shadow banking entities has made it difficult to establish common definitions across jurisdictions; and shadow banking risks stem from the activities, not the entity type. For further details, see *Strengthening Oversight and Regulation of Shadow Banking: Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities*, available at: http://www.financialstabilityboard.org/publications/r_130829c.pdf.

¹⁴ The 2014 Global Shadow Banking Monitoring Report considers 10 OFI sub-sectors: money market funds; finance companies; structured finance vehicles; hedge funds; equity funds; fixed income funds; other investment funds; broker-dealers; REITs; and trust companies.

¹⁵ Public funds were defined as funds that have no restrictions on the type of investor, minimum subscription amount or sales method (i.e., not restricted to private placements). Under this definition are included closed-end and open-end funds. Private funds, in contrast, are not public and have similar characteristics to hedge funds.

¹⁶ In *Hedge Fund Oversight* (2009), IOSCO notes that there is no universal definition of a "hedge fund", although hedge funds are normally seen as sharing certain common characteristics. They exist largely to avoid the legal restrictions imposed on mutual funds in terms of investment strategies, disclosure/transparency and immediate access to funds. A hedge fund typically uses a range of alternative trading strategies unavailable to a mutual fund, including short sales, leverage, program trading, arbitrage, and the use of derivatives. A hedge fund normally requires high minimum investments, has restrictions on withdrawals, is targeted to a limited audience of sophisticated investors and charges much higher fees.

Monitoring shadow banking activities in IFCs merits special attention as they are significant and represent a material data gap in the FSB AGV monitoring exercise. Six member jurisdictions of the WGSB have been identified under various methodologies as providing offshore financial services as IFCs.¹⁷ For these jurisdictions, financial assets registered with domestic authorities are split into those held by local and offshore institutions. Offshore institutions are defined on a *de jure* basis as those that by regulation are precluded from participating in local financial markets or are restricted from offering financial services to domestic residents. One example is the class B bank category in Panama and Cayman Islands, which cannot take on deposits from residents. The WGSB is aware that this approach to separating offshore and onshore financial institutions that are allowed to offer services to resident investors *de facto* focus exclusively on providing services to non-resident clients. However, the current lack of sufficiently granular data makes it difficult to implement a *de facto* separation.

3. Results for the "macro-mapping" exercise

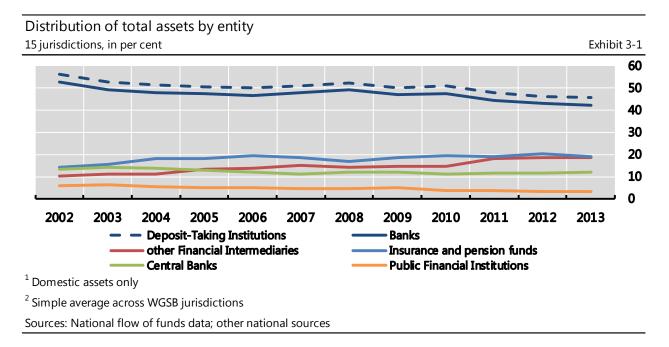
This section summarizes the main findings for the WGSB's macro-mapping exercise based on both the standard template and the offshore IFC template.¹⁸

3.1. Structure of financial systems

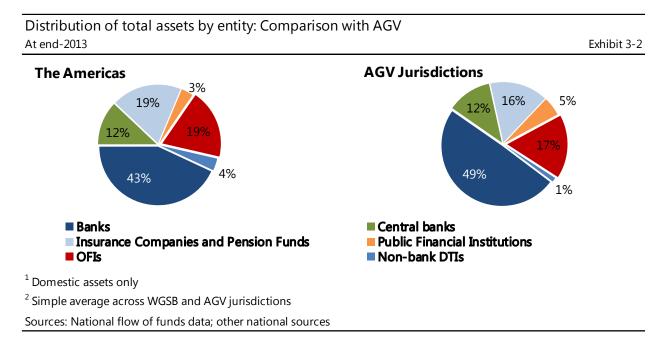
On average across WGSB jurisdictions, banks dominate financial activities, as they hold more than 40% of financial assets (Exhibit 3-1). This share has been declining over the period 2008-2013 due to higher growth in OFIs.

¹⁷ See, for example, Concept of Offshore Financial Centers: In Search of an Operational Definition, IMF Working Paper, 2007.

¹⁸ Unless stated otherwise, financial assets in these jurisdictions include only domestic assets. That is, offshore assets are not included. These offshore activities in IFCs are discussed in Section 3.4.

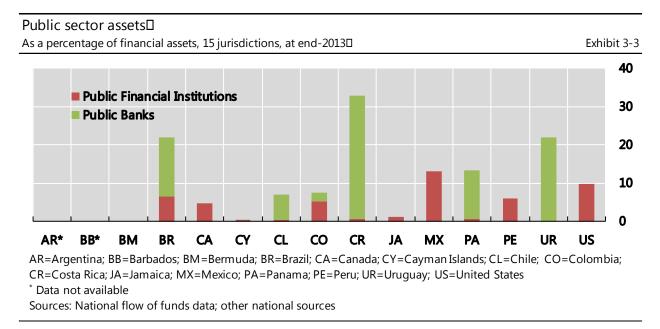


Broadly speaking, the relative importance of the different entities in the financial sector of WGSB jurisdictions has not changed significantly from the last report and is similar to that of the average jurisdiction covered by the 2013 AGV exercise (Exhibit 3-2). Banks account for a relatively smaller share of total assets in WGSB jurisdictions (43%), while OFIs are relatively larger (19%), together with pension funds and life insurance companies (19%). Non-bank deposit-taking institutions (non-bank DTIs) are relatively small in both groups of jurisdictions.



The WGSB set out to measure the relative importance of direct public sector involvement in the financial sector in the Americas region so as to better understand the broad financial sector in which shadow banking activities take place. Brazil, Costa Rica, Panama and Uruguay stand out

because of their high public sector ownership of commercial banks (Exhibit 3-3). Mexico and the United States, on the other hand, have relatively large public financial institutions. In Mexico these are development banks¹⁹ and government agencies that manage workers' savings, mortgages and consumer durable loans. In the United States, these public financial institutions are the Government Sponsored Enterprises (GSEs) involved in providing housing finance.²⁰ Although not reported in the template, the public sector is highly involved in structured finance vehicles in Uruguay – both as the source of the underlying flows or as the agent structuring the vehicles.²¹



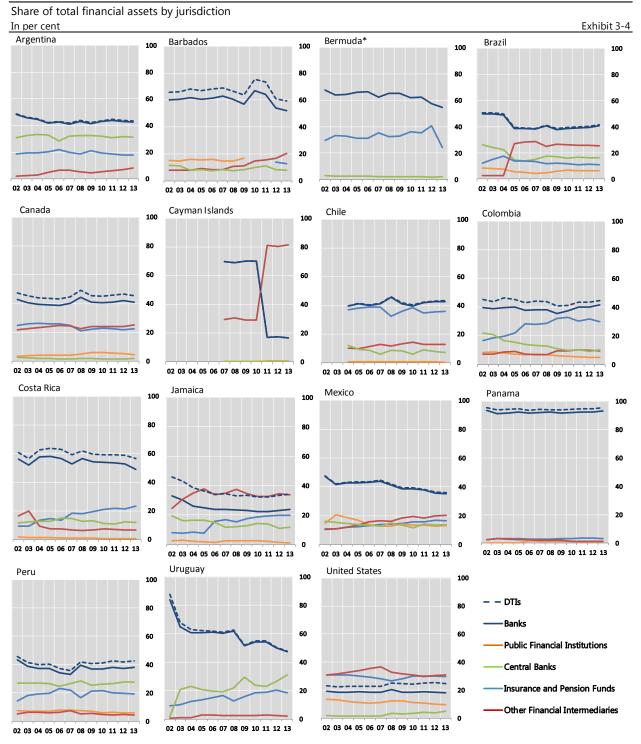
There is significant heterogeneity across individual WGSB jurisdictions in terms of the relative importance of different financial entities (Exhibit 3-4). Banks have the largest shares of assets in all jurisdictions, except the United States, Cayman Islands and Jamaica. In Panama the share of the banking sector is highest, exceeding 90% of total assets. Note that in Barbados, Canada, Colombia, Costa Rica, Jamaica, and the United States non-bank DTIs are also relevant. In Chile and Colombia, insurance companies and pension funds are relatively more important than in the average WGSB jurisdiction. Finally, the OFI sector varies from close to 81% of total domestic assets in Cayman Islands to less than 3% of assets in Uruguay and Panama.²²

¹⁹ Two out of six development banks are deposit takers, for which deposits represent 48% and 35% of total assets, respectively.

²⁰ For example, the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac).

²¹ For example, the *Agencia Nacional de la Vivienda*.

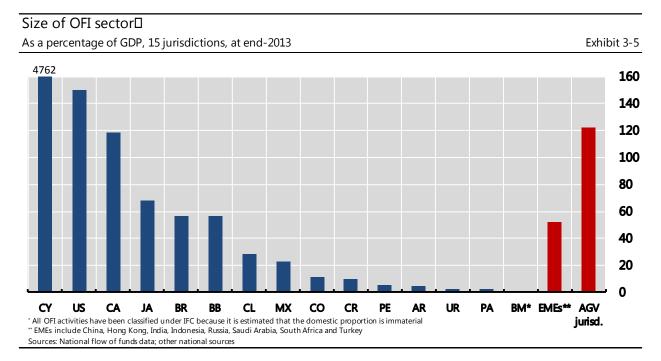
²² The OFI sector in Cayman Islands increased to 81.7% of total assets in 2011 due to the change of a license for a large bank from the domestic sector to the offshore sector. This change reduced the domestic banks assets by approximately USD 230 billion.



