Systemic Oversight Frameworks in LAC

Current Practices and Reform Agenda

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January 2012

Abstract

The world financial crisis that started in the US housing market in 2008 brought into evidence deep failures of prudential oversight, linked for the most part to a failure to comprehend and handle systemic risk in a way that could prevent systemic crises. This paper summarizes the responses to the joint World Bank-ASBA survey of the state of systemic oversight in the Latin American and Caribbean financial sectors and reflects on some of the challenges identified by respondents. The authors found that there is broad consensus among regional

financial authorities on the need to enhance the current systemic oversight framework. Improving consolidated supervision to mitigate risk-shifting in conglomerates, adjusting prudential regulations to account for the accumulation of systemic risks, redefining the role of the supervisor to make it more proactive, and improving coordination among local supervisors as well as with foreign supervisors figure preeminently in the regional reform agenda.

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Systemic Oversight Frameworks in LAC: Current Practices and Reform Agenda

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JEL: G21, G28

Keywords: systemic oversight frameworks, prudential oversight, financial regulation, financial supervision, macro-prudential policies, Latin America

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1. Introduction

The world financial crisis that started in the US housing market in 2008 brought into evidence deep failures of prudential oversight, linked for the most part to a failure to comprehend and handle systemic risk in a way that could prevent systemic crises. Systemic risk is defined as “a risk of disruption to financial services that is (i) caused by an impairment of all or parts of the financial system and (ii) has the potential to have serious negative consequences for the real economy”². Systemically important financial institutions (SIFIs) are those impending failure, inability to operate or disorderly wind down could produce systemic effects as defined above. There are two dimensions to systemic risk; one relates to how risk is distributed in the financial system at a given point in time (“cross sectional dimension”) while the other relates to how risks evolve over time (“temporal dimension”) ³. The current oversight framework focuses on individual institutions (microprudential framework) as opposed to the system as a whole (macroprudential framework).

A macroprudential approach to oversight has been proposed for some time with a view to manage systemic risk⁴ and is now being developed by standard setters. From a cross sectional dimension (also denominated micro-systemic risk perspective), regulation focuses on (i) removing incentives for the accumulation of risks in certain types of intermediaries, including through the extension of regulatory perimeters and the homogenization of regulations across different intermediaries to avoid regulatory arbitrage, (ii) adjusting prudential requirements to take into account the systemic risk induce by the institution, (iii) improving safety net mechanisms to reduce moral hazard pose by SIFIs that are deemed too-big-to fail⁵. From a temporal dimension, regulatory efforts aim at mitigating procyclicality by preventing the building up of risks in the cycle upturn and creating buffers to cushion the downturn to avoid a credit crunch. On the supervisory front, efforts are directed to monitor interconnections between participants and common risk factors. Such approach requires close coordination between

² IMF, BIS, FSB (2009): *Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations. Report to G20 Finance Ministers and Governors.*

³ Caruana, J. (2009): “The International Policy Response to the Financial Crises: Making the Macroprudential Approach Operational”, panel remarks at Jackson Hole.

⁴ Crockett, A. (2000): “Marrying the Micro and Macroprudential Dimensions of Financial Stability”, speech at the 11th International Conference of Banking Supervisors, Basel.

⁵ Cortes, M. Dijkman, M., and Gutierrez E. (2011) Micro-systemic Regulation: A LAC Perspective. The World Bank, Mimeo.

financial sector supervisors and other financial sector authorities, especially monetary authorities.

The Latin America and Caribbean region (LAC), with the notable exceptions of some Caribbean countries affected by the failure of a complex insurance conglomerate, weathered the latest global financial crisis in part reflecting lessons learnt during past financial crisis as well as a somewhat different approach to oversight. Moreover, the credit cycle was not as pronounced as in the industrialized countries most affected by the crisis and public and private sector balance sheets were stronger than in past crisis episodes. However, as the region's financial systems become more complex and more tightly integrated with those of the rest of the world, the question remains as to whether it could become exposed to similar failures caused by homebred endogenous dynamics or increased vulnerability to external turbulence.

In a framework of collaboration between the World Bank (WB) and the Association of Supervisors of Banks of the Americas (ASBA), the two institutions partnered to prepare a survey and identify the state of systemic oversight frameworks in the region. The survey also intends to understand the perception of the region on the possible need for a reform program aimed at better capturing and addressing systemic risk. This paper summarizes the responses to the survey and reflects on some of the challenges identified by respondents. The paper is organized as follows: section 2 provides a description of the survey; section 3 summarizes the main messages coming up from the survey; sections 4 to 9 provide a detailed description of the responses to the main sections of the survey; and section 10 provides some concluding thoughts.

2. Description of the Survey

To understand the regional perception on the importance of systemic oversight, the status of practices in the region and challenges going forward, the survey included questions on three broad topics: microprudential oversight, management of economic cycles, and questions related to macroprudential oversight. The survey was sent to all the LAC bank supervisory agencies that are members of ASBA. The head of banking supervision of the agency (from now on called supervisor) was asked to respond, and to forward the survey to the financial stability or research

department of the central bank (from now on referred as monetary authorities), even if not an ASBA member. Bank supervisors were asked to respond to questions related to microprudential and macroprudential oversight while monetary authorities were asked to respond to the questions related to management of economic cycles and macroprudential oversight. Bank supervisors could coordinate responses with other line supervisors (such as insurance, pensions or securities) but only one response would be sent by country. Of the 31 countries members of ASBA in the LAC region, 19 supervisors and 9 central banks responded the survey (Annex 1).

The survey comprises 117 questions that seek to capture the basic framework and facts, as well as the authorities' views and plans, regarding the six following questions:

1. How important is it to enhance the current systemic oversight framework?
2. Is there a need for redefining the perimeter of regulation in order to help preventing excessive risk-taking behavior and limit the scope for regulatory arbitrage?
3. How much progress has already been achieved towards measuring and internalizing the cross-sectional component of systemic risk and what are the major issues looking forward?
4. How much progress has already been achieved towards addressing the dynamic component of systemic risk and what are the major issues looking forward?
5. How well equipped are supervisors to face the challenges of systemic supervision?
6. How effective is the inter-agency collaboration (between the central bank, the domestic supervisory agencies and the cross-border supervisory agencies) in assessing systemic risks and taking appropriate action when needed?

