Financial Stability Board
Regional Consultative Group for the Americas

Report on Shadow Banking in the Americas

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The RCG for the Americas 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 the Americas can be found at http://www.financialstabilityboard.org/about/rcgamericas.pdf***

22 August 2014

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 with the traditional banking sector, 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), and take place in the absence of effective regulation and oversight. This vulnerability is magnified when the regular 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 promoting more resilient credit intermediation through balanced and effective regulation is a key 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 three annual shadow banking monitoring exercises. The 2013 exercise used end-2012 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 and 2012 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 exercise attempted to narrow the scope of the monitoring by filtering out non-bank financial activities

[1] Based on such features, 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.

[2] For a nontechnical explanation of the motivation and progress to date of the FSB's work on shadow banking, refer to http://www.financialstabilityboard.org/publications/r_130905a.pdf.

[3] See "Shadow Banking: Strengthening Oversight and Regulation" by the FSB, available at http://www.financialstabilityboard.org/publications/r_111027a.htm.

[4] See Global Shadow Banking Monitoring Report 2013 by the FSB, available at http://www.financialstabilityboard.org/publications/r_131114.pdf.

within consolidated banking groups and those activities that do not represent credit intermediation (e.g. equity investment funds). It also considered emerging trends, such as direct lending by non-banks (insurance companies and pension funds) to non-financial corporations.

At its 3rd meeting in December 2012 in Bermuda, the Regional Consultative Group for the Americas of the FSB (RCGA) discussed the challenges and benefits of carrying out a similar exercise at the regional level to achieve a better understanding of the scope and impacts of shadow banking in these jurisdictions. 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. This regional report should also lead to a better understanding of shadow banking globally, in particular in those jurisdictions that are not participants in the AGV monitoring exercise.

The RCGA set up a working group (WGSB) to design and conduct a shadow banking monitoring exercise based on the AGV exercise.[5] The main deliverable was to prepare a report for the RCGA meeting in December 2013 and then present it to the FSB Plenary in April 2014.

The purpose of this document is to report on the WGSB's work on the following tasks:[6]

- Design a shadow banking monitoring exercise for jurisdictions in the RCGA based on the AGV exercise to ensure comparability;
- Provide a "macro-mapping" monitoring component, combined with jurisdiction-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 (Case studies are included as boxes in the report to delve deeper into certain types of shadow banking entities or activities, or practices in specific jurisdictions); and
- Propose recommendations and identify future challenges to improve the oversight of the shadow banking sector in the region.

To carry out these tasks, the WGSB held two conference calls to develop a work plan and data monitoring template. A workshop in Toronto was held on 29 July 2013 to discuss data definition and collection issues, and to finalize the monitoring templates. 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. Helping non-FSB members collect the appropriate data to complete the monitoring template and begin their analysis of the risks was the first key contribution of WGSB. A second workshop was held in Santiago on 31

[5] All RCGA members and some other jurisdictions in the region were invited to join the WGSB. The final membership of the working group is given in Annex 1.
[6] The Terms of Reference of the WGSB are reproduced in Annex 2.

October 2013 to present the preliminary results of the RCGA shadow banking exercise, and to clarify methodological issues.

A second template was developed to capture offshore shadow banking activities in international financial centers (IFCs) and their relationship with the onshore financial system. This was motivated by the fact that there are several jurisdictions in the FSB RCGA that provide offshore financial services as IFCs.[7] A comprehensive framework for data collection and analysis for IFCs does not exist. This creates an important gap in the FSB's global shadow banking monitoring exercise as presumably large volumes of bank and non-bank credit intermediation activities flow through IFCs. Thus, this IFC reporting template is the second key contribution of the WGSB. It is hoped that this template will provide a starting point from which the global shadow banking monitoring exercise can include IFCs in the future.

The key findings for the WGSB's macro-mapping exercise are the following. First, the exercise has collected valuable data on non-bank credit intermediation in the Americas. Second, it has been a useful vehicle for disseminating the AGV methodology to non-FSB members. Third, it is a first step towards identifying the role of IFCs in global non-bank credit intermediation. Fourth, it identifies 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 in specific jurisdictions. These are: (i) open-ended investment funds that hold illiquid assets; (ii) large and highly leveraged broker dealers; (iii) non-bank deposit-taking institutions; and (iv) finance companies.

2. Methodology for the "macro-mapping" exercise

This section describes the methodology of the macro-mapping exercise carried out by the WGSB. Data is reported for the 12 jurisdictions that participated in the working group, and is based on annual flow of funds data or administrative data from financial intermediaries over the period 2002-2012.[8]

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 3 and *Global Shadow Banking Monitoring Report 2013*). This template seeks to cast a wide net and measure all financial assets held by each group of institutions using an entity-based approach.[9] The WGSB

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[7] These would include: Bahamas, Barbados, Bermuda, British Virgin Islands, Cayman Islands, Panama and Uruguay. Cayman Islands, Panama and Uruguay were WGSB members and completed the IFC data template.

[8] To aggregate national data market exchange rates are used.

[9] The FSB's Shadow Banking Workstream 3 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; shadow banking risks stem from the activities, not the entity type. For further details, see http://www.financialstabilityboard.org/publications/r_130829c.pdf.

followed the AGV criteria and associated "other financial intermediaries" (OFIs) with the shadow banking sector.[10]

There are three differences between the WGSB template and the AGV template. First, investment funds are split into money market funds, public funds and private funds. 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.[11] 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.

Monitoring shadow banking activities in IFCs merits special attention as they are significant and represent a material data gap in the AGV monitoring exercise. Three member jurisdictions of the WGSB have been identified under various methodologies as providing offshore financial services as IFCs.[12] 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 class B banks 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 and activities has limitations, because market contacts suggest that even in the absence of regulatory prohibitions many IFC institutions *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.

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[10] The FSB has identified 10 non-bank financial entities involved in shadow banking: (i) money market funds, (ii) credit investment funds; (iii) exchange-traded funds (ETFs); (iv) credit hedge funds; (v) private equity funds; (vi) securities broker-dealers; (vii) securitisation entities; (viii) credit insurance providers/financial guarantors; (ix) finance companies; and (x) trust companies.

[11] 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 more aggressive 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.

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

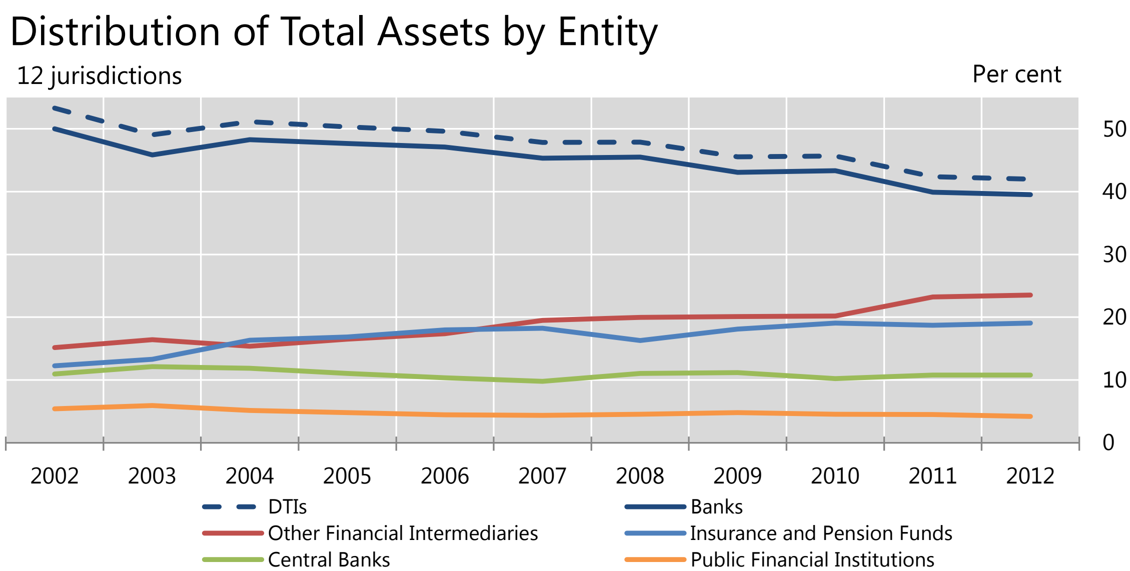
3. Results for the "macro-mapping" exercise