* All OFI activities have been classified under IFC because it is estimated that the domestic proportion is immaterial Sources: National flow of funds data; other national sources

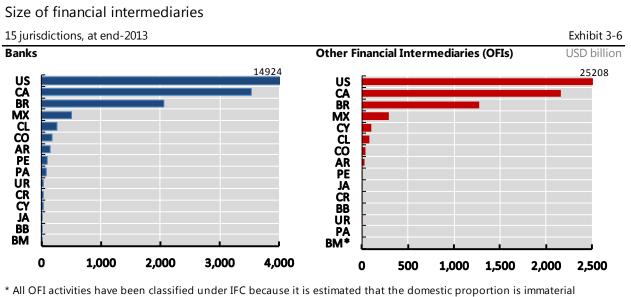
3.2. Other financial intermediaries (OFIs)

The size of the OFI sector is heterogeneous across the WGSB jurisdictions when measured against GDP (Exhibit 3-5).²³ In most jurisdictions, the ratio of OFI assets to GDP is below the AGV average, with several jurisdictions also below the average for the subset of EMEs in the AGV exercise. This is consistent with the fact that most jurisdictions in the region are less financially developed. In fact, the simple average of total financial assets to GDP in the Americas (excluding Cayman Islands) is 210%, half of the ratio in the AGV countries.



Not surprisingly, larger economies, such as the United States, Canada, Brazil and Mexico, have the largest OFI sectors (Exhibit 3-6). The Cayman Islands has the fifth largest OFI sector measured by onshore assets, totaling USD 106 billion. Medium-sized jurisdictions such as Chile and Colombia are more dependent on bank intermediation and the financial assets held by these entities are relatively high.

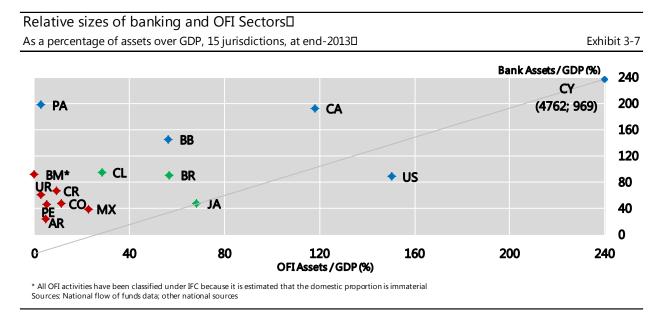
²³ The OFI sector in Cayman Islands is dominated by structured finance vehicles (CISX) registered as an onshore asset but in practice are for offshore investors. For this reason, the OFI to GDP ratio is high.



¹ Domestic assets only

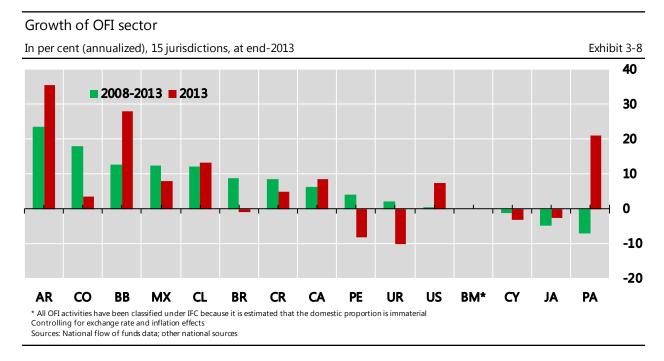
Sources: National flow of funds data; other national sources

Exhibit 3-7 suggests three groupings of WGSB jurisdictions. In the first group, which is characterized by relatively large financial sectors, Barbados, Canada and Panama have bank-dominated financial sectors, whereas Cayman Islands and the United States have sizable OFI sectors.²⁴ In the second group (with medium-sized financial sectors) Jamaica has a larger OFI sector than Chile and Brazil. The remaining jurisdictions are in the third group with relatively small banking and OFI sectors.



²⁴ The first group includes countries where bank and OFI financial assets sum to above 200 percent of GDP, the intermediate group those countries where the figure lies between 100 and 200 percent, and the lower group includes the rest.

The OFI sectors in several jurisdictions have exhibited positive growth rates since the global financial crisis (Exhibit 3-8). Some jurisdictions with the highest growth rates, such as Argentina, Colombia, and Costa Rica, start from a relatively low base for their OFI sector (group 3 in Exhibit 3-7). These high growth rates are explained mainly by the increase of investment funds. In Jamaica and Panama there is a marked contraction in OFI size after 2008 with a recovery in the last year in the case of Panama. Uruguay exhibits a significant decrease in the 2013 growth rate because its structured finance vehicles declined 40%.²⁵ Note that these growth rates control for exchange rate changes and inflation but do not adjust for changes in the valuation of local assets – such as stocks held in investment funds.



The largest subsectors of OFIs in the region are investment funds - money market funds and other investment funds, which include public and private funds (Exhibit 3-9).²⁶ In this respect, the region is also similar to the AGV sample, although money market funds are larger in the Americas (Exhibit 3-10). Investment funds make up more than 60% of the OFI sector in Barbados, Brazil, Chile, Colombia, Peru, and the United States.

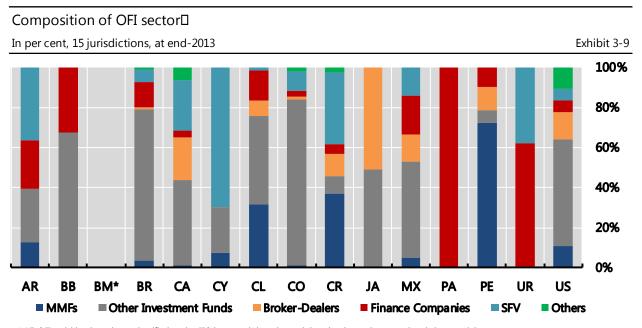
The second subsectors of OFIs are finance companies and structured finance vehicles. The former are important mainly in Panama and Uruguay. There is some heterogeneity in the composition of finance companies across jurisdictions. In Argentina, they include leasing and factoring companies and non-bank credit card issuers. In Brazil, this category includes leasing

²⁵ The reduction is almost entirely explained by the delisting of a USD 442 million SFV from public offering in 2013.

²⁶ Although the WGSB template disaggregates investment funds into three types – money market, public and private - not all jurisdictions are able to make this division with the available data. Thus, for Exhibit 3-9, two categories of investment funds are used: money market funds and other investment funds.

companies, micro-finance institutions, and real estate credit companies. Mexico includes nonbank financial institutions engaged in credit activities (*Sofomes*), leasing and factoring companies.²⁷ Chile also includes non-bank credit card issuers and automobile lending companies. In Uruguay it only consists of credit card issuers. As mentioned in the last regional report, regulation of the sector is very heterogeneous: automobile lending companies, non-bank leasing and factoring companies in Chile and *Sofomes* ENR in Mexico have no prudential regulation. On the other hand, non-bank credit card issuers in Uruguay and Chile and several classes of finance companies in Mexico are prudentially regulated.²⁸

Argentina, Cayman Islands, Costa Rica and Uruguay have structured finance vehicles accounting for more than 30% of total OFIs. Broker-dealers are relevant in Jamaica. Some jurisdictions have other types of OFIs. Brazil and Colombia have prize-linked savings accounts.²⁹ The OFI sector in the United States includes REITs, and funding corporations. REITs are also present in Canada.³⁰



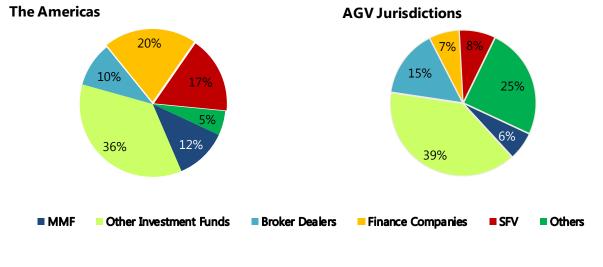
^{*} All OFI activities have been classified under IFC because it is estimated that the domestic proportion is immaterial Others: REITs, prize-linked saving accounts, US holding companies, and US funding corporations Sources: National flow of funds data; other national sources

²⁷ Sofomes ENR are financial companies that do not require authorization by the financial authority in order to operate. They provide credit, financial leasing and factoring services.

²⁸ Further information on *Sofomes* is provided in the first report of the WGSB, <u>http://www.financialstabilityboard.org/wp-content/uploads/r_140822b.pdf</u>. *Sofomes* ER are the regulated subsector, whereas *Sofomes* ENR the non-regulated one and should not be confused.