3. Main Survey Findings

There is broad consensus among regional financial authorities on the need to enhance the current systemic oversight framework. Latin American economies withstood reasonably well the recent financial crisis, but financial authorities in LAC see an increasing likelihood of occurrence of a systemic risk- induced financial crisis as systems develop and become more sophisticated. Most survey respondents indicated that enhancing supervisory capacity to assess systemic risks and to

identify risks in sophisticated products is a top priority, followed by the need to adjust prudential norms to account for systemic risk. About half of respondents pointed out that systemic risk monitoring needs strengthening, with smaller countries being less comfortable about their monitoring framework. In many countries for example, housing prices and housing market developments are not monitored due to lack of proper price indices and only half of respondents monitor systemic risk based on macro developments and credit growth on a regular basis. The biggest stumbling block in the road to reform is boosting supervisory capacity and human capital. Issues related to the supervisory architecture appear relevant as well, with the majority of respondents indicating that rethinking the organization of supervision was an important factor to consider for the improvement of systemic oversight.

Regulatory perimeters in LAC are widely set and resetting the perimeter does not appear as a top priority at this time. Nevertheless supervisors perceive important opportunities for regulatory arbitrage for institutions outside the perimeter and indicate that they plan to extend the perimeter to hitherto unregulated institutions. Retail stores, microfinance institutions and to less extent factoring companies are the intermediaries most frequently outside the oversight perimeter. The silo approach to financial intermediation appears prevalent in LAC, with restrictions on activities to be undertaken by institutions with different licenses and regulation rarely based on the nature of the activity alone. Prudential regulations in LAC tend to be comprehensive, with the notable exception of regulations for cooperatives, although liquidity regulations are not as widely applied as capital adequacy and provisions. Peculiarities with cooperatives regulations may be related to the fact that in several countries their oversight resides in a ministerial department or is the responsibility of cooperatives federations. Albeit regulatory perimeters are wide, safety net perimeters are much narrower, mainly covering only commercial banks.

The most pressing perimeter issues relate to risk-shifting among conglomerates, but powers to regulate conglomerates do not appear comprehensive. This is particularly the case for structures where financial (and real sector) companies that belong to the group are not owned by the bank but by entity that owns the bank. In several countries, banking groups (BG) or financial conglomerates (FC) exclude non-financial group entities. Few countries require constituting a

financial holding company (FHC) to control FC financial sector activities and in the majority of cases can be created abroad. Capital requirements over holding companies are rare.

Regulation of the cross-sectional components of systemic risk is, as elsewhere, incipient. While LAC is ahead of other regions in the use of countercyclical provisions, the use of other countercyclical prudential regulations is limited. Capital charges in LAC are uniform across banks, and do not vary with the size of the institution, interconnectedness or other factors that determine its contribution to systemic risk. The existing liquidity requirements that are considered of systemic nature relate to central bank reserve requirements and regulations that require banks to have contingency planning in the event of systemic liquidity shocks⁶. Countercyclical capital, liquidity and lending requirements or circuit breakers⁷ have not been adopted, but in the region, financial authorities seem to be more open to consider countercyclical provisions and capital requirements. Implementation difficulties seem to be hampering wider adoption of such norms.

The majority of respondents thought that there should be a fundamental redefinition of the role and functions of the supervisor and making it more proactive. However, supervisory powers to request additional buffers to account for the buildup of systemic risks appear limited in several jurisdictions. Agencies' legal mandates, political and industry pressures and lack of adequate legal protection for supervisors were quoted as factors hampering the exercise of supervisory discretion.

The stability of the financial system is a collaborative effort between various regulatory bodies albeit there appears to be scope for improving coordination between supervisors and the central bank, and among different supervisors. The majority of supervisors do not participate on monetary policy meetings, although most consider it would be convenient since the banking sector is an important channel for monetary policy transmission and such decisions may impact

⁶ Nevertheless, some highly dollarized countries have introduced prudential liquidity requirements to deal with dollarization risks which are systemic in nature.

⁷ A circuit breaker is defined as a temporary change in operational or market procedures under periods of high turbulence, including suspension of deposit convertibility or mutual fund redemptions, stock trading suspension, short-selling bans, mark-to-market adjustments, etc. A circuit breaker is considered pre-wired if it is already embedded in the contract and legal framework.

financial sector stability. Formal and regular meetings between the head of monetary and supervisory agencies to discuss macro-prudential issues take place in only half of countries meetings among technical staff are rarer. Collaboration of supervisors in the production of central bank financial stability reports is limited, and collaboration of staff from central bank financial stability units in supervisory activities (including off-site supervision or stress testing exercises) does not take place. Only half of the respondents indicated that that there are formal arrangements in place to discuss and resolve potential issues of regulatory arbitrage across financial institutions with different licenses supervised.

Lastly, there are important challenges on cross border coordination to deal with systemic risk in the LAC region. The main sources of concern regarding systemic oversight are international financial groups and regional financial groups. Lack of effective arrangements for cross-border information exchange and discussion of common issues to deal with cross-border crisis, and for sharing the resolution costs of institutions operating cross-border are sources of concern among regional supervisors.

4. Relevance of Systemic Oversight Reform

Financial authorities in LAC see that the likelihood of occurrence of a systemic risk- induced financial crisis increases as systems develop and become more sophisticated. Most Latin American supervisors and monetary authorities think unlikely that a financial crisis similar to the one recently experienced in the US could happen in their countries under the current stage of financial development. However, as the system evolves in sophistication, over 50 percent of the respondents consider somewhat likely that a US-type crisis could happen in their countries (Figure 1). Over 80 percent of respondents pointed to limited exposure to subprime assets and toxic US assets as important or extremely important reasons for their financial system resilience. More than half also thought that a simpler financial system with limited global integration and a stricter approach to prudential oversight had helped.

Most respondents felt the latest world cycle did not complicate much local prudential management (Figure 1). However, there seems to be some difference in perceptions; a third of

monetary authorities indicated that it had complicated prudential management on the upturn while only 20 percent of supervisors thought so. Aggregate demand fluctuations were the most important source of financial sector vulnerability to the last economic cycle, ahead of exchange rate fluctuations or volatility in capital flows. Several respondents indicated that US aggregate demand fluctuations had an impact on GDP, employment levels, exports and remittances. The main reported direct effect on the financial sector of the global downward spiral that began in September 2008 was liquidity shortages, but respondents indicated that policies to provide foreign and domestic liquidity succeeded in overcoming the situation.