This section summarizes the main findings for the WGSB's macro-mapping exercise.[13]

Structure of financial systems

On average across WGSB jurisdictions, banks dominate financial activities, as they hold close to 40% of financial assets (Figure 1). This share has been declining over the period 2005-2012 due to higher growth in Other Financial Intermediaries (OFI).

Figure 1

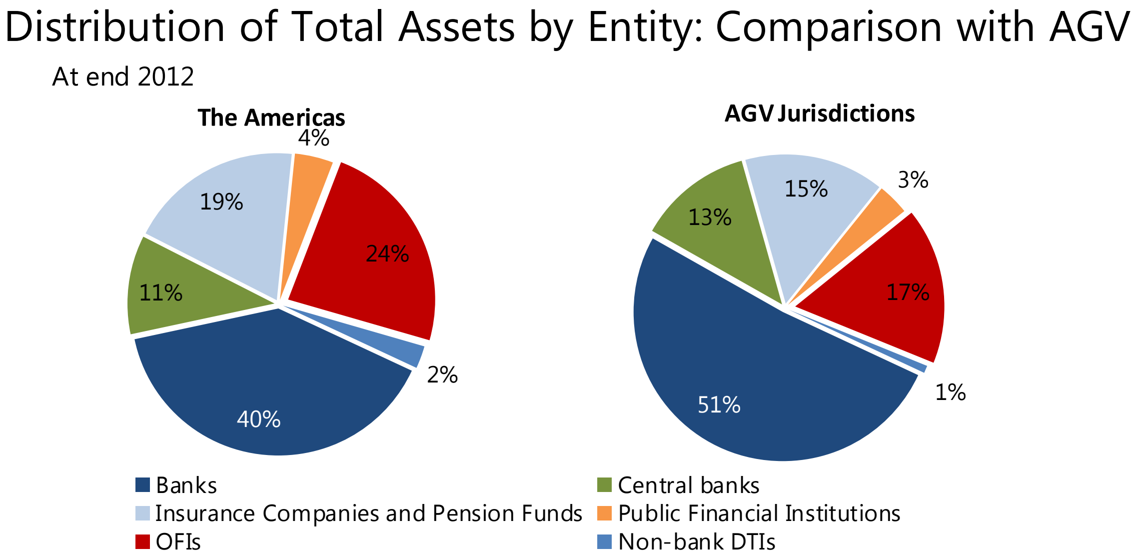


Source: National flow of funds data; other national sources.

Broadly speaking, the relative importance of the different entities in the financial sector of WGSB jurisdictions is similar to that of the average jurisdiction covered by the AGV exercise (Figure 2). Banks make up for a relatively smaller share of total assets in WGSB jurisdictions (40%), while Other Financial Intermediaries (OFI), and Pensions Funds and Life Insurance Companies are relatively larger (24% and 19% respectively). Non-bank deposit-taking institutions (DTIs) are relatively small in both groups of jurisdictions.

[13] Unless stated otherwise, financial assets in these jurisdictions include only domestic or onshore financial assets. Offshore assets in IFCs are examined in more detail in Section 4 of the report.

Figure 2



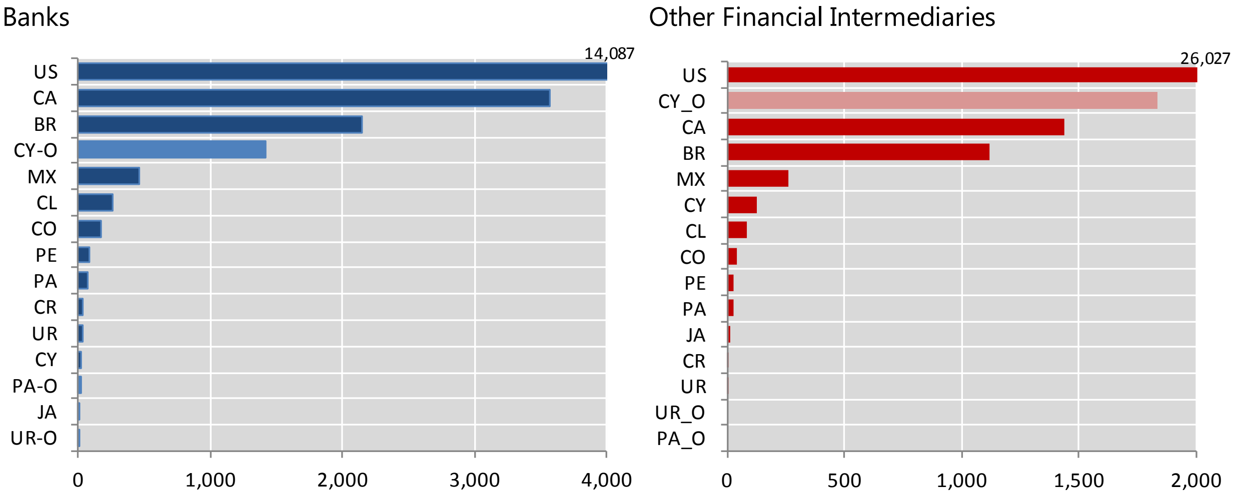
Source: National flow of funds data; other national sources.

Figure 3 shows the absolute size of the different intermediaries in the region. Not surprisingly larger economies with the most developed financial sectors, such as the United States, Canada, Brazil and Mexico, have the largest OFI sectors. The Cayman Islands has the fifth largest OFI sector measured by domestic assets, totalling USD 127 billion. Including offshore assets the total increases to USD 1,963 billion. Medium-sized jurisdictions such as Chile and Colombia are more dependent on intermediation and the shares of financial assets held by banks are relatively high.