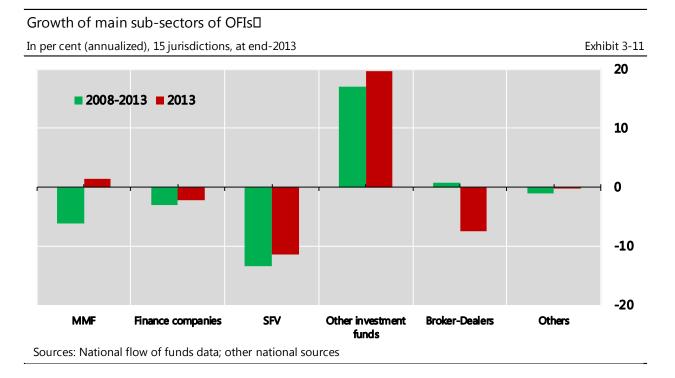
²⁹ In Colombia, prize-linked accounts correspond to a specific type of account managed by financial institutions, supervised by the Financial Superintendence but without access to Central Bank liquidity and not covered under any deposit insurance scheme

³⁰ The template does not ask specifically about REITs, but some jurisdictions included them in "Others."



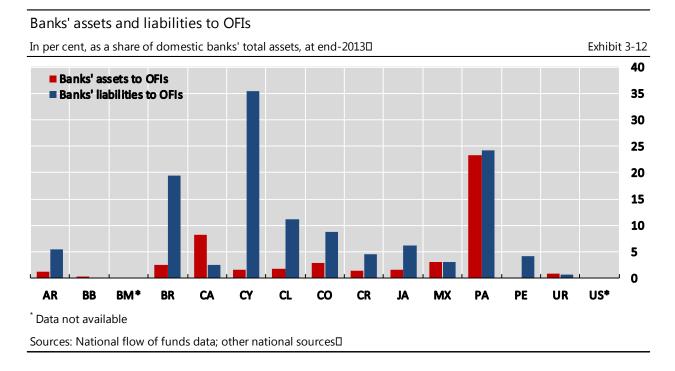
Sources: National flow of funds data; other national sources

Other investment funds was the sub-sector with the highest growth rates in 2013 and during 2008-2013 (Exhibit 3-11). Meanwhile, structured finance vehicles and broker-dealers contracted more than 7% in 2013.



3.3. OFI connections with the banking system

In several jurisdictions, links between OFIs and domestic banks are important. In Panama, exposure to credit risk from OFIs is more than 20% of bank assets. In Cayman Islands, Panama, Brazil,³¹ Chile and Colombia banks rely on OFIs for funding – usually through investment funds. Balance sheet inter-connections between banks and the OFI sector in the remaining jurisdictions of the WGSB are very low (Exhibit 3-12). Note, however, that these measures are at best lower bound estimates of the links. The main limitation is that they do not always include off-balance sheet positions between OFIs and banks – like derivative positions.³²



3.4. International financial centers

Several jurisdictions in the RCGA provide significant offshore financial services as IFCs. These activities represent an important gap in the FSB's global shadow banking monitoring exercise because large volumes of bank and non-bank credit intermediation activities of other jurisdictions flow through IFCs. These offshore non-bank credit intermediation activities, especially large investment funds registered in IFCs, may pose systemic risk and thus warrant close monitoring and vulnerability assessment.

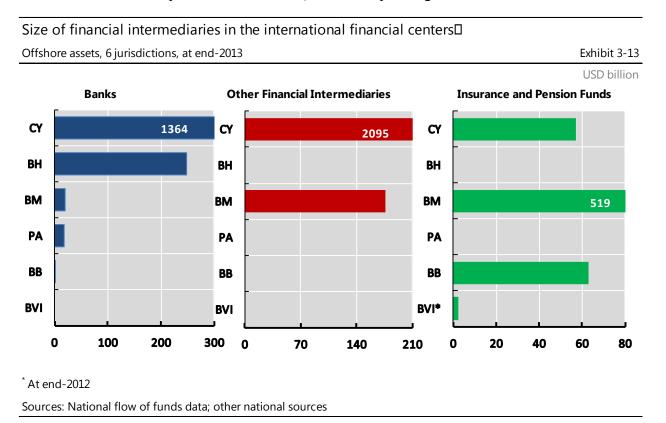
³¹ In Brazil, fixed-income investment funds comprise the majority of the OFI sector, and their assets are mainly composed of federal government bonds (31.9%) and repurchase agreements with the banking system backed up by federal government bonds, accounting for an additional 27.5%. These repos represent a material share of banks' liabilities to OFIs, but their credit and liquidity risk are not significant because sovereign bonds are used as collateral.

³² In the case of Colombia, exchange rate derivatives are included.

Six jurisdictions in the WGSB are international financial centers – Bahamas, Barbados, Bermuda, British Virgin Islands, Cayman Islands, and Panama, – and they completed a separate IFC template to identify the nature of their international financial activities.

In the Cayman Islands, offshore assets are composed of special license banks (USD 1364 billion), private funds (USD 2095 billion) and insurance companies (USD 57 billion) (Exhibit 3-13). Bermuda has an important insurance sector (USD 519 billion), specializing in catastrophe reinsurance, and Barbados also has an important insurance sector (USD 63 bn); meanwhile, in British Virgin Islands, this sector comprises captive insurance companies and reaches USD 2 billion.

In Panama and Bahamas, the reported offshore assets correspond to banks that operate with special licenses. The special bank licenses in Panama and the Cayman Islands prohibit deposit-taking from residents and limit the activities that these banks can conduct in local markets. All offshore banks are prudentially regulated and supervised by the local authorities, although in Panama prudential requirements and intensity of supervision is lower than for full license onshore banks. In Bermuda, banks serve both domestic and international clients (e.g. global reinsurance firms headquartered in Bermuda) without separating them.³³



³³ For the purpose of this study the separation between Bermuda's domestic and IFC banking activities was estimated based on the share of assets held by banks in local currency and all other currencies.

4. Non-bank deposit-taking institutions and broker-dealers

One recommendation from the 2014 Report on Shadow Banking in the Americas was that future work on shadow banking in the RCGA should place particular attention on four areas: openended investment funds, non-bank deposit-taking institutions, broker-dealers, and finance companies. In line with this recommendation, the WGSB in 2014 developed and conducted surveys on non-bank deposit taking institutions and broker-dealers, including the regulatory and supervisory aspects of these entities. The summary results from the surveys are described in more detail below, and the questionnaire for each entity type is included in Annex 5.

4.1. Non-bank deposit-taking institutions

Non-bank deposit-taking institutions (non-bank DTIs) fund themselves through deposits or deposit-like instruments. The most common form of non-bank DTIs in the Americas are financial cooperatives (e.g., credit unions, savings and loans cooperatives and building societies), but there is much heterogeneity across jurisdictions. Non-bank DTIs are not considered to be part of the shadow banking sector in the annual FSB shadow banking monitoring exercise;³⁴ however, they are significant in some WGSB jurisdictions and perform similar roles to banks: intermediating credit and performing liquidity and maturity transformation. Because non-bank DTIs perform similar credit intermediation activities to banks, in circumstances where they are subject to less stringent regulation than banks, they would represent the edge of the regulatory perimeter. Because the gaps between the regulation of banks and non-bank DTIs may be growing as authorities implement Basel III standards for banks, regulatory arbitrage may cause bank-like risks to migrate to non-bank DTIs.³⁵

Given this concern, the WGSB wanted to determine whether non-bank DTIs should be considered to be outside of the regulatory perimeter in the Americas. For this purpose, the WGSB developed and conducted a survey to gather information on the regulatory and supervisory environment in which non-bank DTIs operate, as well as the linkages between non-bank DTIs and the rest of financial system, primarily banks.³⁶ Responses were received from 13 jurisdictions in the Americas.³⁷

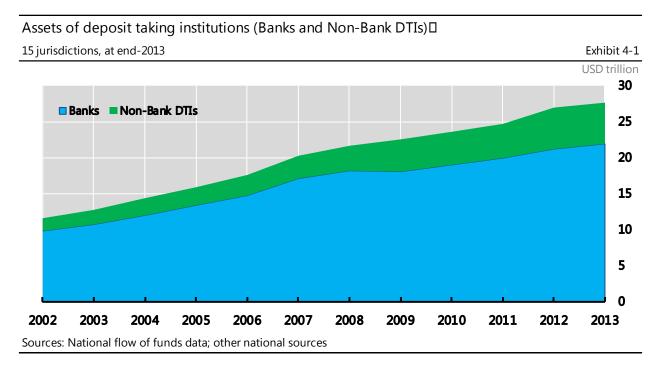
³⁴ The broad measure of shadow banking, referred to as the Monitoring Universe of Non-Bank Financial Intermediation (MUNFI), does not include deposit-taking institutions (whether banks or other DTIs).

³⁵ As explained later in this section, some jurisdictions have taken steps to preclude this possible regulatory arbitrage between banks and non-bank DTIs by ensuring that both sets of institutions are subject to the same regulation and supervision.

³⁶ The linkages between banks and non-bank DTIs are measured by bank assets to non-bank DTIs and bank liabilities to nonbank DTIs, which can be used to assess credit exposures and funding dependence between banks and non-bank DTIs.

³⁷ Participating RCGA jurisdictions in the non-bank DTI survey are: Bermuda, Brazil, British Virgin Islands, Canada, Cayman Islands, Chile, Colombia, Costa Rica, Jamaica, Mexico, Panama, the United States and Uruguay.