About half of respondents indicated that systemic risk monitoring needs strengthening, with smaller countries being less comfortable about their monitoring framework (Figure 1). The LAC 5 countries (Brazil, Chile, Colombia, Mexico and Peru) generally perceived that their approach to overseeing systemic risks is good although they noted it is necessary to further strengthen coordination among different financial authorities. Enhancing supervisory capacity to assess systemic risks and to identify risks in sophisticated products is the top priority (more than 80 percent of respondents thought them to be very important or extremely important) followed by the need to adjust prudential norms to account for cross-sectional systemic risk (about 70 percent). Making prudential norms more counter-cyclical and enhancing supervisory powers to take discretionary action to reduce systemic risks was considered extremely or very important by over 60 percent of respondents. Also, 80 percent (or more) of respondents thought that improving the safety net, improving the accounting framework and enhancing transparency, and resetting the regulatory perimeter of prudential oversight was at least important. One country indicated that extending the regulatory perimeter to conglomerate holdings would also be very important. Virtually all supervisors and monetary authorities indicated that cooperation with each other is very or extremely important to improve systemic oversight. Cooperation with other domestic supervisors and foreign supervisors is also considered very important.

The biggest stumbling block in the road to reform is boosting supervisory capacity and human capital. Close to 80 percent of the respondents saw this as very or extremely important challenge, particularly because inadequate regulatory capacity cannot keep up with fast-evolving markets

Figure 1. Relevance of Systemic Oversight Reform

and products (Figure 1). Several respondents indicated that multilateral institutions could play a useful role to enable continuous capacity building and guidance on international best practices. Mobilizing support for the necessary legal and institutional reforms, getting a clearer vision of the issues and alternatives and boosting cross-agency coordination are also viewed as pressing issues.

5. Regulatory Perimeters in LAC and Scope for Regulatory Arbitrage

Despite the relative simplicity of financial systems in LAC, a variety of financial intermediaries operate in most countries⁸. Commercial banks, credit cooperatives and insurance companies are present in virtually all countries. In at least half of the countries microfinance institutions, credit card companies, finance companies, leasing companies operate as well (Figure 2)⁹. Hedge funds, retail stores and public utility firms conduct financial intermediation in only few countries, while offshore banks and factoring companies operate in about 40 percent of countries. Three countries clarified that off-shore banks could not conduct business with residents. In addition, investment vehicles—which invest resources from the public but they are not leveraged—operate in most countries as well including pension funds, money market funds, mutual funds, and other funds.

Prudential oversight perimeters tend to be wide in LAC. Retail stores, microfinance institutions and to less extent factoring companies are the intermediaries most frequently outside the oversight perimeter (Figure 2). Supervisory perimeters tend to broadly coincide with regulatory perimeters albeit there are notable exceptions (for example insurance companies are not supervised in Haiti). Most institutions are supervised by the central bank or a superintendence. Brokerage houses are the intermediaries more frequently supervised by an independent securities commission or superintendence. However, in several countries regulation and supervision of cooperatives resides in a ministerial department or is the responsibility of cooperatives federations (which in some cases are then in turn supervised by the financial supervisor)¹⁰. Most supervisors indicated that are considering extending the perimeter of regulation in the near term

⁸ Financial intermediaries are defined as those that borrow resources from the public to lend or invest in a leverage way.

⁹ However, based on comments to the survey it is unclear to what extent microfinance institutions actually borrow resources from the public.

¹⁰ Cooperatives operate in 18 countries but are regulated in 17 countries and supervised in 16 countries. In 7 countries regulation and/or supervision is outside the central bank or superintendence.

for those intermediaries that are yet un-supervised/un-regulated¹¹. Institutions are mostly regulated independently of their size. However, in 3 countries, cooperatives are only regulated and supervised beyond a certain threshold related either to size or to whether they take deposits from the public in addition to member deposits. Investment vehicles tend to be regulated as well, with very few exceptions in small countries with underdeveloped capital markets.

Prudential regulations in LAC tend to be comprehensive, with the notable exception of regulations for cooperatives, although liquidity regulations are not as prevalent as capital adequacy and provisions (Figure 2). This is somewhat surprising since while insolvent institutions may continue operations if they are liquid, illiquidity may precipitate the failure of a solvent institution. Absence of liquidity regulations is particularly widespread for brokerage houses¹². The type of regulation applied to cooperatives in many countries seems rather weak. Only 15 of the 17 countries that indicate regulate cooperatives provided details on the type of regulation applied. Provisions seem to be the most common regulation (applied in 14 countries), followed by exposure limits and licensing (12 countries). In 4 out of the 15 respondent countries there are no minimum paid in capital requirements or capital adequacy ratios, and in two third of those countries there are no liquidity regulations for cooperatives. Insurance companies are regulated in 16 cases, but regulations only imply licensing and minimum paid in capital in 14 cases, capital adequacy ratio in 11 cases and provisions in 12. In 2 countries out of the 7 in which off-shore banks operate, they are not subject to CAR or provisions regulations, and in one case, off-shore banks are not subject to minimum paid in capital. In the case of investment funds, about 50 percent of respondents indicated they had liquidity requirements for mutual funds, mostly in the form of liquidity requirements for money market funds, although in some cases there are also limits on redemption.

¹¹ One supervisor indicated that they are not considering to extend the regulatory perimeter as unregulated sector was small, with loans of unregulated institutions currently amounting to about 1.5 percent of bank loans.

¹² Only 5 of 11 countries responding to the question of regulation of brokerage houses indicated they apply liquidity regulations

Figure 2. Perimeter of Oversight

Albeit regulatory perimeters are wide, safety net perimeters are much narrower, mainly covering only commercial banks (Figure 2). Nevertheless in some countries, mostly Caribbean and Central American, there are neither deposit insurance arrangements nor central bank facilities for commercial banks (the latter reflecting restrictions due to official dollarization). Credit cooperatives are typically outside the safety net. Access to lender of last resort facilities is quite limited.

The silo approach to financial intermediation appears prevalent in LAC. In most countries it is necessary to obtain a license to conduct financial intermediation, which is typically granted by the agency responsible for prudential oversight of the intermediary. Only 60 percent of respondents grant a universal banking license, albeit universal banks cannot conduct a wide range of activities (Figure 2). Universal banking licenses in LAC typically allow to conduct leasing and factoring, and to less extent investment fund management, merchant and investment banking (Figure 3). However, in most cases insurance and securities brokerage cannot be done by universal banks.