Figure 3

Size of Financial intermediaries*

12 jurisdictions, at end 2012 USD billion



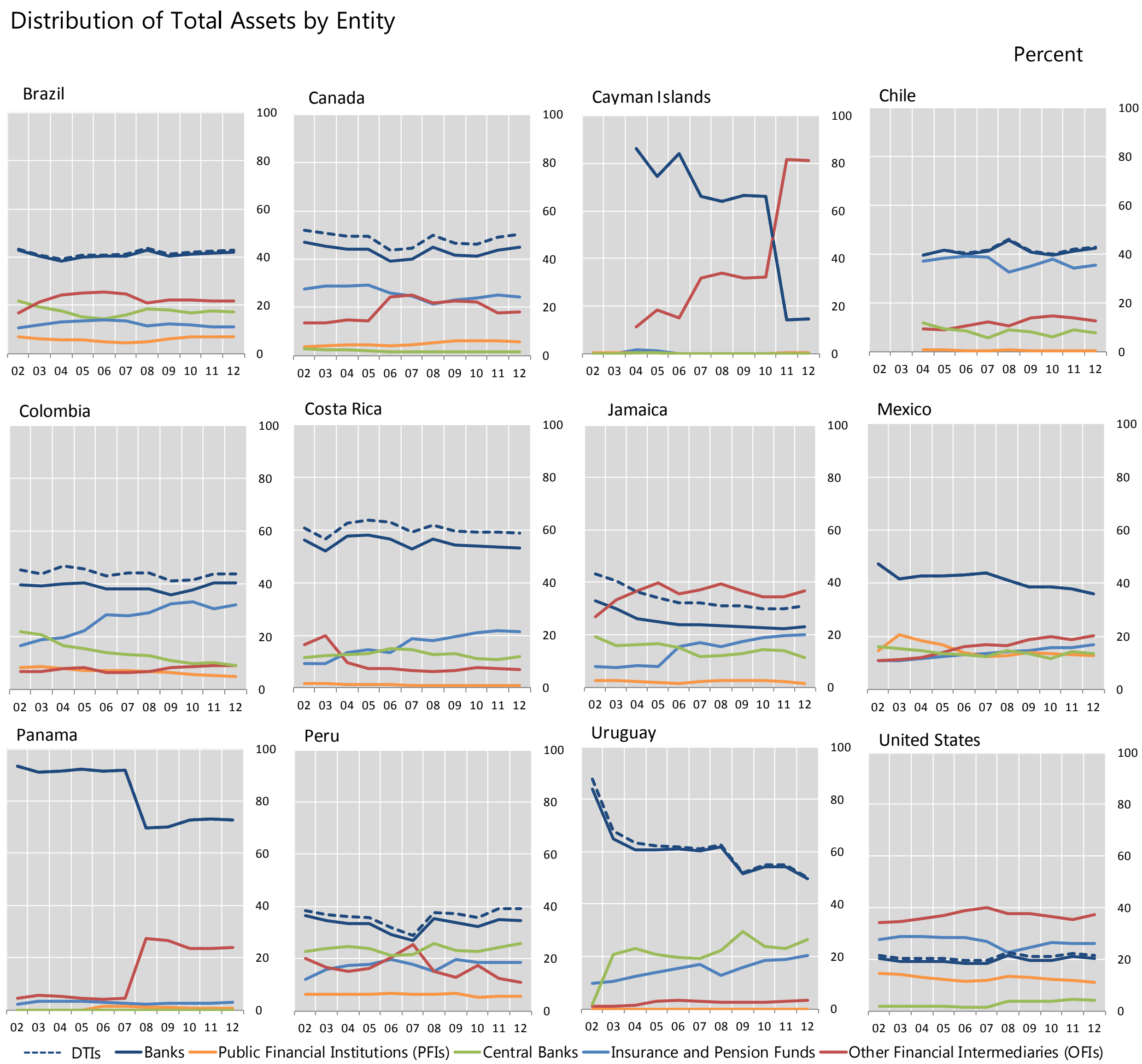
* Domestic and offshore assets included.

Source: National flow of funds data; other national sources.

There is significant heterogeneity across individual WGSB jurisdictions in terms of the relative importance of different financial entities (Figure 4). Banks are the largest holders of assets in all jurisdictions except the United States, Cayman Islands and Jamaica. In Panama the share of the banking sector is highest, making up over 70% of total assets. Note that in Canada, Colombia, Costa Rica and Jamaica non-bank DTIs are also relevant. In Chile and Colombia, pension funds are relatively more important than in the average WGSB jurisdiction. Finally, the OFI sector varies from close to 80% of total domestic assets in Cayman Islands and 37% in the United States, to less than 3% of assets in Uruguay.[14]

[14] 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.

Figure 4

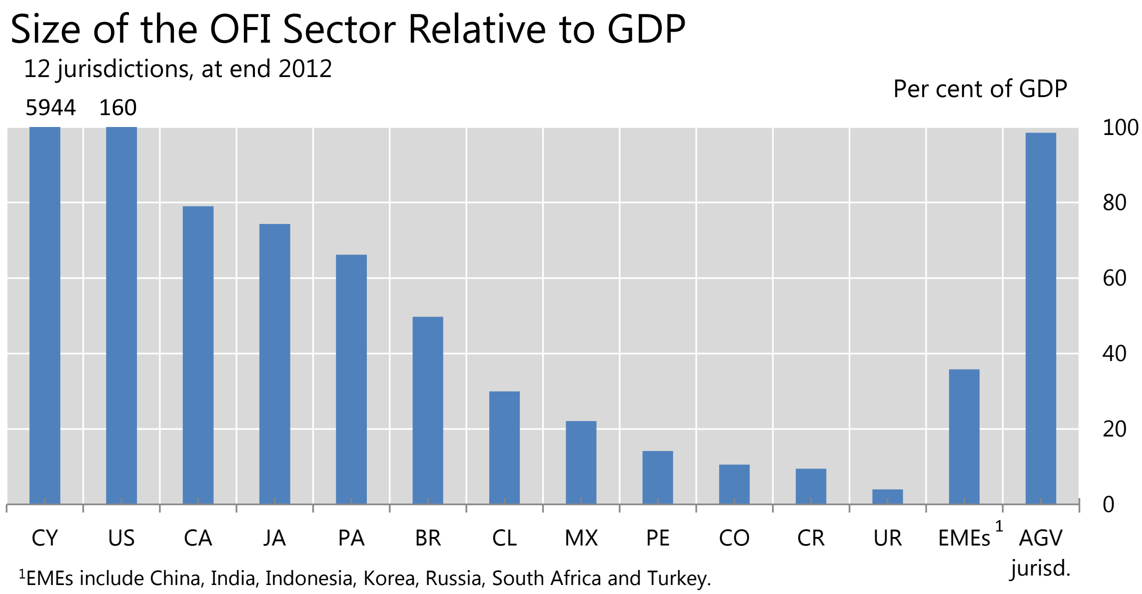


Source: National flow of funds data; other national sources.

Other financial intermediaries (OFIs)