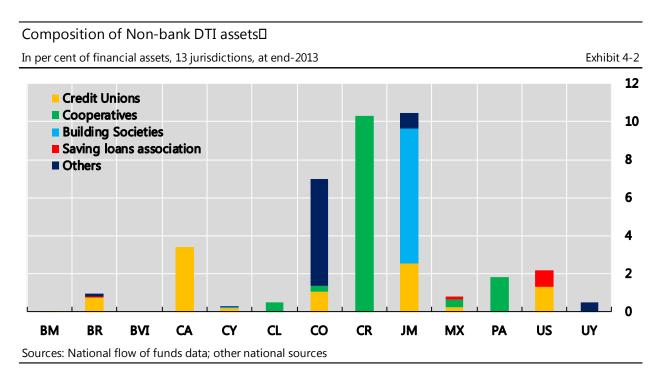
Assets of non-bank DTIs have been steadily growing in WGSB jurisdictions, and between 2007 and 2013 these assets increased at an annual rate of about 10% (Exhibit 4-1), reaching USD 5.7 trillion by end-2013. In contrast, the growth rate of bank assets in these jurisdictions reached 4% per year over the same period.³⁸ Possible explanations for this growth may be that non-bank DTIs may have been able to provide easier access to credit than banks in the aftermath of the crisis, or that some bank-like activities may have migrated from banks to non-bank DTIs.



Assets of non-bank DTIs as a proportion of total financial assets are particularly significant for Jamaica, Costa Rica, Colombia, Canada, the United States and Panama (Exhibit 4-2). At the other end of the spectrum, the non-bank DTIs of Bermuda and the British Virgin Islands consist of one credit union each. Credit unions and cooperatives are the most common types of non-bank DTIs across the Americas, but there is heterogeneity across countries as WGSB members collectively identified fifteen different types of non-bank DTIs in their jurisdictions.³⁹

³⁸ Excluding the United States and Canada, the average annual growth rates for WGSB jurisdictions are 12.7% for non-bank DTIs and 8.2% for banks. Some countries experienced faster growth in bank assets than non-bank DTI assets over the same period, notably Colombia, Peru and Uruguay.

³⁹ For even the most common categories, credit unions and cooperatives, definitional differences exist across countries. For example, whereas credit unions in most countries accept deposits, in Mexico credit unions do not accept deposits, but rather members' contributions are registered as loans that are not redeemable on demand.



With respect to links to the banks, data limitations prevented several jurisdictions from calculating the links between their banks and non-bank DTIs. Where such data are available, however, indications are that the bilateral exposures are relatively small, with bank assets to non-bank DTIs rarely exceeding 2% of bank assets.

Despite these low direct links, non-bank DTIs could affect financial stability owing to the important size of the sector relative to the banking sector in some jurisdictions. Furthermore, the share of the economically active population that participates as a member of a non-bank DTI is significant in many jurisdictions (Box 4-1). Thus, financial stress among non-banks DTIs could have confidence effects on banks.

Members to Eco	nomically Active Population (%)	Box 4-1
Jurisdiction	Type of Institution*	Members / Economically Active Population (%)
BM	Credit unions	8.6
BR	Saving loans associations	1.5
DK	Credit unions	5.7
СА	Credit unions & Caisses populaires	53.0
CL	Cooperatives under decoop	2.0
CL	Cooperatives under SBIF	14.0
	Credit unions	10.0
	Cooperatives	0.03
CO.	Financial corporations	0.004
CO	Commerce financial companies	2.0
	Leasing finance companies	2.6
	Employees funds	3.8
СҮ	Credit unions	36.8
JA	Credit unions	81.0
	Credit unions	0.2
MX	Cooperatives	8.9
	Saving loans associations	5.3
РА	Cooperatives	12.4
US	Credit unions	48.6
UY	Cooperatives	0.3

*Includes only institution types where member data was available

All non-bank DTI types that were identified in this exercise are regulated, and almost all are supervised.⁴⁰ These regulatory and supervisory authorities are usually national, typically the central bank, finance ministry or bank supervisor, and in some countries the entities are regulated at the sub-national level. Non-bank DTIs are regulated and supervised by the same authority that supervises its banks in Bermuda, Brazil, the Cayman Islands, Chile (for SBIF-regulated cooperatives), Colombia (with the exception of credit unions and employee funds, which are supervised by the Solidarity Economy Superintendent instead of the banking supervisor), Costa

⁴⁰ In Mexico, cooperatives and savings and loan associations have a minimum size threshold of 2.5 million UDS, below which they are not subject to regulation or supervision, provided they are registered within the terms of the Saving and Loan Associations Regulation Act.

Rica, Jamaica (except for credit unions, which are not prudentially regulated or supervised), Mexico, the United States (federal thrifts only), and Uruguay.

Regulation and Supervision of Credit Unions in CanadaBox 4-2

Credit unions and caisses populaires in Canada had USD 292 billion in assets at the end of 2013, equivalent to approximately 8% the size of chartered bank assets in Canada. They are regulated and supervised provincially, reflecting that they operate within, not across, provincial borders. The legislative and regulatory frameworks under which credit unions operate are typically established by respective ministries of finance, and supervision is typically undertaken by provincial deposit insurers.

In 2012 the federal government established a legislative framework to enable credit unions to incorporate and continue their operations as federal entities. This framework would allow federal credit unions to operate across provinces, and like other federally regulated financial institutions they would be regulated and supervised by the federal Office of the Superintendent of Financial Institutions, and have their deposits insured by the Canadian Deposit Insurance Corporation. At this point, however, no credit union operates under this federal framework.

While the domestic regulators and supervisors of banks and non-bank DTIs are often the same, the regulatory requirements that apply to non-bank DTIs can differ from those for banks. Accordingly, these differences represent a potential source of regulatory arbitrage, which deserves continued monitoring, especially as new capital, liquidity, leverage and resolution rules are adopted for banks.

Capital requirements apply to almost all non-bank DTIs in the Americas. These requirements generally follow Basel I, II or III, but can vary both across and within countries. For example, non-bank DTIs in Mexico and Jamaica typically face Basel I capital requirements, whereas those in Brazil are subject to Basel III requirements. In Canada, capital requirements for credit unions vary across provinces (reflecting that credit unions are generally provincially regulated), with most provinces applying requirements in line with Basel II.

In contrast to capital requirements, leverage and liquidity requirements for non-bank DTIs are far less common in the Americas. Leverage requirements were identified for about one-third of the non-bank DTI types, and those entities subject to such requirements represent about 15% of the financial assets of non-bank DTIs across the WGSB. Liquidity requirements do not apply to non-bank DTIs in a number of countries, including Brazil, Chile, Costa Rica, Jamaica and Panama.⁴¹

⁴¹ With the exception of credit unions, all other non-bank DTIs in Jamaica are required by law to hold liquid reserves in both domestic and foreign currency with the central bank.

For these countries, the ratio of liquid assets to short-term liabilities varies considerably, from about 10% in the case of credit unions in Bermuda and cooperatives in Chile (both of whose assets are a very low proportion of domestic financial assets), to about 125% for cooperatives in Costa Rica.

Deposit insurance is provided in several countries and across different entity types in the Americas. In most instances there are limits to the coverage available, and these limits vary considerably across countries. The coverage limits are usually equal to or less than the limits for bank customers, although credit union members in some Canadian provinces benefit from unlimited deposit insurance. While deposit insurance in some form is relatively common across the Americas, central bank backstops for liquidity support or to act as a lender of last resort for non-bank DTIs is less common.

Finally, few countries have requirements in place for resolution plans among its non-bank DTIs. Countries with some resolution planning requirements include Bermuda, Brazil, Canada, the United States and Uruguay.

In summary, the questionnaire revealed valuable information into the size, bank linkages and regulatory and supervisory treatment of non-bank DTIs in the WGSB. While their assets represent a relatively small share of national financial assets, the growth rate in assets of non-bank DTIs has exceeded that of banks in recent years. Credit unions and cooperatives are the most common, but there is heterogeneity across countries with other non-bank DTIs playing important roles. Where data were available, financial links between non-bank DTIs and banks were found to be relatively low. All non-bank DTIs are regulated and most are supervised, and they are often regulated and/or supervised by the banking regulator/supervisor. Regulatory and supervisory approaches differ. Capital requirements, for example, generally include a Basel I, II or III approach, but can vary both across and within countries. Accordingly, the gaps between bank and non-bank regulatory requirements represent a potential source of regulatory arbitrage. The potential for riskier credit intermediation activities to migrate to non-bank DTIs merits close monitoring.

4.2. Broker-Dealers⁴²

Broker-dealers are institutions that take proprietary positions or act as a broker in financial security transactions on their own account or on behalf of their clients. They play a key role as market-makers and suppliers of market liquidity. These institutions usually fund their inventory of financial assets using short-term financing such as repos, which exposes them to elevated leverage and maturity and liquidity risks. Although many broker-dealers are independent firms

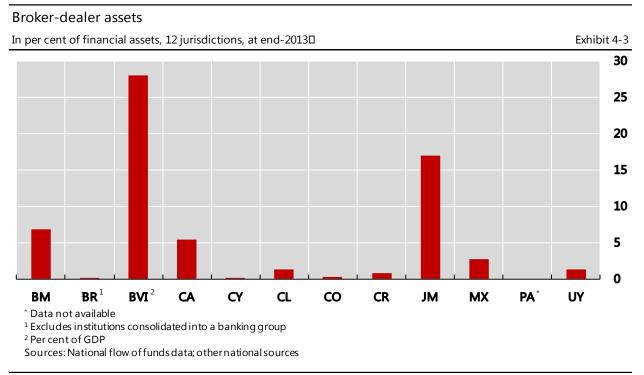
⁴² The observations discussed in this section are based on a compilation of the results from the sample of countries that participated in the broker-dealer survey: Bermuda, Brazil, British Virgin Islands, Canada, Cayman Islands, Chile, Colombia, Costa Rica, Jamaica, Mexico, Panama and Uruguay.

solely involved in brokerage services, many others are business units or subsidiaries of commercial banks or investment banks.