Prudential norms are rarely set on the basis of activity alone and typically regulations do not consider contingent liabilities. Typically either is done on the basis of the license (40 percent of cases), or it takes into account both license and activity. However, all respondents (but one) indicated that minimum paid in capital varies with the nature of the license in all countries. Several countries indicate that the activity is restricted to the type of license granted; however, many intermediaries can grant loans or invest. In the case of Chile, for example, insurance companies can grant retail loans—a common practice in several countries by which insurance companies lend using the insurance policy as collateral—but are supervised by the superintendence of Securities and Insurance instead of the Banking Superintendence, which supervises other lending institutions. Only in the case of commercial banks does prudential regulation take into account the size of contingent liabilities. For most other intermediaries it is unusual. Also, respondents indicated that no domestic bank can set an off-shore bank and operate with residents under different prudential regulations.

Powers to regulate conglomerates do not appear comprehensive. In 40 percent of countries, banking groups (BG) or financial conglomerates (FC) exclude non-financial group entities. Most

supervisors indicated they can presume which companies belong to the FC (80 percent). However, only in 30 percent of respondent countries a financial holding company (FHC) has to be created to control all of their financial sector activities. Moreover, FHC can in the majority of cases be created abroad and in those cases it would be under foreign supervision. Related party limits are a widespread tool to reduce exposure from the bank to the rest of the FC or economic group. Permissible activities and larger exposure limits are also applied in about 2/3 of the cases while ownership limits in about half of cases (Figure 3). In more than half of the countries there is no special capital requirement for financial groups. Some countries seem to have interpreted this as powers over the holding company (in cases where the holding has to be constituted) and others seem to interpret the group as the bank and their subsidiaries. Powers over conglomerates do not appear to be more extensive in LAC 5 countries where 4 out of 5 countries don't have capital requirements over the group in comments to the questions. However, for example in the case of Mexico there is an agreement of responsibility by the holding with regards to the losses of its subsidiaries¹³. About 70 percent of countries consider the financial group (understood in most cases as a bank and its subsidiaries) when setting capital requirements; they set them either on a fully consolidated basis, or set requirements for both the group and the individual institutions.

Supervisors and monetary authorities perceive substantial scope for regulatory arbitrage, particularly across regulated and unregulated institutions as well as across borders. More than 50 percent of respondents thought such issues to be very or extremely important, even though regulatory perimeters are wide as previously discussed (Figure 3). Arbitrage among institutions belonging to the same group and financial intermediaries with different licenses was perceived also as important by about 50 percent of respondents. Accordingly, the most pressing perimeter issues relate to risk-shifting among conglomerates, both cross border and domestic. Other perimeter issues associated with accumulation of opaque liabilities including through derivatives by real sector corporations, over the counter trading of derivatives activities and provision of

¹³ The financial group's holding company is responsible for all and every liability and/or losses (defined as an inability to meet its obligations due to lack of assets) of its subsidiaries. In the event of simultaneous defaults, the group should respond for its bank's liabilities first, and only the deal with the issues concerning the rest of its subsidiaries on a pro-rata basis. For their part, subsidiaries charter's are required to explicitly state that they will not be held responsible for losses of their holding company or those of fellow subsidiaries within the group.

Figure 3. Scope for Regulatory Arbitrage and Perimeter Issues

services by unlicensed intermediaries were also perceived as important by at least 50 percent of respondents.

Credit cooperatives and insurance companies are institutions for which respondents think that is most important to strengthen regulation for systemic concerns (Figure 3). About 50 percent of respondents also indicated it would be important as well for investment vehicles (pension, money market and mutual funds). Only five countries out of the 19 that responded are considering adjusting regulation to take into account the systemic importance of the institution, although many more have not ruled out doing so. Supervision is more commonly adjusted to this fact, but mostly on a preliminary basis.

6. Cross-Sectional Regulation of Systemic Risk

Regulation of systemic liquidity risk is still relatively incipient in LAC. About 60 percent of supervisors indicated that their current regulatory framework distinguishes between systemic and idiosyncratic liquidity risks¹⁴. Some supervisors clarified that the distinction is done in the context of liquidity stress test scenarios or that the regulation envisions a role for the central bank in the provision of systemic liquidity. Most countries do not have systemic liquidity requirements in place, albeit their introduction has not been ruled out (Figure 4). The existing requirements that are considered of systemic nature relate to central bank reserve requirements, regulations that require banks to have contingency planning in the event of systemic liquidity shocks, and increased liquidity requirements for foreign exchange liabilities or for example prior to an election when systemic risks are perceived to be higher. The incorporation of systemic liquidity concerns in capital is virtually non-existent. One of the respondents that indicated some form of requirement was in place referred to the capacity of the supervisor to require additional capital in reaction to risks that could affect the bank solvency (and thus its capacity to repay deposits).

Capital charges in LAC are uniform across banks, and do not vary with the size of the institution, interconnectedness or other factor that determines its contribution to systemic risk. Uruguay and Peru indicated that they are considering imposing additional capital surcharges for systemic risk.

¹⁴ Only 20 percent of monetary authorities answered such distinction existed.

Figure 4. Oversight of Cross Sectional Systemic Risk

In the case of Uruguay the surcharge under consideration will depend on the size of uninsured deposits and the size of international reserves available for the lender of last resort. In only about 40 percent of countries do capital charges for counterparty credit risk vary depending on whether the counterparty is a regulated financial intermediary or unregulated.

Financial innovation is typically regulated in the region. About 60 percent of supervisors (including most LAC 5 countries) indicated that they have powers to authorize new financial products or regulate existing ones. The majority of supervisors also indicated that they plan to introduce in the near future changes to the governance framework of financial intermediaries as a result of the global financial crisis (Figure 4). Some countries refer to the need to strengthen bank boards and improve fit and proper criteria for banks. Mexico noted that it has agreed to adopt the principles and standards issued by the Financial Stability Board regarding executive compensation. The central bank of Brazil has drafted a document on executive compensation schemes which is under consultation. Several countries indicate the willingness to comply with any newly issued international standards for corporate governance.