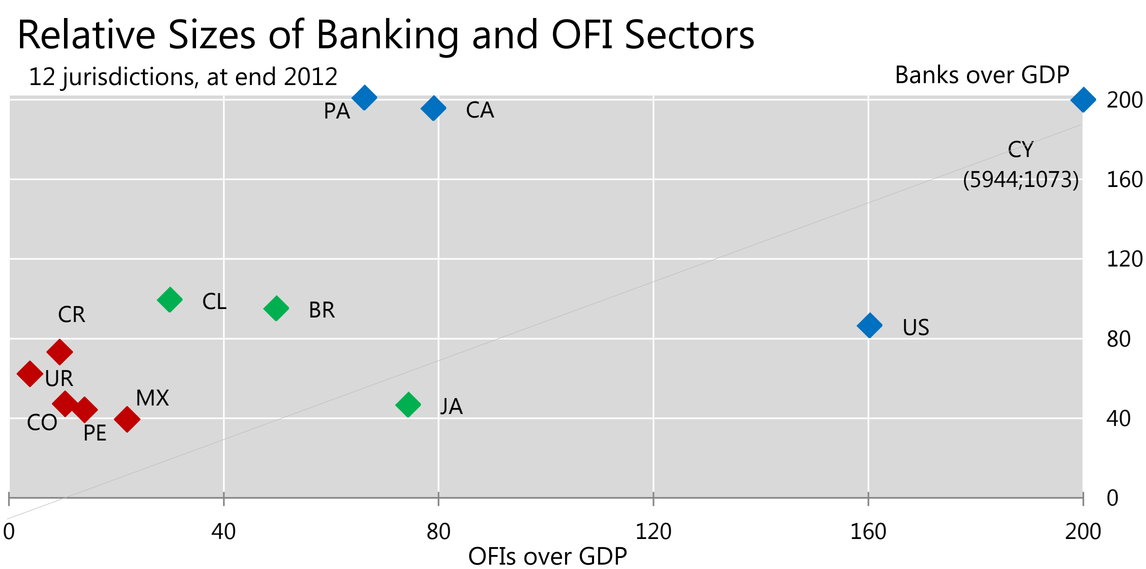
The size of the OFI sector is heterogeneous across the WGSB jurisdictions when measured against GDP (Figure 5). In most jurisdictions, the ratio of OFI assets to GDP is below the AGV average, with several jurisdictions also below the average for the subset of EMEs in the AGV exercise. Figure 6 suggests three groupings of WGSB jurisdictions. In the first group, which is characterized by relatively large financial sectors, Canada and Panama have bank-dominated financial sectors, whereas Caymans Islands and the United States have sizable OFI sectors. In the second group (with medium-sized financial sectors) Jamaica has a relatively larger OFI sector than Chile and Brazil. The remaining jurisdictions are in the third group with relatively small banking and OFI sectors.

Figure 5



[1]EMEs include China, India, Indonesia, Korea, Russia, South Africa and Turkey.
Source: National flow of funds data; other national sources.

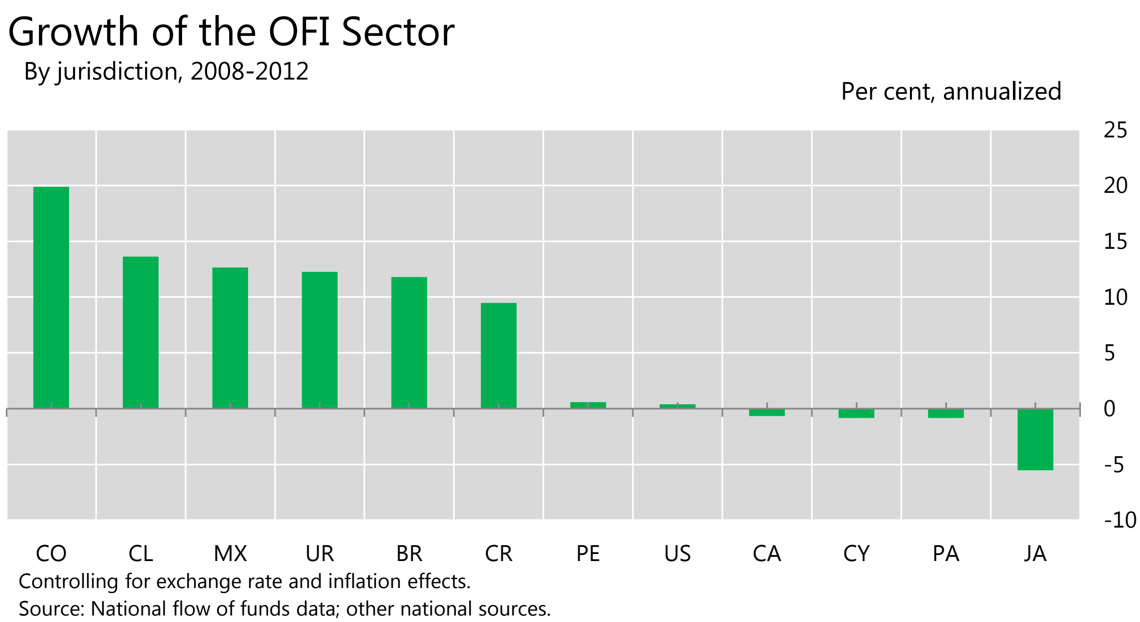
Figure 6



Source: National flow of funds data; other national sources.

The OFIs within several jurisdictions in the region have exhibited positive growth rates since the global financial crisis (Figure 7). With the exception of Chile and Brazil, the six jurisdictions with the highest growth rates start from a relatively low base for their OFI sector (group 3 in figure 6). In Jamaica there is a marked slowdown in OFI growth after 2008. 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.

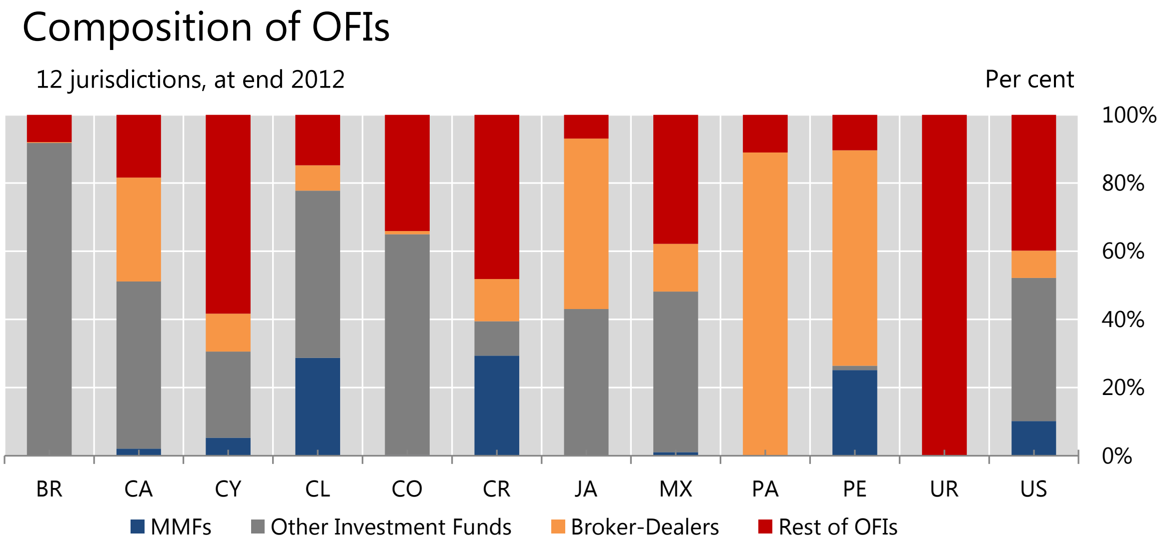
Figure 7



The largest subsectors of OFIs in the region are investment funds (money market funds and other investment funds, which include public and private funds)[15] and broker dealers (Figure 8). In this aspect, the region is also similar to the AGV sample (Figure 9). Other investment funds make up a significant share of the OFI sector in Brazil, Canada, Chile, Colombia, Mexico and the United States. Broker-dealers are important in Jamaica, Panama and Peru.