Similar to the non-bank DTIs survey, the WGSB sent out a questionnaire to gather detailed information about regulatory aspects of broker-dealers in the Americas. Results from the 12 jurisdictions that answered the survey confirm some of the aforementioned general features of this sector, in particular, the relevance of leverage and liquidity risks. The discussion that follows reflects the answers to the questionnaire provided by these jurisdictions.

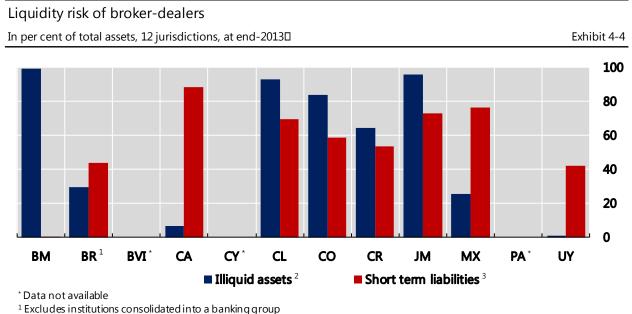
In terms of size, broker-dealers hold a significant share of financial assets in half of the respondent countries (Exhibit 4.3). In Canada and Jamaica, they represented more than 5% of financial assets at the end of 2013. Broker-dealers are also important in some jurisdictions with international financial centers like British Virgin Islands and Bermuda, where these entities are supervised by domestic authorities but in practice predominantly service international clients.⁴³ Furthermore, assets under management on behalf of their clients, which are not part of the entity's balance sheets, represent almost 50% of financial assets in Mexico and 20% in Panama.

The average jurisdiction surveyed has about 60 institutions registered as broker-dealers, with a maximum of 170 entities both in Canada and Brazil. In spite of that, the sector looks highly concentrated in the region since the largest three entities represent, on average, 52% of the market.



⁴³ Data limitations prevent accurate measurement of broker-dealer assets in Cayman Islands and Panama when they are part of bank holding companies.

Broker-dealers were seriously affected by the 2008-09 global financial crisis because of their reliance on short-term funding, in particular repurchase agreements or repos, which made them vulnerable to runs. In the region, broker-dealers remain exposed to liquidity risk (Exhibit 4-4). On the liability side, they rely heavily on short-term financing (more than 50%), with repos being an important source of funds in some countries, for example in Colombia (Box 4-3). On the asset side, several jurisdictions – Bermuda, Chile, Colombia, and Jamaica – reported that more than 80% of total broker-dealer assets are illiquid assets.⁴⁴ Broker-dealers also face high levels of leverage (Exhibit 4-5). On average, debt represents 60% of total assets and it is more important in those jurisdictions with higher short-term liabilities (Canada, Jamaica and Mexico). Note that this measure could be a lower bound considering the leverage through repo and derivatives.



² Assets that are not cash or easily convertible into cash, excluding clients' assets

³ Corresponds to all debt obligations coming due within one year

Sources: National flow of funds data; other national sources

⁴⁴ Illiquid assets are not easily convertible into cash. These exclude cash, money market fund shares, treasury bills, bank deposits and accounts receivable. For broker-dealers, clients' assets are not considered in the measure.

Broker-dealers in Colombia

Even though broker-dealers represent just 1% of OFIs' assets, they are important agents in the functioning of the Colombian financial market. Their contribution to OFIs' assets is small because, as with all the agents, their net repo position is included in this calculation (not the repo operations in the left hand side of the balance sheet). Broker-dealers are one of the most active agents in the repo market; if their repo operations as reported in the left hand side of the balance sheet were taken into account, their assets would represent 3% of the OFIs' assets.

In Colombia nine entities account for 75% of the public debt repo market; two of these are broker-dealers. One implication of this is that these two companies are highly leveraged (equity/assets of 13% and 15%, versus an average of 66% for broker-dealers). Another implication of their important activity in the repo market is that they are among the top 20 systemic financial institutions in Colombia using the identification methodology proposed by the BIS. The explanation for this is their high contribution to the interconnection and substitutability components.

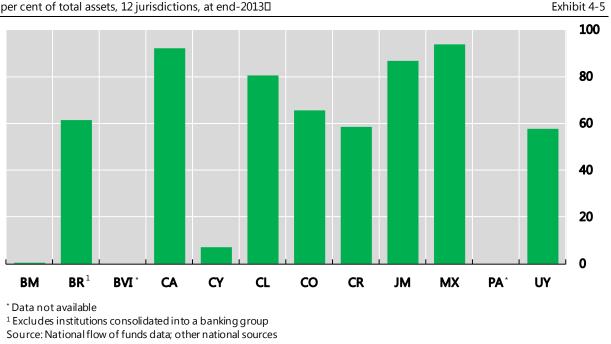
Given the relevance of broker-dealers in the financial market, authorities have been working in identifying their potential risks and making sure there is adequate regulation. The main risk identified so far is liquidity risk and it might materialize because these entities sometimes do transactions in the market platforms under the brokerage contract (in the name of their clients). If one of their clients defaults they will usually try to make whole the transaction using their own funds; otherwise, given a default, the Financial Superintendence would intervene on behalf of the broker-dealer.

To cope with this and the liquidity risk faced by broker-dealers because of their own transactions, since September 2014 they have to comply with a liquidity indicator, similar to Basel III LCR. The indicator takes into account the risk they are exposed under the brokerage contract by including 5% of their clients' gross positions in the liquidity ratio. Broker-dealers have to comply with a liquidity indicator for 1- and 7-day periods.

Another risk under this topic is the intra-day liquidity risk faced by broker-dealers. Given that they are not required to hold reserves at the Central Bank (CB), as banks do, they start their daily transactions with little cash at the CB. For the settlement of their transactions they depend on the cash they receive from other operations and on intra-day credit provided by some banks. This dependence of incoming cash to settle the transactions poses a liquidity risk to the payment system. This cannot be solved by accessing the CB unless the broker-dealer has the adequate collateral (public bonds) to access the intra-day repo provided. To have a sense of magnitudes, on average, repo operations in the left hand side of the balance sheet over equity are 155%, while public debt over equity is 13%. Given the new liquidity requirement for broker-dealers, the CB is studying if more regulation is needed to mitigate the intra-day liquidity risk. Authorities are also in the search of a better solvency indicator for broker-dealers. Right now they have to maintain a solvency ratio, similar to a bank's solvency ratio, higher than 9%.

Broker-dealer debt

In per cent of total assets, 12 jurisdictions, at end-2013D



The links between banks and broker-dealers were reported by only a few jurisdictions. In those cases, banks show negligible exposures to broker-dealers through both debt and loans (less than 0.2% of banks assets). Exceptions are Canada and Jamaica with exposure of 12% and 1% of bank assets, respectively. This exposure would increase if common share ownership were also considered since, in most jurisdictions, some of the broker-dealers belong to a banking group. Such link may affect financial stability because of the higher dependence on short-term liabilities of the bank holding company which may require additional capital requirements relative to those banks that do not own broker-dealers.

Similar to non-bank DTIs, in all respondent jurisdictions, broker-dealers are regulated and supervised by the monetary authority, finance ministry or, most often, the financial institution superintendent, Also, in half of the jurisdictions there are self-regulation schemes that either complement the supervisor's role, like the Stock Exchange in Brazil, or constitute the only supervisor of broker-dealers, like IIROC in Canada. In terms of regulatory standards, all jurisdictions reported that broker-dealers have a specific law, except in Uruguay. In Brazil the same prudential regulatory regimes for banks are also applied to securities brokerage and distribution companies.

All jurisdictions establish minimum capital as part of their licensing regimes, ranging from USD 12,000 to USD 650,000 and also require some kind of capital and liquidity requirements for the broker-dealers operations. Regarding capital, countries either apply a specific leverage requirement (capital to assets or liabilities to capital), or are compliant with Basel II or III framework, as in Mexico and Brazil.⁴⁵

Two countries (Canada and Jamaica) try to ensure adequate liquidity by limiting the difference between short term assets and short term liabilities and five of them restrict foreign currency exposure (Brazil, Colombia, Costa Rica, Jamaica, and Mexico). In general, restrictions in the holding of assets and issuance of certain liabilities are present in few jurisdictions.

In terms of market conduct regulation, there is a high degree of disclosure of standards by all the respondents considering not only the release of financial statement reports but also information about fees, commissions, and other types of reports (for example, liquidity analysis and certificate of compliance with legislation in Bermuda, and reports in relation to their repo businesses in Jamaica).

Finally, from a stability regulation perspective, few jurisdictions in the region allow brokerdealers to have public liquidity access. Entities in Brazil, Colombia, Costa Rica and Jamaica, however, may borrow from the discount window of the central bank.⁴⁶

Summarizing, broker-dealers are an important part of the financial system in most jurisdictions that responded to the questionnaire. These entities are regulated and supervised in all reporting jurisdictions but there is a lack of regulation in specific areas. For instance, maturity and/or currency mismatches, holding of specific assets (derivatives, loans) and issuance of liabilities, concentration of counterparty, and related business. Broker-dealers are usually highly levered and have significant liquidity risk using repurchase agreements as an important source of financing, although in some jurisdictions repos encumber sovereign bonds as the underlying collateral. Some authorities have recently changed their regulation to address some of the potential risks arising from this sector. For example, as mentioned in Box 4.3, since September 2014 Colombia established a new liquidity indicator, similar to the Basel III LCR and is also in the search of a better solvency indicator. In the broker-dealer industry reform Jamaica included, among others, new backstop facilities (put in place in October 2014), enhanced crisis management and resolution framework (put in place in March 2015) and introduced a gradual tightening of prudential standards for broker-dealers which will serve to reduce the size of the "retail repo" business.