Deposit insurance schemes still need to be developed in several Latin American countries and price of insurance does not reflect contributions to systemic risks. As previously indicated, about 40 percent of countries, mostly Caribbean and Central American do not have deposit insurance schemes in place. Deposit insurance premium typically only include deposits (exclusively insured deposits in half of cases). Countries are not considering charging a premium over liabilities other than deposits or adjust the premium charged in relation to the systemic risk posed by the institution.

7. Dynamic Systemic Regulation

Almost all monetary authorities indicated their interest rate policy is not sufficient to control credit cycles and asset bubbles, and several respondents indicated to have used other policy instruments as well. In some cases, given official dollarization, the central bank is not in control of interest rates. Some other countries indicated that excess liquidity in the financial system reduces the effectiveness of interest rate policy as banks do not need to borrow from the central bank. Other countries also pointed to the difficulties to detect asset bubbles. Four out of the nine

respondents have used reserve requirements. They are perceived as quite successful instrument, particularly in the downturns. Two countries reported to use capital controls in the last 10 years to preserve financial stability. They were perceived at least moderately successful in diminishing exchange rate volatility and in shifting the maturity of foreign liabilities towards longer terms.

There is wide variety of opinions among monetary authorities and supervisors on how strong is the case for having macroprudential tools to help control credit cycles and asset bubbles. About a third in each group of respondents sees a strong case, a moderate case and no case respectively (Figure 5). Some of the countries that saw a strong case for such tools indicated that being a small open economy external shocks have substantial impact and macroprudential tools would help stabilizing the economy. In general countries that did not see a case for such instruments pointed out to the fact they have not experienced asset bubbles. One supervisor noted that using macroprudential instruments in the downturn could be potentially dangerous to financial stability.

Circuit breakers have not been widely used. Only 4 countries reported have been done so. In one case, stock trading was suspended. In other case, mutual fund redemptions were suspended when allowed by contractual clause. Other types of breakers where also introduced by the industry. For example, fund managers in one country temporarily changed the pricing of money market mutual fund quotas from historic to market price. About 50 percent of respondents indicate they are not considering introducing any type of circuit breakers.

While LAC is ahead of other regions in the use of countercyclical provisions, the use of other countercyclical prudential regulations is incipient. Changes in capital requirements were only used in one case to control credit and asset bubbles in the last decade. Countercyclical liquidity norms are not used either, although more than half of respondents indicate they are not ruled out¹⁵ (Figure 5). Equally, countercyclical capital and leverage ratio requirements are not in placed but about 70 percent of supervisors indicated they have not ruled them out. Four countries in the region have introduced countercyclical provisioning requirements (Bolivia, Colombia,

¹⁵ Some countries indicated they had some form of countercyclical liquidity requirement because they have countercyclical provisions.

Peru and Uruguay) and two other countries are considering their introduction. Virtually no country has ruled out introducing them at a future stage. Regarding countercyclical lending norms, such as loan-to-value ratios or haircuts in repos, no country in the region has introduced them, albeit slightly over half of respondents indicated they have not ruled them out (including all LAC 5 supervisors).

Financial authorities noted that the effectiveness of such measures needs to be further studied and pointed to several implementation challenges. In most cases the introduction of the countercyclical measures has been relatively recent. Thus, supervisors and monetary authorities in these countries tend to think it is early to fully assess the success of existing countercyclical norms. One of the supervisors also noted that it was difficult to assess the impact of the countercyclical prudential norm in isolation from the rest of the regulatory framework.

Respondents indicated that technical difficulties, institutional difficulties and implementation challenges are equally important factors that need to be addressed to introduce countercyclical norms. One country mentioned that lack of statistical records complicated the calibration necessary for the design of the norm. Supervisors in two countries mention difficulties in getting the industry to accept the proposals given their lobbying capacity and in reaching agreement with the industry in the rules during the consultation process.

Figure 5. Dynamic Systemic Regulation

8. Systemic Risk Supervision and Challenges

There is substantial scope for improvements in systemic risk supervision in LAC. About 45 percent of respondents saw their ability to monitor systemic risk as good or excellent (including bank supervisors in 4 of the LAC 5 countries), and 40 percent indicated it needs strengthening (Figure 6). Two respondents indicated that effective consolidated supervision of conglomerates (including cross-border ones) would be necessary to improve systemic risk monitoring¹⁶. There are several key hindrances to the agencies' capacity to conduct effective systemic risk supervision including (i) the need to develop proper staff skills, (ii) better coordination with other domestic supervisors, (iii) need to strengthen legal powers, protection and independence of supervisors and (iv) better use of market data (Figure 6). Issues related to the supervisory architecture appear relevant as well; only about a third thought that rethinking the organization of supervision was moderately or not important factor. More than 50 percent of respondents saw assessment of risk profiles, strategic directions and internal controls as extremely important and virtually all thought this was extremely or very important for systemic risk monitoring. About 85 percent of respondents thought that analysis and monitoring of compliance and trends observed from reported prudential reports was extremely or very important and 65 percent thought the same about reviewing the accuracy of reports of regulatory compliance.

The majority of respondents thought that there should be a fundamental redefinition of the role and functions of the supervisor and making it more proactive, at least to some extent. Only about 15 percent of respondents did not think any reform was necessary (Figure 6). Some supervisors emphasized the need to decisively change the traditional scope of supervision to become more risk-based. Several of them also indicated that supervisors should be more proactive and adopt pre-emptive measures to preserve financial stability when perceived risks are building up. Supervisory agencies should then clarify their strategies and mechanisms to deal with such risks. It was also noted that there may be excessive reliance on rating agencies and that it is necessary that some agency be willing to tackle asset price bubbles. Monetary authorities commented on the need to adopt a macroprudential approach both in regulation and

¹⁶ One country noted the need for international efforts to develop standards on systemic risk monitoring. Other country indicated the need for better models (in the profession in general) to understand the impact of financial instability on the economy.

Figure 6. Systemic Risk Supervision Capacity

supervision. About half of respondents indicated that recent events had altered their views regarding the scope for market discipline and the role of price signals in helping enhance the effectiveness of official oversight.