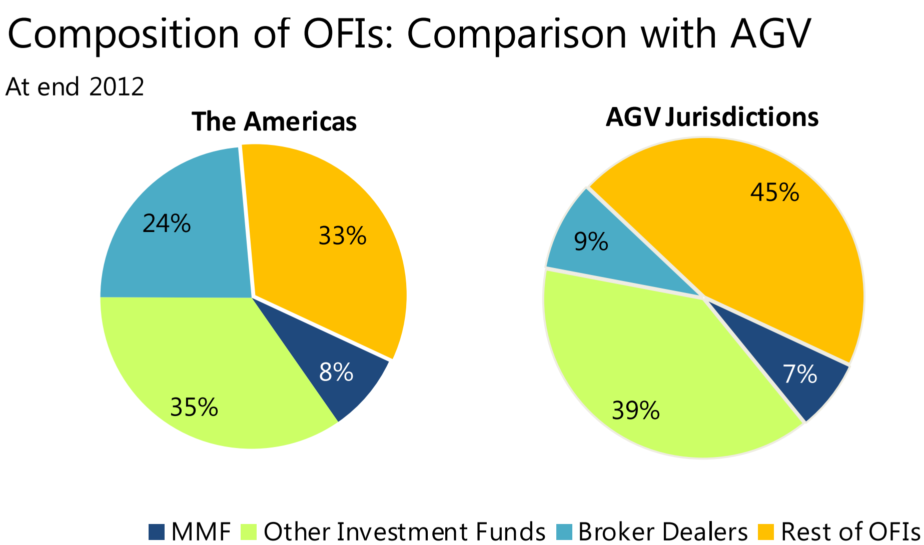
[15] Although the WGSB template disaggregates investment funds into three types – money market, public and private - not all jurisdictions are able to make this division with the available data. Thus, for Figure 8, two categories of investment are used: money market funds and other investment funds.

Figure 8



Rest of OFIs: Finance companies, structured finance vehicles, non bank credit card issuers, REITs, prize-linked saving accounts, US holding companies, and US funding corporations.
Source: National flow of funds data; other national sources.

Figure 9



Source: National flow of funds data; other national sources.

The "Rest of OFIs" category is heterogeneous (Table 1). Various types of finance companies are the largest institutions in this category in Chile, Mexico, Panama and Peru. In other WGSB jurisdictions, structured finance vehicles are the most significant institution in this sub-category (Brazil, Canada, Cayman Islands, Colombia, Costa Rica and Uruguay).

Table 1

Rest of OFIs

Percent of total OFIs, at end 2012

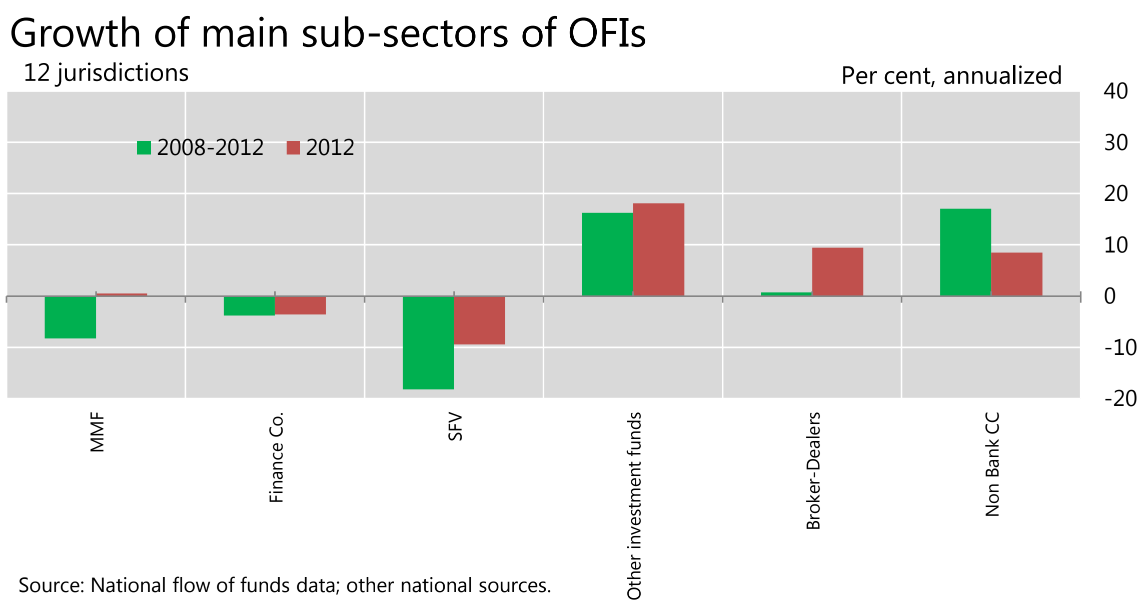
	BR	CA	CY	CL	CO	CR	JA	MX	PA	PE	UR	US
Market based credit												
Structured Finance Vehicles	6.1	8.1	58.0	1.8	11.6	37.1		13.7			50.9	6.7
Funding corporations												8.5
Holding Companies												16.6
REITs								1.6				2.1
Total	6.1	8.1	58.0	1.8	11.6	37.1		15.3			50.9	34.0
Non bank credit institutions												
Finance Companies (1)	0.1	6.6		6.4	2.5			20.7	3.5	2.8		5.9
Non Bank Credit Card issuers/acquirers	0.5			6.6		6.9		1.9			45.2	
Prize-linked Savings accounts	1.3											
Others					19.9	4.1	7.0		7.6	7.7	4.0	27.2
Total	1.9	6.6		13.0	22.4	11.0	7.0	22.6	11.1	10.5	49.1	33.1

(1) Include Microcredit to households and SMEs.

Source: National flow of funds data; other national sources.

"Other investment funds", U.S. holding companies and the "Others" category were the sectors with the highest growth rates in 2012 and during 2008-2012 (Figure 10). Non-bank credit card issuers also grew significantly but from a lower base. Structured finance vehicles, meanwhile, contracted almost 10% in 2012.

Figure 10

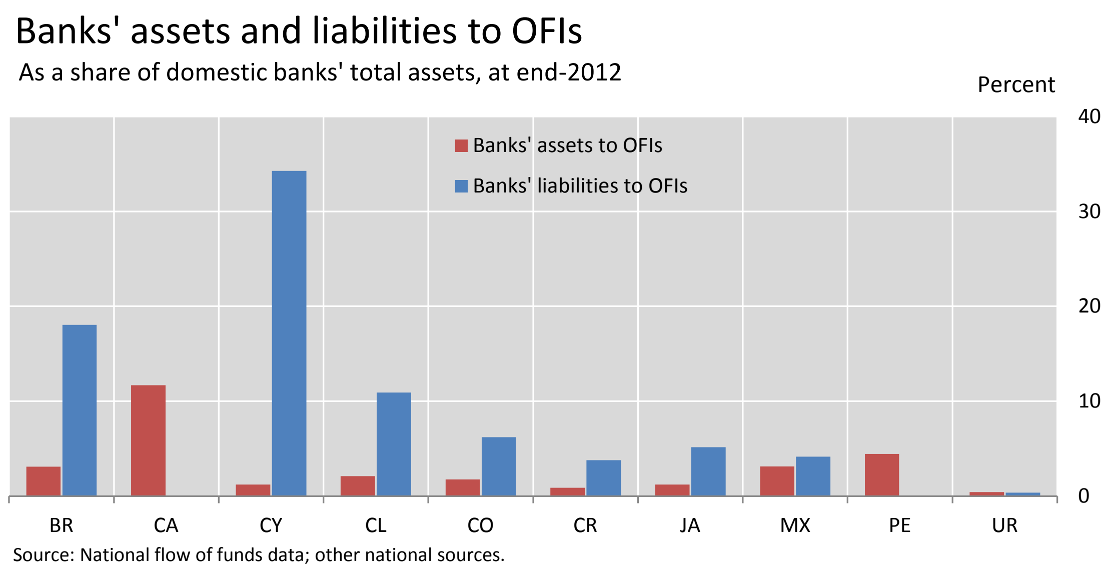


Source: National flow of funds data; other national sources.