5. Key findings and recommendations

Key accomplishments and findings

⁴⁵ Broker-dealers and banks in Mexico abide by the same capital rules.

⁴⁶ In Brazil, broker-dealers also have access to a stock exchange mechanism.

The second round of the WGSB shadow banking monitoring exercise was valuable because the exercise was refined and expanded to include a wider set of jurisdictions. Consequently, it provided useful data on non-bank credit intermediation in the Americas region. This is especially true for the non-FSB members, including IFCs. The data collected complements the work of the FSB AGV in identifying global trends in the size and risks of non-bank credit intermediation.

The monitoring exercise is a useful vehicle for disseminating the AGV methodology to non-FSB members and as a constructive forum for discussing and sharing experiences on overseeing and analyzing non-bank activities and their risks. In several of these participating constituencies, it has led to important efforts to improve the collection and analysis of data on non-bank financial institutions. The WGSB agreed that further work needs to be done on open-ended investment funds, in the context of illiquid markets, and finance companies (including micro-credit). It also agreed to conduct the monitoring exercises in sync with the AGV exercises to ensure comparability of approaches and data.

Data and insights collected from the six IFCs that participated in the exercise represent another important step towards identifying and better understanding the role of international financial centers in the global network of non-bank credit intermediation.

Recommendations

Recommendation #1. The work of the WGSB should continue and the shadow banking monitoring exercise should be conducted by the RCGA on the same basis as the FSB AGV exercise. In particular, effort should be made to narrow the scope of the monitoring consistent with the AGV exercise, use more granular data to leverage the work of the FSB's workstream on other shadow banking entities (WS3) on shadow banking entities and activities and begin developing and incorporating risk metrics into the exercise.

Although important progress has been made in non-FSB jurisdictions in the collection of nonbank credit intermediation data and the analysis of risks, more needs to be done. Future monitoring exercises should follow the FSB AGV exercise more closely to refine the measure of shadow banking activities, and to identify and analyse risks arising from these activities. Ultimately, it could be integrated into the AGV process, especially for IFCs since they represent an important data gap.

Recommendation #2. Future work on shadow banking in the RCGA should pay particular attention to two areas that were identified as posing potential risks to financial stability in the region: open ended funds (in particular in the context of illiquid markets), and finance companies (including micro-credit).

An ongoing regional discussion of these issues would be useful for local policy making, and could feed in to global regulatory discussions.

Recommendation #3. Other FSB RCGs should conduct similar exercises to map non-bank credit intermediation in their regions, including for international financial centers.

A comprehensive global exercise to collect data on shadow banking, including risk metrics, and conduct risk analysis on shadow banking would reduce important data gaps, make it easier to identify examples of regulatory arbitrage and to examine cross-country linkages, and deepen our understanding of the global risks stemming from shadow banking activities.

Annex 1 FSB Regional Consultative Group for Americas

Working Group on Shadow Banking

- Terms of Reference -

The "shadow banking system" can broadly be described as "credit intermediation involving entities and activities outside the regular banking system". Although intermediating credit through non-bank channels can have advantages, such channels can also become a source of systemic risk, especially when they are structured to perform bank-like functions (e.g. maturity transformation and leverage) and when their interconnectedness with the regular banking system is strong.

Efficient monitoring of the shadow banking sector, and its connection with other areas of the financial sector, is an important element for strengthening overall financial stability oversight and to mitigate the build-up of risks. Monitoring shadow banks has thus become a key priority for the FSB and the G20.

The FSB set out its initial recommendations to enhance the oversight and regulation of the shadow banking system in its report to the G20 in October 2011. Based on the commitment made in the report, the FSB has conducted two annual monitoring exercises. In the 2012 exercise coverage included 25 jurisdictions and the euro area as a whole, compared to 11 jurisdictions and the euro area in the 2011 exercise. The addition of new jurisdictions brings the coverage of the monitoring exercise to 86% of global GDP and 90% of global financial system assets.

The exercise was conducted by the FSB Analytical Group on Vulnerabilities (AGV), the technical working group of the FSB Standing Committee on Assessment of Vulnerabilities (SCAV), using quantitative and qualitative information, and followed a similar methodology as that used for the 2011 exercise. Its primary focus was on a "macro-mapping" based on national Flow of Funds and Sector Balance Sheet data (hereafter Flow of Funds), that looks at all non-bank financial intermediation to ensure that data gathering and surveillance cover the areas where shadow banking-related risks to the financial system might potentially arise.

During its 3rd meeting, the RCG for the Americas (RCGA) discussed the challenges and benefits of carrying out a similar exercise at the regional level so as to achieve a better understanding of the scope and impacts of "shadow banking" in the countries in the Americas. Particular emphasis will be placed in capturing specific characteristics of the "shadow banking" sector in the region. Two potential areas of emphasis are non-bank credit intermediation (via micro credit, informal lending, etc.) and the nature and size of "shadow banking" in offshore financial centers. This regional report would also lead to a better understanding of "shadow banking" globally, in particular in those countries that are not G20 members.

To carry out this exercise the RCGA agreed to set up a working group (WGSB) that would design and conduct a shadow banking monitoring exercise for the countries in the RCGA, based on the AGV exercise, including those enhancements that will be implemented in the 2013 exercise. The outcome of the exercise will be brought for discussion to the RCGA, and eventually presented to the FSB plenary.

Below is the proposed operational framework for the WGSB.

I. Scope of discussion

The WGSB should aim to complete the following tasks:

- Design a shadow banking monitoring exercise for countries in the RCGA. This should be based closely on the AGV exercise, so as to ensure global comparability.
- This exercise should include a "macro-mapping" monitoring component, combined with country specific analysis of the nature of shadow banking, its connection to the rest of the financial sector, and especially to the traditional banking sector, and potential risks from this connection. Country case studies may be included to delve deeper into certain types of shadow banking entities or activities.
- Propose recommendations and identify future challenges to improve the oversight of the shadow banking sector in the region.

II. Membership

The WGSB should comprise a mix of senior level representatives from members of the RCGA and technical experts from the various financial authorities of the jurisdictions members of the RCGA.

III. Deliverables

The WGSB should prepare a report for review at the fifth RCGA meeting late in 2013. Discussion at that meeting should lead to a set of recommendations to be put forward to the FSB Plenary for consideration.

IV. Working arrangements

The WGSB will conduct most of its work by conference calls and written procedures. However, one physical meeting will be necessary.

All RCGA members will be requested to answer a questionnaire/template and provide additional country level analysis. This questionnaire will be based on the AGV questionnaire that draws mostly from flow of funds data⁴⁷, and therefore should not require additional information from AGV members.

V. Time Line

- March 14th Establish membership of the WGSB
- Late-March Conference call to establish the working timeline and discuss the draft of the data questionnaire/template
- September Meeting to analyze cross country data and country specific analysis. September date is set to benefit from AGV discussion in July.
- November Draft Report to RCGA.

⁴⁷ See Global Shadow Banking Monitoring Report 2012 by the FSB (18 November 2012, available at http://www.financialstabilityboard.org/publications/r_121118c.pdf), for the questionnaire.

Annex 2 FSB Regional Consultative Group for the Americas Working Group on Shadow Banking List of Members

Co-chairs	Claudio Raddatz Director of Financial Policy Division Banco Central de Chile
	Lawrence Schembri Deputy Governor Bank of Canada
Argentina	Emiliano Basco Principal Analyst of Economic Research Central Bank of Argentina
	Hernán Rodriguez Information Dissemination Deputy Manager Central Bank of Argentina
	Andrés Calderón Supervision Senior Inspector Central Bank of Argentina
Bahamas	Alwyn Jordan Central Bank of The Bahamas
Barbados	Allan Wright Central Bank of Barbados
Bermuda	Marcelo Ramella Deputy Director, Policy, Legal Services & Enforcement Department Bermuda Monetary Authority
	Leo Mucheriwa Assistant Director Research Bermuda Monetary Authority

Brazil	Frederico Souza Head of division, Financial System Monitoring Department Banco Central do Brasil
	Irineu Hiroshi Yokoo Banco Central do Brasil
British Virgin Islands	Alva McCall Deputy Director, Policy Research and Statistics Division Financial Services Commission
Canada	Michael Januska Principal Researcher, Financial Stability Department Bank of Canada
Cayman Islands	Justine Plenkiewicz Head, Policy and Development Division Cayman Islands Monetary Authority
	Alvis Bonita Anglin Cayman Islands Monetary Authority
Chile	Alfredo Fuentes Senior Economist Statistics Division Banco Central de Chile
	Carmen Gloria Silva Senior Economist Financial Stability Area Banco Central de Chile
Colombia	Pamela Andrea Cardozo Ortiz Banco Central de la República
Costa Rica	Josué Cortés Segura Banco Central de Costa Rica
	Genaro Segura Calderón Technical Services Superintendencia General de Entidades Financieras (SUGEF)

Jamaica	Brian Langrin Head, Financial Stability Department Bank of Jamaica
Mexico	Ana Mier y Terán Banco de México
	José Loyola Trujillo Director General for International Affairs Mexican National Banking and Securities Commission
Panama	Nahila Melgar Director of Risk Superintendency of Banks
Peru	Marylin Choy Central Manager, Operation and Technical Affairs Central Reserve Bank of Peru
	Carlos A. Ballón Avalos Gerente de Operaciones Monetarias y Estabilidad Financiera Central Reserve Bank of Peru
Uruguay	Jose Antonio Licandro Head, Financial Regulation Superintendence of Financial Services Central Bank of Uruguay
	Juan Pablo Bazerque Central Bank of Uruguay
United States	Matthew Poggi Economist, International Banking and Securities Markets US Treasury

Annex 3 FSB Regional Consultative Group for Americas Working Group on Shadow Banking 2014-2015

- Work Plan -

The "shadow banking system" can broadly be described as "credit intermediation involving entities and activities outside the regular banking system". Although intermediating credit through non-bank channels can have advantages, such channels can also become a source of systemic risk, especially when they are structured to perform bank-like functions (e.g. maturity transformation and leverage) and when their interconnectedness with the regular banking system is strong.