Frameworks to monitor sources of cross-sectional systemic risk still need to be developed in many countries. Less than a fourth of respondents felt that housing market monitoring was good and none thought it was excellent (Figure 6). About 20 percent of respondents indicate they do not monitor housing market developments. Only one monetary authority thought its monitoring of this market was good. Supervisors noted that lack of good and reliable data on housing prices hampered monitoring albeit several supervisors indicated that housing credit markets remained underdeveloped, limiting the scope for systemic risk build up. Over the counter derivatives markets are not monitored by half of the respondents whom indicated that such markets were not significant in their jurisdictions. Only LAC 5 countries reported having active derivative markets and all supervisors in these countries thought that their monitoring was good and that the monetary authorities collected and reported data on transactions periodically to supervisors. Only a fourth of respondents indicated that their monitoring of regulatory arbitrage across groups or institutions with different licenses was good or excellent (Figure 6). Off-balance sheet activities are monitored by all respondents and only 20 percent thought it needed strengthening. Regarding new and/or sophisticated products and services, only about a fifth of respondents thought that their ability to assess inherent risks was good (none thought it was excellent).

Supervisory powers to request additional buffers to account for systemic risks appear limited in several jurisdictions. About 40 percent of respondents indicated that their powers for requesting that an institution increases its capital, provisions, or liquidity based on their exposure to systemic risk was poor or non-existent (Figure 7). The main hindrance to the use of supervisory discretion is the agency's legal mandate. About 40 percent of respondents indicated that political pressures and industry pressures were an important factor and 30 percent pointed also to lack of legal protection. About 3/4 of respondents indicated that the civil code was not important factor. One supervisor also noted that the complexity of the issues involved in measuring systemic risk made it difficult to get precise measures on which to base additional prudential requirements. Most respondents indicated that market discipline should be strengthened at least to some extent,

including through the adoption of the pillar 3 of Basel II and International Financial Reporting Standards.

While most supervisors and monetary authorities in LAC have operational independence, budgetary and administrative independence to set salary scales is less frequent. The latter is the case especially among heads of supervisory agencies (about 40 percent indicated the lack such independence, Figure 7). Regarding accountability, most agencies indicate they are legally responsible to the government, mostly to the minister of finance, or the monetary board or council in the countries in which such institution exists.

The range of tools and indicators used to monitor systemic risk build up is still limited in most LAC countries. Only half of respondents monitor systemic risk based on macro developments and credit growth on a regular basis (Figure 7). Stress testing, financial stability reports and monitoring of evolution of credit and deposits over GDP are the tools used for this monitoring. About 40 percent of respondents indicate they conduct systemic stress testing exercises regularly, and an additional 30 percent conduct them occasionally. While these stress tests account for the impact of macroeconomic factors, they seem to be mostly applied to commercial banks only. Only 3 supervisors and 1 monetary authority reported to monitor systemic liquidity risks on continuous basis. An additional 40 percent of agencies indicated that they monitor it on a preliminary basis. Respondents indicated that they monitor liquidity ratios, interbank market rates and funding gaps but noted that they need to better incorporate interconnections. Several institutions indicated are currently working on incorporating a systemic component on their liquidity monitoring. Few agencies assess marginal contribution of the individual institutions to systemic risk, mostly on a very preliminary basis, through stress tests exercises and monitoring interbank linkages. Only about 20 percent of respondents indicated they set and adjust discretionally minimum haircuts on securities used for repos. An additional 20 percent are considering doing so.

Figure 7. Systemic Risk Supervision Challenges

9. Inter-agency collaboration to monitor and manage systemic risk

There is a variety of arrangements in LAC regarding who is responsible for setting prudential regulation. In about a third of countries the mandate for setting prudential regulation is with the central bank, while in another third with the superintendence (Figure 8). In Brazil, Guatemala, Eastern Caribbean countries and Dominican Republic the responsibility lies in a monetary board/council, in Costa Rica is the responsibility of the council of supervisors while in Chile the responsibilities are split between the central bank and the superintendence with the former issuing prudential regulation related to financial and liquidity aspects and the latter concentrating on solvency related regulations. In no LAC country prudential regulation falls under the purview of the minister of finance.

The stability of the financial system is a collaborative effort between various regulatory bodies. In the majority of the countries, the central bank has a mandate to maintain financial stability (15 out of 19 countries), together with the supervisor authority (9 countries) and/or the ministry of finance (Figure 8). In countries with monetary boards this institution is entrusted with this task. Most respondents indicated that the mandate is explicitly defined, although the term financial stability is not always explicitly mentioned but instead there are references to preserve the value of the currency and the stability of external and internal payments. Over 70 percent of the respondent countries have financial stability departments in the central bank.

There appears to be scope for increased collaboration between supervisors and monetary authorities. The majority of supervisors do not participate on monetary policy meetings, albeit most of supervisory agencies think such participation would be desirable since the banking sector plays a key role on monetary policy transmission and policy decisions can impact the liquidity and solvency of the system. One supervisory agency indicated that while permanent participation of the head of supervision in monetary is not necessary, he or she should be able to express opinions in financial instability contexts. In only about half of the respondent countries there are regular formal meetings between the head of monetary and supervisory agencies to discuss macro-prudential issues and outlook of the economy. In the rest of countries meetings are formal but occasional or they are regular but informal. However, regular formal meetings among

technical staff are rarer. In one case the central bank clarified that they meet with technical staff from the superintendence when they are preparing the financial stability report to request data and opinions. About 75 percent of supervisors indicated that they did not collaborate at all on the production of the central bank financial stability report. In no case collaboration between superintendences and central banks (in countries where both exists) include joint participation on on-site or off-site inspections. In the countries in which supervision is within the central bank is not clear whether there is cooperation across departments; respondents indicated there is only one institution but details on the nature of the collaboration were not provided.

Cooperation among different domestic supervisors could also be improved upon. Only half of the respondents indicated that there are formal arrangements in place to discuss and resolve potential issues of regulatory arbitrage across financial institutions with different licenses supervised. Some of these arrangements include: (i) Memorandums of Understanding (MOUs) with local and foreign supervisors in order to facilitate information sharing and to convene formal meetings on a regular basis; and (ii) regulatory committees to coordinate financial groups' supervision, review laws and regulations and to provide a forum for discussion of all relevant issues. About 40 percent of respondents indicated that they conduct inter-agency crisis simulation, but not on a regular basis.