OFI connections with the banking system

In several jurisdictions, links between OFIs and domestic banks are important. In Canada exposures to OFI are close 10% of bank assets. In Brazil, Cayman Islands and Chile 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 (Figure 11). Note, however, that these measures are at best lower bounds of interconnections. The main limitation is that they do not include off-balance sheet positions between OFIs and banks – including derivative positions.

Figure 11



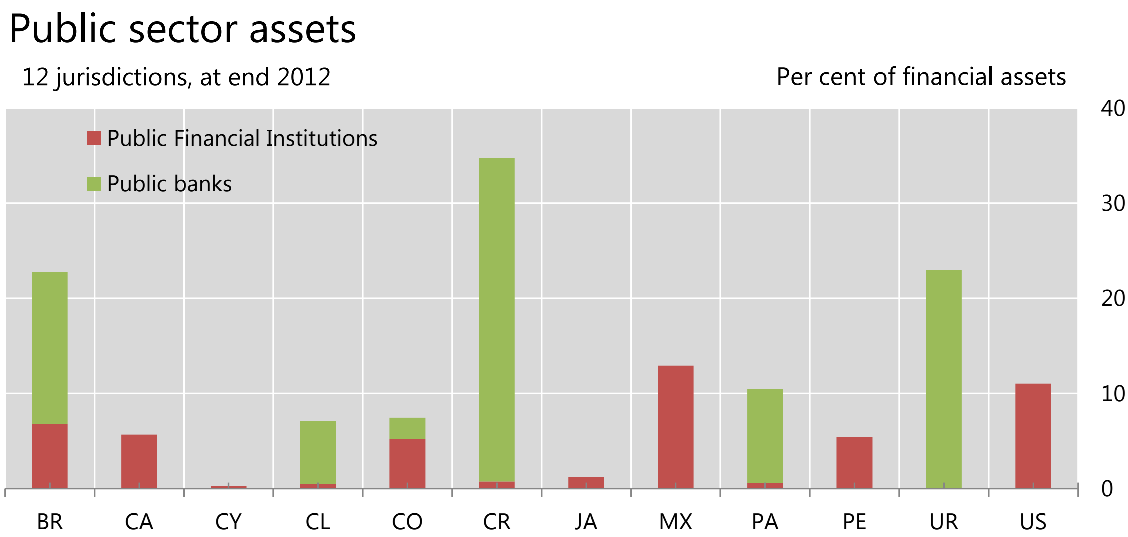
4. Specific "macro-mapping" issues in the WGSB

As mentioned above, 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 (Figure 12). Brazil, Costa Rica, and Uruguay stand out because of their high public sector ownership of commercial banks. Mexico and the United States, on the other hand, have relatively large public financial institutions. In Mexico these are deposit-taking development lenders 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.[16] Although not reported in the template, the public sector is highly

[16] For example, Fannie Mae and Freddie Mac.

involved in structured finance vehicles in Uruguay – both as the source of the underlying flows or as the agent structuring the vehicles.[17]

Figure 12



Source: National flow of funds data; other national sources.

Three jurisdictions in the WGSB are international financial centers − Cayman Islands, Panama and Uruguay − and they completed a separate IFC template to identify the nature of their international financial activities.

In Panama and Uruguay the reported offshore assets correspond to banks that operate with special licenses. In the Cayman Islands offshore assets are composed of special license banks, captive insurance companies, catastrophe bonds and non-public funds[18]. The special bank licenses prohibit deposit-taking from residents and limit the activities that the banks can conduct in local markets. All offshore banks are prudentially regulated and supervised by the local authorities, although in Panama and Uruguay prudential requirements and intensity of supervision is lower than for full license onshore banks. The Cayman Islands, however, imposes restrictions on the activities of special license banks to reduce the risks they pose to the local financial system.

The size of these offshore centers varies significantly between jurisdictions. Reported data from the Cayman Islands shows that offshore assets are USD 3.3 trillion-- which is equivalent to

[17] For example, the *Agencia Nacional de la Vivienda*.
[18] Catastrophe bonds are fixed duration bonds that repay investors if the stated peril does not occur during the duration of the bond.

almost 1600 times GDP and 21 times total domestic assets. In Panama offshore assets are USD 16.6 billion (45% of GDP and 16% of onshore assets). In Uruguay the IFC activities are much smaller. They have been falling continuously since 2004, following the banking crisis, and currently are close to 1% of GDP (and roughly equal to 1% of onshore assets).

Because of the size of its offshore activities, the Cayman Islands is the most important IFC in the WGSB. Almost 56% of the offshore assets are held by OFIs, mostly investment funds. [19] The remaining 44% of offshore assets are held by special license banks.

There are three important data restrictions that limit the ability of the Cayman Islands Monetary Authority (CIMA) to measure and separately identify onshore and offshore activities. Consequently, the size of the total OFI sector may be underestimated. First, securitization vehicles are not required to be registered with CIMA and, as such, CIMA has no information about those entities unless they are listed on the Cayman Islands Stock Exchange. In addition, these listed securitization vehicles are currently classified as onshore OFIs whereas discussion between CIMA and market participants suggest that most of the structured finance vehicles included in the OFI sector are, in practice, targeted mainly towards non-resident investors. Second, broker-dealers are not required to report their assets to CIMA if they: (i) provide services exclusively to other companies in their group; (ii) provide services exclusively to sophisticated or high-net worth individuals; or (iii) are regulated in another jurisdiction.. There are 2170 broker-dealers and other securities intermediaries that have this reporting exemption. Third, closed-ended private funds and funds that have fewer than 15 investors are not required to report to CIMA. Current efforts by CIMA to enhance data collection are reported in Box 1.

Box 1

The Cayman Islands Monetary Authority is planning to implement several changes to the forms that investment funds are required to file prior to authorization and on an annual basis, and thus will obtain more precise information about the assets held by these funds. The changes will apply to both public and private funds. The Authority is revising the forms that investment funds use to become registered and licensed to capture more information about the funds' service providers, delegation arrangements and jurisdictions or regions where the fund will be marketed to investors. The Authority is also revising the annual return forms for investment funds to include data about fund leverage, type of instruments held by the fund and the jurisdictions of these instruments.

[19] These are hedge funds with different investment strategies: multi-strategy funds, commodities funds, index tracking funds, global macro funds, emerging markets funds and funds that invest in distressed securities. The assets held by private funds reached a peak in 2007, totaling USD 2.2 trillion. In 2012 they held USD 1.8 trillion in assets and were 11,000 funds.

Since 2012, the Mutual Funds Law requires master funds established in the Islands to register with the Authority. Subsequent to registration, such funds are subject to the disclosure and annual reporting requirements that apply to all investment funds. This regulatory initiative will allow the Authority to collect information about the ultimate investments of the feeder funds that invest in such master funds (prior to 2012, only feeder funds were required to report their assets and investments).

Although not usually considered part of the shadow banking sector in the AGV exercise, the WGSB also looked in some detail at non-bank deposit-taking institutions. The focus on this subsector was driven by three considerations. First, non-bank DTIs, often in the form of cooperatives are prevalent throughout the Americas region, and in some jurisdictions have a relatively large share of deposits and consumer or mortgage lending. Second, these institutions are generally not Basel-compliant, nor are they expected to be, given that they are owned by their members. However, they provide services that are close substitutes to those provided by banks. If regulatory arbitrage were to occur as banks adopt Basel III rules, then the migration of activities from banks would likely go first to these more lightly regulated non-bank DTIs. Hence, they deserve close monitoring to assess the extent of regulatory arbitrage. Third, although not systemic under traditional definitions, this sector often holds a large number of small deposits — so that a problem in this sector could have a large negative impact on public trust in the financial system.