Efficient monitoring of the shadow banking sector, and its connection with other areas of the financial sector, is an important element for strengthening overall financial stability oversight and to mitigate the build-up of risks. Monitoring shadow banks has thus become a priority for the FSB and the G20.

The FSB set out its initial recommendations to enhance the oversight and regulation of the shadow banking system in its report to the G20 in October 2011. Based on the commitment made in the report, the FSB has conducted three annual monitoring exercises. In the 2012 and 2013 exercises, coverage included 25 jurisdictions and the Euro area as a whole, compared to 11 jurisdictions and the Euro area in the 2011 exercise. The addition of new jurisdictions brought the coverage of the monitoring exercise to 80% of global GDP and 90% of global financial system assets.

These exercises have been conducted by the FSB Analytical Group on Vulnerabilities (AGV), the technical working group of the FSB Standing Committee on Assessment of Vulnerabilities (SCAV), using quantitative and qualitative information. Their primary focus have been on a "macro-mapping" of the shadow banking system, based on national Flow of Funds and Sector Balance Sheet data (hereafter Flow of Funds). This mapping incorporates all non-bank financial intermediation to ensure that data gathering and surveillance cover the areas where shadow banking-related risks to the financial system might potentially arise.

During its third meeting, the RCG for the Americas (RCGA) discussed the benefits of carrying out a similar exercise at the regional level so as to achieve a better understanding of the scope and impacts of "shadow banking" in the countries in the Americas. One of the areas of emphasis discussed was the nature and size of "shadow banking" in those member countries that had international financial centers. This regional report would also lead to a better understanding of "shadow banking" globally, particularly in those countries that are not G20 members.

To carry out this exercise, the RCGA agreed to set up a working group (WGSB) that would design and conduct a shadow banking monitoring exercise for the countries in the RCGA, based on the AGV exercise.

The outcome of this first exercise was brought for discussion to the fifth meeting of RCGA in December 2013, and will be presented to the FSB plenary in March 2014. In the December meeting the RCGA decided to extend the duration of the working group, and to repeat the exercise during 2014-15.

Below is the proposed operational framework for the WGSB for the period 2014-2015.

I. Scope of Working Group

The WGSB should aim to:

- Incorporate those RCGA member jurisdictions that did not participate in the 2013 shadow banking monitoring exercise, especially new IFC members.
- Develop and conduct a new shadow banking monitoring exercise for countries in the RCGA. This should closely follow the AGV exercise to enhance comparability to other jurisdictions and to the 2013 RCGA WGSB findings to identify changes in trends.
- This exercise will include a "macro-mapping" monitoring component of shadow banking, its connection to the rest of the financial sector, especially to the traditional banking sector, and the potential risks arising from this connection. The exercise should identify specific activities that could merit further analysis by the RCGA.
- Country case studies will be included to delve deeper into two of the activities the 2013 exercise considered could pose a risk for financial stability in specific jurisdiction: non-bank deposit-taking institutions and broker-dealers.
- Produce a final report for discussion in the RCGA that may be included in the 2015 SCAV/AGV global shadow banking monitoring report.

II. Membership

The WGSB is made up of senior level representatives from the various financial authorities of the jurisdictions members of the RCGA⁴⁸.

The WGSB will be co-chaired by Claudio Raddatz, Director of Financial Policy Division at Banco Central de Chile, and Lawrence Schembri, Deputy Governor of Bank of Canada for the period 2014-2015. The Central Bank of Chile and Bank of Canada will provide secretariat support for the WGSB.

III. Deliverables

The WGSB will complete a new shadow banking monitoring exercise in the region during 2014. The results will be included in a report to be discussed at the RCGA meeting in December 2014. This report

⁴⁸ The updated membership of the WGSB is given in the Annex.

will be updated in early 2015 and sent to the RCGA and the FSB Secretariat. The WGSB will also produce a dataset available to WGSB members with information from the macro-mapping exercise.

IV. Working arrangements

The WGSB will conduct most of its work by conference calls and written procedures. However, one physical meeting will be necessary. A two-day workshop will be organized in November 2014 with the following agenda:

- Day 1: i) session on data collection (summary results from templates and specific issues arising from in the completion of the templates) ii) session on one or more issues related to International Financial Centers (IFCs).
- Day 2: i) session on non-bank deposit-taking institutions in the Americas, in particular, credit cooperatives and ii) a session on broker-dealers.

All WGSB members will be requested to answer a template on shadow banking activity and provide a brief document with country level analysis. In addition some members will be invited to present on specific issues in the meeting or prepare brief notes on these issues for the finance report. The template will be based on the WGSB template used in the 2013 exercise that draws mostly from flow of funds data, and therefore should not require additional information from WGSB members.

In addition, WGSB members will be requested to complete a brief questionnaire on regulatory and supervisory aspects on non-bank deposit taking institution and broker-dealers in their jurisdictions.

V. Time Line

March	Establish membership of the WGSB including new jurisdictions. Circulate the Work Plan (WP) and data template
May 23	Conference call to discuss WP, data template and venue of workshop
End of May	Circulate revised (WP) and data template
Mid June	Circulate questionnaire on regulation for comments
Early July	Circulate revised questionnaire on regulation for answers of the members
September	Data collection (1 st submission), fill in questionnaire on regulation
October	Circulate the workshop program
13-14 November	Workshop
Nov and Dec	Data collection (revised submission) and country notes
December	Presentation to RCGA
May 2015	Document to RCGA and AGV

Annex 4 Template used for the data collection exercise

	1																	(USD mil))
	Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10	Col 11	Col 12	Col 13	Col 14	Col 15	Col 16	Col 17	Col 18	
STOCK of financial assets as of end-year	Financial Institutions =(col2+col3+c ol13+col14+co l15+col19+col	Central Bank	Deposit-Taking Institutions =(col4+col7+co 110)	Banks (Note 8)	[[XX (Note 1)	[Others			Insurance Companies (Note 2, 3)	Pension Funds (Note 2,3)	Public Financial Institutions =(col16+col17+	Development Banks	XX (Note 1, 4)	Others	
	32)				Assets to OFIs	Liabilities to OFIs		Assets to OFIs	Liabilities to OFIs		Assets to OFIs	Liabilities to OFIs			col18)				
2002	0		0												0				1
2003	0		0												0				
2004	0		0												0				
2005 2006	0		0												0				
2007	0		0												0				
2008	0		0												0				
2009	0		0												0				
2010 2011	0		0												0				
2011 2012	0		0												0				
																			1
	Col 19	Col 20	Col 21	Col 22	Col 23	Col 24	Col 25	Col 26	Col 27	Col 28	Col 29	Col 30	Col 31	Col 32	Col 33	Col 31	Col 34	Col 35	Col 36
STOCK of	Other																	Financial	1
financial assets as of end-year	Financial Intermediarie s (OFIs)	Money Market Funds (MMFs) - of which constant NAV or	Other Money Market Funds (MMFs) (Note 5)	Finance Companies	Structured Finance Vehicles	Public Funds (Note 9)	equity funds	of which fixed income/bond funds	other funds	Non-public funds	equity funds	of which fixed income/bond funds	other funds	Broker- dealers	Non Bank Credit Card issuers (Note 1)	Microcredit to Households and SMEs (Note 1)	Others	Auxiliaries (please describe in Note 7)	rate at end of the period
2002 2003 2004 2005	0 0 0 0																		
2006 2007 2008	0 0 0																		
2009 2010 2011 2012	0 0 0																		
																e data point in 20			<u> </u>

* Members may complement the Flow of Funds / sector balance sheet data with other information. If data is unavailable, please fill in "N/A" or keep it blank. If end-2012 data is not available, please provide the most recent available data point in 2012 and indicate the reference date

Please indicate here whether you are reporting in the above financial assets (preferred) or total assets: XXXXXXXXX Blue columns contain a formula; please do not modify

Note 1: For XX, please fill in subcategories as relevant.

Note 2: If data for Insurance Companies and Pension Funds can not be separated, please fill the aggreaged number in the insurance companies' cells and explain that in the Note cell.

Note 3: If data for Insurance Companies, Pension Funds and Public Financial Institutions are included in Other Financial Intermediaries, please clarify that in the Note cell.

Note 4: If data for government-owned deposit-taking institutions are included in the Public Financial Institutions, please separate that out in XX cells or clarify as such in the Note cell.