There are important challenges of cross border coordination in the LAC region. The main cross-border sources of concern regarding systemic oversight are international financial groups and regional financial groups (70 percent of respondents see it as very or extremely important source) (Figure 8). Off shore entities also remained important for most countries. MOUs are considered extremely important for providing cross border information exchange by 50 percent of supervisors and virtually all the rest considered them very important. Ad hoc contacts were considered important or extremely important by 75 percent of the respondents, while only 55 percent thought so of legally binding agreements. Letters of commitment seem to be the less effective mechanism. Lack of effective arrangements for cross-border information exchange and discussion of common issues is a very important concern for a significant majority of the respondents (75 percent). Over 50 percent of supervisors noted to be very or extremely important as well: (i) the lack of effective arrangements to deal with cross-border crisis (63 percent);

Figure 8. Architecture and Coordination

(ii) the lack of effective arrangements to discuss common issues between home and host supervisors (61 percent); (iii) the lack of effective cross-border inspections (57 percent); and (iv) the lack of effective arrangements for sharing the resolution costs of institutions operating cross-border (50 percent).

10. Summary and Conclusions

Supervisors and monetary authorities in LAC, both in large and small countries, are increasingly focused on improving systemic oversight. The concern of the authorities with potential build up of systemic risks is warranted. While financial systems in LAC remain underdeveloped in terms of size and the complexity of products taken, a wide variety of financial intermediaries already operate in most countries. Large cross-border conglomerates with complex structures and institutions that because of their size or interconnectedness can be considered systemically important already dominate the landscape in several countries. At the onset of the global financial crisis, new and unexpected channels of contagion among institutions and markets manifested. In Mexico for example, a corporate default arising from exposure to exotic FX derivatives froze the commercial market paper in turn affecting firms refinancing capacity which could have prompted further corporate defaults. In Brazil, the central bank engaged in substantial liquidity injections, in part to counter the “drain” associated with the fact that banks had to place additional liquidity at their accounts in the central counterparty clearing house to cover heightened margin calls. The failure of CL financial, a large complex regional conglomerate with interests in insurance, banking, energy, agriculture and real estate and operations in several countries has had substantial impact in the Caribbean. Going forward, a key challenge for LAC (as elsewhere) would be reforming the current oversight and safety net structure to account for the accumulation of systemic risks.

There is a comprehensive agenda of regulatory reforms being considered by LAC financial authorities to improve systemic risk oversight. Such reforms include the adoption of macroprudential regulations (i.e. adjusting prudential norms to account for cross-sectional systemic risk making prudential norms more counter-cyclical), as well as the adoption of regulation that limits the scope for regulatory arbitrage within conglomerates, including cross-

border ones. Regulatory perimeters are widely set in LAC and their redefinition is not a top priority at this time. Nevertheless supervisors perceive important opportunities for regulatory arbitrage for institutions outside the perimeter and indicate that they plan to extend the perimeter to hitherto unregulated institutions (such as cooperatives). Improving the safety net, the accounting framework and enhancing transparency are also considered important reform agenda items.

In tandem, there is an important institutional reform agenda to ensure the effectiveness of systemic oversight. Enhancing supervisory capacity to assess systemic risks and to identify risks in sophisticated products is the top priority for supervisors and monetary authorities in the region. Key aspects of the institutional reform also include redefining the role and functions of the supervisor to make it more proactive and enhancing supervisory powers to take discretionary action to reduce systemic risks. Finally, it is essential to improve cross-agency and cross-border coordination. The stability of the financial system is a collaborative effort between various regulatory bodies which requires enhanced coordination between supervisors and the central bank as well as among different line supervisors. Improved crossed border coordination is necessary to deal with risks associated to the operations of international and regional conglomerates are also pressing issues.

While the agenda is clearly defined, implementing reforms will require substantial efforts. To keep up with fast-evolving markets and products it will be essential to boost supervisory capacity and resources. Mobilizing support for the necessary legal and institutional reforms and getting a clearer vision of the issues and alternatives are also viewed as pressing issues. Multilateral institutions and supervisory associations could play a useful role to help in the implementation process enabling continuous capacity building, providing guidance on international best practices and helping mobilize support for implementation reform.

Annex 1. Respondents to the WB-ASBA Survey

Country	Head of Supervision	Head of Research Central Bank
Argentina		
Bolivia	X	
Brazil	X	
Colombia	X	X
Costa Rica	X	X
Chile	X	X
Ecuador		
El Salvador	X	X
Guatemala	X	X
Honduras		
Mexico	X	X
Nicaragua		
Panama	X	
Paraguay	X	X
Peru	X	X
Dominican Republic	X	
Uruguay	X	
Venezuela		
Aruba	X	X
Bahamas		
Barbados	X	
Belize		
Cayman Islands	X	
Haiti	X	
Netherland Antilles		
Suriname		
Trinidad and Tobago	X	
British Virgin Islands		
Guyana		
Jamaica		
Eastern Caribbean Islands	X	

Annex 2. Summary Statistics of Rating Questions*

Question	Average	Median	Variance	n
Please rate the factors underlying the possible relative resilience of your financial system, compared to that of the countries in the world that were the most affected:				
a. A simpler financial system with limited global integration	3.48	4.00	1.64	27
b. A stricter approach to prudential oversight	3.56	4.00	0.64	27
c. A more limited exposure to subprime-type assets	4.30	4.00	0.68	27
d. A more limited exposure to toxic US assets	4.42	5.00	0.65	26
e. Other	3.60	4.00	2.30	5
Please rate the importance of the following macroeconomic factors in exacerbating the vulnerability of your financial system to the latest world cycle:				
a. Capital flows	2.96	3.00	1.00	26
b. Exchange rate fluctuations	2.62	2.50	1.21	26
c. Aggregate demand fluctuations	3.30	3.00	0.83	27
d. Other	3.71	4.00	0.57	7
How would you rate the quality and usefulness of your cooperation with the following agencies regarding systemic oversight:				
a. The central bank	4.63	5.00	0.38	16
b. Other domestic supervisors	3.88	4.00	1.03	25
c. Foreign host supervisors	3.65	4.00	0.78	23
d. Foreign home supervisors	3.80	4.00	0.67	25
e. Multilateral organizations	3.52	4.00	1.01	25
Please rate the priority of taking the following actions:				
a. Redefining the perimeter of prudential oversight	3.19	3.00	0.70	27
b. Adjusting prudential norms to better take into account cross-sectional systemic risk	3.67	4.00	1.08	27
c. Making prudential norms more counter-cyclical	3.41	4.00	1.40	27
d. Enhancing supervisory capacity to assess systemic risk and vulnerabilities	4.26	4.00	0.51	27
e. Enhancing supervisory powers to take discretionary action aimed at reducing systemic risk and vulnerabilities	3.74	4.00	1.20	27
f. Enhancing supervisory capacity to better identify and quantify the risks inherent in sophisticated products and services	4.07	4.00	0.38	27
g. Improving the safety net	3.52	4.00	1.18	27
h. Improving the accounting framework and enhancing transparency	3.56	4.00	0.64	27
i. Other	4.00	4.00	0.00	3
Please rate the importance of addressing the following possible stumbling blocks on the road to reform:				
a. Getting a clearer vision of issues and alternatives	3.69	4.00	0.46	26
b. Mobilizing support for the necessary institutional and legal reforms	3.88	4.00	0.59	26
c. Boosting up supervisory capacity and human capital	4.08	4.00	0.55	26
d. Boosting up cross-agency coordination and cooperation	3.58	4.00	0.89	26
e. Other	4.00	4.00		1