As noted, the most common form of non-bank deposit-taking institution in the Americas region are financial cooperatives (credit unions, savings and loans cooperatives and building societies), which co-exist with several other forms of deposit-taking institutions (Table 2). All have some form of prudential regulation, although requirements and intensity of supervision vary significantly across WGSB jurisdictions and in comparison to local banks. Several jurisdictions have deposit insurance and some also have access to central bank liquidity.

Table 2

Non-Bank Deposit Taking Institutions

		As a % of DTI (for 2012)	Prudential Regulation	Liquidity Guarantees	Deposit Insurance
Brazil	Credit Unions				
	Credit Unions	1.65	x		x
	Consumer Finance Companies	0.13	x		x
	Savings and Loan Associations	0.10	x		x
	Non bank Credit conglomerate	0.14	x		x
Canada	Credit Unions and Caisses Populaires	10.3	x		x
Cayman Islands	Credit Union	1.0			
	Building Society	0.3			
Chile	Savings and Loans Associations	1.08	X		X
Colombia	Financial Corporations	1.12	x	x	x
	Commercial finance companies	4.62	x	x	x
	Financial cooperatives	0.74	x	x	x
Costa Rica	Credit Unions	6.68	X	X	
	Savings Banks	2.43	X	X	
	Nonbank Financial Companies	0.78	X	X	
Jamaica	Merchant Banks	2.4	X	X	X
	Building Societies	23.2	X	X	X
Peru	Empresas Financieras	4.1	x	x	x
	Cajas Municipales	5.8	x	x	x
	Cajas Rurales	1.2	x	x	x
Uruguay	Financial Houses	0.9	X	X	
USA	Credit Unions	6.0			

5. Risks from nonbank credit intermediation

From the macro-mapping exercise and individual jurisdiction reports, the WGSB identified four areas in which shadow banking was both significant and could potentially pose a risk to financial stability because of its connections to the banking sector or its role in markets that are important for banking sector funding or liquid assets.

i. Open ended investment funds

As mentioned before, investment funds make up a large part of the OFI sector in several jurisdictions in the region. Direct connections to the banking sector are sizable in Brazil, Chile and the United States, where they play a relevant role in bank funding. In Chile and the United States, MMFs, in particular, provide a large share of bank funding.

In Brazil, the investment funds industry is mostly made up of fixed-income investment funds. These funds mostly hold government bonds (40% of total assets). Banks predominantly borrow from investment funds through repos backed by government bonds. Even taking into account that such repos represent a relevant share of banks' liabilities to OFIs, liquidity risk is mitigated by the use of sovereign bonds as collateral. In Chile, authorities have changed valuation for money market mutual funds from fixed NAV to a mechanism of bands. If asset valuation is within the band, then the fund is valued at a fixed NAV. Outside the band the NAV floats. In the United States, the SEC has recently adopted new regulation relating to MMFs.[20]

In other economies the impact of funds on the banking sector may be more indirect, but also important. Large changes in portfolio decisions of funds (or assets under management in open ended funds) could affect the valuation and liquidity of assets that are also held by banks. There is also a risk that if banks invest in funds and the funds suspend redemptions, then banks cannot access their assets, which could put pressure on banks' liquidity. Moreover, if valuations are endogenous to fund decisions, then "runs" on funds can occur, even in the absence of fixed NAVs. For example, despite the fact that in Mexico funds are floating NAV by law, there was evidence of runs occurring at the beginning of the crisis in 2008, so that temporary stabilizing regulation was put in place in order to protect the investments' equity value from deteriorating markets and from a downward spiral of fire sales. Finally, if the funds have access to central bank liquidity (as is the case in Colombia) moral hazard issues may become significant – with funds tending to overinvest in illiquid assets. In addition, authorities in Colombia are concerned that mutual funds do not hold the type of assets eligible for liquidity facilities, and therefore could not access funds, if needed.

Although this linkage between banks and investment funds has been emphasized in the academic literature as a relevant channel for the transmission of liquidity shocks, it has not received much attention in the global oversight discussion on shadow banking, which has focused largely on money market mutual funds and banking funding risks.[21] This raises the question of whether the global regulatory discussion may have been placing too much emphasis on MMFs and their valuation mechanisms (i.e. fixed or floating NAVs) and not enough attention on open-ended funds in general, including exchange traded funds (ETFs), that have short, in-kind, redemption periods but invest in long-term illiquid assets.

[20] See *Money Market Fund Reform; Amendments to Form P-F*, Investment Company Act Release No.31166 (July 23, 2014), available at http://www.sec.gov/rules/final/2014/33-9616.pdf.

[21] See Cifuentes, R. and Ferrucci, G. and Shin, H.S., *Liquidity Risk and Contagion* (May 2005). Bank of England Working Paper Series No. 264.

ii. Broker-dealers

In some WGSB jurisdictions, broker dealers are sizeable, highly leveraged and conduct maturity transformation. In Jamaica (and to a lesser extent in Panama) this is done by offering short repo products to households and firms to finance the purchase of long-term public debt. Risks arise because of the large presence of lightly regulated broker-dealers in retail public debt markets, the imperfect legal protection of the collateral in the secured financing operations and the lack of awareness of the risks by retail clients. This issue is of particular concern to authorities in Jamaica. In Jamaica most of these broker dealers belong to banks, which may in turn generate liquidity risks for these banks if they are forced to provide funding to replace falling repo volumes. Moreover, losses to retail savers could impact other dealers if firms and households change their views on the protection that the collateral provides. This change in perception could be driven either by legal problems related to collateral in the event of financial problems in a specific broker, or by concerns regarding the valuation of the public debt used as collateral. In turn, these valuation concerns could be triggered by downgrades in sovereign ratings. Box 2 describes the importance of broker dealers in Jamaica.

Box 2

Broker-dealers are important players in Jamaica's financial sector. Their importance in terms of size originated in the early 1990s when the Central Bank appointed a number of securities firms as 'primary dealers' in order to underwrite primary bond issues and develop a secondary market for public bonds. Since then the rapid growth of debt issuance by the Government of Jamaica (GOJ), now one of the most highly indebted sovereigns in the world, fuelled the growth in the securities dealers sector. Although dealers trade an assortment of international fixed income and equity instruments on behalf of clients, their activities predominately involve taking proprietary positions in GOJ domestic and international bonds financed largely by short-term "retail repurchase" agreements with individual and corporate clients. However, unlike a traditional repo, the retail repo does not formally encumber the underlying security as the title is not transferred to the client.

iii. Non-bank deposit-taking institutions

As noted earlier, non-bank deposit-taking institutions (DTIs) are significant in many of the WGSB jurisdictions, and they perform similar roles to banks, intermediating credit and providing maturity transformation. In most jurisdictions they have access to some form of deposit guarantee, and in some cases, access to central bank liquidity, so that the usual concerns regarding moral hazard in banking apply to these institutions. All jurisdictions prudentially regulate non-bank DTIs – although the prudential requirements and intensity of supervision may vary across jurisdictions. The gaps between prudential regulation between bank and non-bank DTIs may be growing as authorities implement the new more stringent Basel III standards for capital, liquidity and leverage on banks and hence may be a source of regulatory arbitrage.