Note 5: If data for MMFs can not be separated between CNAV and Others, please fill the aggreaged number in the CNAV MMF cells and explain that in the Note cell.

Note 6: If data for funds can not be separated from Other Investment Funds, please fill the aggreaged number in the Other Investment Funds cells and explain that in the Note cell.

Note 7: If your Flow of Funds / sectoral accounts distinguish financial auxiliaries, please describe what they are and provide examples

Note 8: Add percentage of public ownership of total financial assets.

Note 9: Funds that have no restrictions on the type of investor, minimum subscription amount or sales method (i.e. not restricted to private placements).

Template for International (Offshore) Financial Sector Entities 1

			Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10	Col 11	Col 12	Col 13	Col 14	Col 15
STOCK of financial assets			Financial Institutions			Other Financial Intermediaries (OFI's)											
as of end-year	Assets to Banks ²	Liabilities to Banks ²		Banks ³	Insurance Companies		Money Market Mutual Funds	Public Funds 5	equity funds	of which fixed income/bond	other funds	Non-public funds (Private Funds) 6	equity funds	of which fixed income/bond	other funds	Structured Finance Vehicles	Other Financial Institutions ⁴
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2011										funds				funds			
Note (Detailed definition etc.)																	

1 IFC entities are defined on the basis that they exclusively (or almost exclusively) conduct financial transactions with non-residents. Assets should be recorded in these columns.

2 Assets and liabilities held by the offshore banks with respect to domestic banks.

3 This category would include both subsidiaries and branches, and include mainly banks that have licenses that limit their activities with residents.

4 These could include OFIs not already identified, such as finance companies.

5 Funds that have no restrictions on the type of investor, minimum subscription amount or sales method (i.e. not restricted to private placements).

6 See definition on hedge funds in the attached document of Q&A.

	AIII	lex 5			
QUESTIONNAIRE ON NO	ON BANK DEPOSIT TAKING INSTITUTIONS				
Information up to December 2013					
Fill in the information for each type of	institution separately.				
Type of institution			Yes / No		Observations (1)
Credit Unions					
Caisses Populaires Cooperatives					
Consume Finance Compa	anies				
Saving and Loans Associa					
Non bank Credit Conglor	nerate				
Building Societies Financial Corporations					
Commercial Finance Con	npanies				
Saving Banks					
Merchant Banks					
Financial Houses					
Other:					
Description			Value		Observations (1)
Total assets	(USD million)				
Liquid assets (cash, finan Total liabilities	cial assets) (USD million) (USD million)				
Short term liabilities	(USD million)				
Banks assets to Non-ban					
Banks liabilities to Non-b					
Number of members Member / Economically	(#)				
Number of institutions (
Market share of 3 largest					
Nonprofit organization			Yes / No		Observations (1)
Nonprofit organization Tax exemption					
Belongs or consolidates	with a banking group				
	Accounting consolidation				
Belongs or consolidates	Prudential consolidation				
Belongs of consolidates	with a congromerate				
Prudential regulation		Yes / No	Who? (2)	Value (3)	Observations (1)
Regulator / supervisor	Are these entities regulated?				
	All of them? Are these entities supervised?				
	All of them?				
	Specific Law				
	Are included in other laws: central bank, banking system?				
Entry requirements	Minimum capital				
Linuy requirements	Ownership restrictions				
	Open entity				
	Closed entity (bond of association)				
	Fit and proper test on directors, management, or key staff Detailed business plan				
	How long does it take to obtain a license?				
Capital requirements	Capital adequacy ratios				
	Basel I Basel II				
	Basel III				
	Leverage				
Line della constante a					
Liquidity requirements	LCR NSFR				
	Liquidity ratio				
Other requirements	Provisions for credit risk Delinquency ratio				
	Central risk counterparty				
	Clearing house				
	Requirement for recovery plan				

Annex 5

Balance sheet restrictions	Limits on asset/liability mismatches:				
bulance sheet restrictions	Maturity				
	Currency				
	Limits or restrictions in the holdings of:				
	Commercial loans				
	Consumer loans				
	Housing loans				
	Foreign currency loans				
	Credit cards				
	Investments				
	Other assets				
	Limits or restrictions in the issuance of:				
	Demand deposits				
	Time deposits				
	Institutional investor deposits				
	Bonds				
	Commercial paper Credit from financial institutions				
	Other liabilities				
	Limits or restrictions to concentration of exposures:				
	By borrower				
	By lender				
	Limits on related businesses related to:				
	Insurance				
	Other				
	Limits or restrictions on equity:				
	Redemption restrictions				
larket conduct regulation		Yes / No	Who? (2)	Value (3)	Observations (1)
Disclosure standards	Disclosure of rates, fees, and commissions				
	Release of accounting data				
	Financial statement reporting				
	Audited financial statements				
	IFRS Special reporting to regulators				
	Special reporting to regulators Specific valuation systems for assets and liabilities				
	specific valuation systems for assets and habilities				
Market conduct rules	Misleading advertisement				
market conduct rates	Related business lending				
	Related business consolidation				
Governance	Directors responsible for activities				
	Independent directors from management				
	Rules on minority ownership				
ompetition regulation			Value	-	Observations (1)
Market structure requirement	ts Maximum market share per institution (%)				
			Yes / No		
	Competes with regulated banks				
tability regulation			Yes / No		Observations (1)
Deposit insurance			Tes / NO		Observations (1)
Liquidity guarantees access					
Equility guarantees access	Access to Central Bank Lender of Last Resort				
	Access to Central Bank Liquidity (different from lender of last reso	ort)			
	Other Liquidity guarantees access				
Central bank account					
Deposit reserves					
Requirement for resolution	lan				
		·			· · · · · · · · · · · · · · · · · · ·
change rate (end of 2013)		l			
_					
	: frequency, the regulation criteria if the restriction applies only for a	group (e.g. capit	al amount, total a	assets, number of	f members), etc.
) Put the name of the institution who reg					
) When it applies, fill in the value or perc	entage of each regulatory item, as it is currently stated in regulation.				

QUESTIONNAIRE ON BROKER DEALERS

1			Value		Observations (1)
Total assets	(USD million)		value		observations (1)
Liquid assets (cash, financia					
	off-balance sheet) (USD million)				
Total liabilities	(USD million)				
Short term liabilities	(USD million)				
Banks assets to Non-bank D					
Banks liabilities to Non-bar					
Number of institutions	(#)				
Market share of 3 largest in	stitutions (%)				
			Yes /No		Observations (1)
Tax exemption			Yes / No		Observations (1)
Belongs or consolidates wit	h a banking group				
	Accounting consolidation				
	Prudential consolidation				
Belongs or consolidates with					
regulation		Yes / No	Who? (2)	Value (3)	Observations (1)
Regulator / supervisor	Are these entities regulated?				
	All of them?				
	Are these entities supervised?				
	All of them? Specific Law				
	Are included in other laws: securities law?				
	Auto-regulation or market discipline				
Entry requirements	Minimum capital				
	Ownership restrictions				
	Fit and proper test on directors, management, or key staff				
	Detailed business plan				
	How long does it take to obtain a license?				
Combol an evidence and	1				
Capital requirements	Leverage				
	Other				
Liquidity requirements	Liquidity ratio				
Equility requirements	Other				
Other requirements	Provisions for credit risk				
	Central risk counterparty				
	Clearing house				
Balance sheet restrictions	Limits on asset/liability mismatches:				
	Maturity				
	Currency Limits or restrictions in the holdings of:				
	Bilateral repos				
	Tri-party repos				
	Retail repos				
	Derivatives				
	OTC derivatives				
	Loans				
	Invesments				
	Other assets				
	Limits or restrictions in the issuance of:				
	Demand deposits				
	Time deposits				
	Institutional investor deposits				
	Bonds				
	Commercial papers Credit from financial institutions				
	Other liabilities Limits or restrictions to concentration of exposures:				
	By repos counterparty				
	By derivatives counterparty				
	Other				
	Limits or restrictions on related businesses:				
	Proprietary trading				
	Custody				
	Underwriting				
	Market maker activities				
	Limits or restrictions on:				
	Segregation of securities				

Market conduct regulation		Yes / No	Who? (2)	Value (3)	Observations (1)
Disclosure standards	Disclosure of rates, fees, and commissions				
	Release of accounting data				
	Financial statement reporting				
	Audited financial statements				
	IFRS				
	Special reporting to regulators				
	Specific valuation systems for assets and liabilities				
Market conduct rules	Misleading advertisement				
	Related business lending				
	Related business consolidation				
Governance	Directors responsible for activities				
	Independent directors from management				
	Rules on minority ownership				
Competition regulation			Value		Observations (1)
Market structure requirements	Maximum market share per institution (%)				
			Yes / No		
	Competes with regulated banks		1007110		
	competes with eguided banks				
Stability regulation			Yes / No		Observations (1)
Deposit insurance					
Liquidity guarantees access					
	Access to Central Bank Lender of Last Resort				
	Access to Central Bank Liquidity (different from lender of last resort)				
	Other Liquidity guarantees access				
Central bank account					
Deposit reserves					
Exchange rate (end of 2013)]			
(1) Write down any additional information: valu	e, percentage, frequency, the regulation criteria if the restriction applies	only for a group (e ø canital amou	nt total assets n	umber of members) etc
(2) Put the name of the institution who regulates		, a Broup (,	
	e of each regulatory item, as it is currently stated in regulation.				
(c,					