Question	Average	Median	Variance	n
Under your current regulatory and supervisory arrangements, please rate the importance of regulatory arbitrage opportunities in the following areas:				
a. Across financial institutions belonging to the same group	2.79	3.00	1.58	28
b. Across financial institutions with different licenses	2.46	2.00	1.07	28
c. Across financial intermediaries with different licenses	2.82	3.00	2.15	28
d. Across the balance sheets of regulated institutions (off balance vs. on balance)	2.48	2.00	1.87	27
e. Across borders	3.39	4.00	1.14	28
f. From the regulated to the unregulated	3.25	3.50	1.90	28
g. Other	1.00	1.00	0.00	2
Please rate the importance of the following additional potential perimeter issues:				
a. Financial intermediation undertaken by unlicensed institutions	3.11	3.00	2.25	28
b. Other financial services provided by unlicensed institutions	2.75	2.50	1.82	28
c. Risk shifting between financial institutions and real sector corporations belonging to the same economic group	3.11	3.00	1.80	28
d. Cross-border risk shifting across financial institutions belonging to the same group	3.71	4.00	0.73	28
e. Acquisition of large and opaque potential financial liabilities by real sector corporations	2.96	3.00	1.67	28
f. Over the counter trading of derivatives and other instruments	2.43	3.00	1.22	28
g. Other	1.00	1.00	0.00	2
Please rate the importance of strengthening the regulation of the following financial institutions on account of potential systemic concerns:				
a. Money market funds	2.52	2.00	1.26	27
b. Other mutual funds	2.32	2.00	1.26	28
c. Credit cooperatives	3.00	3.00	1.33	28
d. Leasing and factoring companies	2.22	2.00	1.10	27
e. Finance companies	2.62	2.00	1.29	26
f. Brokerage houses	2.29	2.00	1.25	28
g. Insurance companies	2.82	3.00	1.93	28
h. Pension funds	2.67	3.00	1.62	27
i. Hedge funds	1.95	2.00	1.10	20
j. Other	1.71	1.00	1.24	7
If cyclically-adjusted prudential norms are deemed to be desirable but have not yet been introduced, rate the main difficulties that need to be overcome for their introduction and how much of a burden do the norms pose				
a. Technical difficulties (getting it right)	3.63	4.00	1.72	24
b. Institutional difficulties (getting everybody on the same page)	3.50	4.00	1.31	22
c. Implementation challenges	4.00	4.00	0.95	22
d. Other	3.67	3.00	1.33	3

Question	Average	Median	Variance	n
Please rate the key hindrances to strengthening your agency's capacity to conduct effective systemic supervision:				
a. Developing proper staff skills	3.56	4.00	1.49	27
b. Paying proper salaries	2.86	3.00	1.68	28
c. Rethinking the organization of supervision	3.07	3.00	1.70	28
d. Strengthening the powers, legal protection, and independence of the supervisor	3.48	4.00	1.49	27
e. Better coordination with the central bank and/or other supervisory agencies	3.37	4.00	1.32	27
f. Better coordination with foreign supervisors	3.30	4.00	1.37	27
g. Better use of market data	3.26	3.00	0.89	27
h. Other	4.00	4.00		1
Please rate the relative importance placed on the following supervisory activities:				
a. Analysis and monitoring of compliance and trends observed from reported prudential reports	4.25	4.00	0.49	28
b. Reviewing the accuracy of reports of regulatory compliance	3.79	4.00	1.14	28
c. Assessment of risk profiles, strategic directions, financial conditions and the adequacy of internal controls and risk management given the overall characteristics (size, complexity and risk profile) of the institution involved	4.46	5.00	0.41	28
What in your view is the most important hindrance to the use of supervisory discretion?				
a. The civil code	1.81	1.00	1.62	27
b. The agency's legal mandate	2.89	3.00	1.95	27
c. Political pressures	2.11	2.00	1.10	27
d. Industry pressures	2.22	2.00	1.26	27
e. Lack of or weak legal protection of supervisory officials	2.37	2.00	1.86	27
f. Other	3.75	3.50	0.92	4
Please rate the relative importance of the following potential cross-border sources of concern regarding systemic oversight:				
International financial groups	4.06	4.00	0.64	18
Regional financial groups	3.63	4.00	1.36	19
Off-shore entities	2.89	3.00	2.10	18
Other	3.00	3.00	4.00	3
Please rate the effectiveness of the following mechanisms, both formal and informal, for providing cross border exchanges of information:				
Legally binding agreements	3.20	4.00	2.17	15
Memoranda of understanding	4.33	4.50	0.94	18
Letters of commitment	2.85	3.00	1.81	13
Ad hoc contacts	3.94	4.00	0.46	16
Others	5.00	5.00		1

Question	Average	Median	Variance	n
How concerned are you about the following potential cross-border issues?				
a. Cross-border regulatory arbitrage	2.95	3.00	1.61	19
b. Agency and market discipline problems	2.58	3.00	0.81	19
c. Lack of effective arrangements for dealing with cross-border crisis situations	3.58	4.00	0.92	19
d. Lack of effective arrangements for sharing the resolution costs of the local subsidiaries and/or branches of foreign institutions	3.11	3.50	1.52	18
e. Lack of effective arrangements to exchange information between home and host supervisors	3.79	4.00	1.62	19
f. Lack of effective arrangements to discuss common issues between home and host supervisors	3.58	4.00	1.48	19
g. Lack of effective arrangements for cross-border inspections	3.21	4.00	1.84	19

* Note: The rating scale used was extremely important=5, very important=4, important=3, moderately important=2, not important =1.