The data collected in the template does not allow the measurement of interconnections between non-bank DTIs and banks. However, even if these links were low, non-bank DTIs could affect financial stability owing to the large number of depositors and borrowers, and also because of possible confidence effects on banks.

iv. Finance companies

Finance companies and non-bank credit card issuers are a concern as potential sources of risk in Chile, Mexico and Uruguay. Sources of vulnerability vary across jurisdictions. In Chile and Mexico there is a potential risk that households may leverage up through credit from these entities, or that they become significant in banks loan portfolios. Moreover, in Mexico some of these lenders have been forced by bank competition into riskier credit segments. Regulation of the sector is very heterogeneous: auto loan companies, nonbank leasing and factoring companies in Chile and *Sofomes* ENR in Mexico have no prudential regulation.[22] On the other hand, non-bank credit card issuers in Uruguay and Chile and several classes of finance companies in Mexico are prudentially regulated.[23]

6. Key Findings and Recommendations

Key findings

The WGSB monitoring exercise was valuable because it provided useful data on non-bank credit intermediation in the Americas region. This is especially true for the non-FSB members. The data collected complements work of the AGV in identifying global trends in the size and risks of non-bank credit intermediation.

The exercise has proven to be a useful vehicle for disseminating the AGV methodology to non-FSB members and as a constructive forum for discussing and sharing experiences on monitoring 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.

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[22] *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.

[23] These include regulated *Sofomes* and *Sofoles*. Regulated *Sofomes*, in contrast to unregulated *Sofomes* which are referred to by the acronym, ENR, abide by practically the same prudential regulation that applies to commercial banks as they are regulated due to having patrimonial links either to a regulated commercial bank by being a subsidiary or by belonging to the same financial group, therefore limiting regulatory arbitrage. *Sofoles* were up to July 2013 financial companies that granted credit to a specific activity or sector; the legal figure has been eliminated as part of financial sector deregulating efforts from years before in an attempt to increase financial depth in Mexico. Since then, these entities have had to modify their statutes and transform into other financial figures, for example into *Sofomes* ENR and presumably increasing the unregulated sector. Chile recently reformed its regulation for non-bank credit card issuers, strengthening prudential requirements and information disclosure.

The WGSB identified four types of shadow banking entities whose activities may merit further attention because of potential risks to financial stability in specific jurisdictions. These are: (i) open ended funds, in the context of illiquid markets; (ii) large and leveraged broker-dealers; (iii) non-bank deposit-taking institutions; and, (iv) finance companies.

Data and insights collected from the three IFCs that participated in the exercise represent a first step towards identifying 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 on an annual basis in the RCGA.

Although important progress has been made in non-FSB jurisdictions in the collection of non-bank credit intermediation data and the analysis of risks, more needs to be done. Future exercises should follow the FSB AGV exercise 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 place particular attention on the four 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), large and leveraged broker dealers, non-bank deposit-taking institutions and finance companies.

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

Recommendation #3. Broader participation in the RCGA shadow banking monitoring exercise should be encouraged, in particular by jurisdictions that are engaged in significant IFC activities.

Recommendation #4. The FSB should encourage other RCGs to conduct similar exercises to map non-bank credit intermediation in their regions, including for international financial centers.

A comprehensive global exercise to collect data 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 shadow banking may entail.

Annex 1

FSB regional consultative group for the Americas
Working Group on the Shadow Banking
List of Members

Co-chairs	**Kevin Cowan** Director of Financial Policy Division Banco Central de Chile
	Lawrence Schembri Deputy Governor Bank of Canada
Brazil	**Frederico Souza** Head of division, Financial System Monitoring Department Banco Central do Brasil
Cayman Islands	**Justine Plenkiewicz** Deputy Head, Policy and Development Division Cayman Islands Monetary Authority
Chile	**Alfredo Fuentes** Senior Economist Statistics Division Banco Central de Chile
Colombia	**Pamela Andrea Cardozo Ortiz** Banco Central de la República
Costa Rica	**Cristián Alvarez Corrales** Banco Central de Costa Rica
Jamaica	**Brian Langrin** Chief Economist, Financial Stability Department Bank of Jamaica
Mexico	**Ana Mier y Terán** Banco Central de México

Panama	**Nahila Melgar** Director of Risk Superintendency of Banks
Peru	**Marylin Choy** Central Manager, Operation and Technical Affairs Central Reserve Bank of Peru
Uruguay	**Jose Antonio Licandro** Head, Financial Regulation Superintendence of Financial Services Central Bank of Uruguay
United States	**Matthew Poggi** Economist, International Banking and Securities Markets US Treasury

Annex 2

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 jurisdictions 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 off-shore financial centers. This regional report would also lead to a better understanding of "shadow banking" globally, in particular in those jurisdictions 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 jurisdictions 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 jurisdictions 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 jurisdiction 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. Jurisdiction 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.

The WGSB will be co-chaired by Kevin Cowan, Director of Financial Policy Division at Banco Central de Chile, and Lawrence Schembri, Deputy Governor of Bank of Canada. Members are invited to nominate participants for the WGSB. Please send your nominations to: Jin Soo Lee (JinSoo.Lee@bis.org) and Yael Baytelman (ybaytelm@bcentral.cl) before 14 March, 2013.

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 jurisdiction level analysis. This questionnaire will be based on the AGV questionnaire that draws mostly from flow of funds data[24], 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

[24] 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 3

Template used for the data collection exercise

(USD mil)

STOCK of financial assets as of end-year	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
	Financial Institutions =(col2+col3+col13+col14+col15+col19+col32)	Central Bank	Deposit-Taking Institutions =(col4+col7+col10)	Banks (Note 8)	Assets to OFIs	Liabilities to OFIs	XX (Note 1)	Assets to OFIs	Liabilities to OFIs	Others	Assets to OFIs	Liabilities to OFIs	Insurance Companies (Note 2, 3)	Pension Funds (Note 2,3)	Public Financial Institutions =(col16+col17+col18)	Development Banks	XX (Note 1, 4)	Others
2002	0		0												0			
2003	0		0												0			
2004	0		0												0			
2005	0		0												0			
2006	0		0												0			
2007	0		0												0			
2008	0		0												0			
2009	0		0												0			
2010	0		0												0			
2011	0		0												0			
2012	0		0												0			

STOCK of financial assets as of end-year	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
							of which…				of which…								
	Other Financial Intermediaries (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	fixed income/bond funds	other funds	Non-public funds	equity funds	fixed income/bond funds	other funds	Broker-dealers	Non Bank Credit Card issuers (Note 1)	Microcredit to Households and SMEs (Note 1)	Others	Financial Auxiliaries (please describe in Note 7)	rate at end of the period
2002	0																		
2003	0																		
2004	0																		
2005	0																		
2006	0																		
2007	0																		
2008	0																		
2009	0																		
2010	0																		
2011	0																		
2012	0																		

***: 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 aggregaged 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

STOCK of financial assets as of end-year			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
			Financial Institutions			Other Financial Intermediaries (OFI's)											
									of which…				of which…				
	Assets to Banks [2]	Liabilities to Banks [2]		Banks [3]	Insurance Companies		Money Market Mutual Funds	Public Funds [5]	equity funds	fixed income/bond funds	other funds	Non-public funds (Private Funds) [6]	equity funds	fixed income/bond funds	other funds	Structured Finance Vehicles	Other Financial Institutions [4]
2002																	
2003																	
2004																	
2005																	
2006																	
2007																	
2008																	
2009																	
2010																	
2011																	
2012																	
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.