Developments in Financial Regulation and Supervision in OIC Member Countries

A Comparative Look at the Course of Global Financial Crisis

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Based on the World Bank's Bank Regulation and Supervision Survey, this OIC Outlook Report explores mainly two questions. First, were there significant differences in regulation and supervision between OIC and crisis countries? Second, what aspects of regulation and supervision did change significantly during the crisis period? These specific questions are being asked in the widely argued context of why OIC countries, like many other developing countries, fared better and remained relatively unscathed during and in the aftermath of the recent global financial crisis.

In a nutshell, the results suggest that the overall regulatory response to the crisis has been slow, and there is room for further improving regulation and supervision, as well as private incentives to monitor risk-taking.

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OVERVIEW

Financial regulation and supervision has been a particular source of much recent debate and attention, due largely to the recent global financial crisis which broke out in 2007. A number of studies have pointed out that the weaknesses in regulation and supervision were one of the factors leading the world to the crisis.[1] The financial crisis did not only raise some important questions on the suitability of the regulatory and supervisory approaches followed in the run-up to the crisis, but also prompted regulators and other supervisory authorities to consider important reforms in the structure of regulation and supervision. However, as Čihák, Demirguc-Kunt, Pería and Mohseni-Cheraghlou (2012) put it: “Despite the high level of interest in the topic and extensive work on the global regulatory framework (exemplified for instance by the various initiatives of the Basel Committee on Banking Supervision), there is a surprising lack of consistent and up-to-date information on the regulatory and supervisory approaches pursued in countries around the world and the changes brought about by the crisis.”

The World Bank’s 2007 and 2011-2012 Bank Regulation and Supervision Surveys (BRSS)[2], in this regard, bring important insights into the questions of both how regulatory and supervisory frameworks varied across different country groups and how they have evolved across the world during the crisis period. The 2011-2012 edition of the BRSS, in this regard, is an updated and substantially expanded version of earlier BRSS releases (i.e. in 2001, 2003, and 2007). The 2011-2012 iteration of the survey provides information on financial regulation and supervision for 143 jurisdictions – including up to 38 OIC member countries[3] – through answers to an approximate 300 questions. The last two surveys (i.e. 2007 and 2011-2012) span the crisis period and, therefore, allows the researchers to examine the recent state of financial regulation and supervision in a wide range of OIC and other countries, including those hit hard by the crisis, and to compare it across different country groups as well as between pre- and post-crisis episodes.

Overall, the surveys provide a broadly balanced representation of countries in terms of level of income and population size. In terms of subject coverage, the surveys are quite comprehensive, providing a unique and valuable set of information on a wide range of issues related to financial regulation and supervision. In total, the surveys cover about 630 features of financial regulation and supervision, in the following 14 broad areas: (1) entry into banking, (2) ownership, (3) capital, (4) activities, (5) external auditing requirements, (6) bank governance, (7) liquidity and diversification requirements, (8) depositor (savings) protection schemes, (9) asset classification, provisioning and write-offs, (10) accounting and information disclosure, (11) discipline/problem institutions/exit, (12) supervision,

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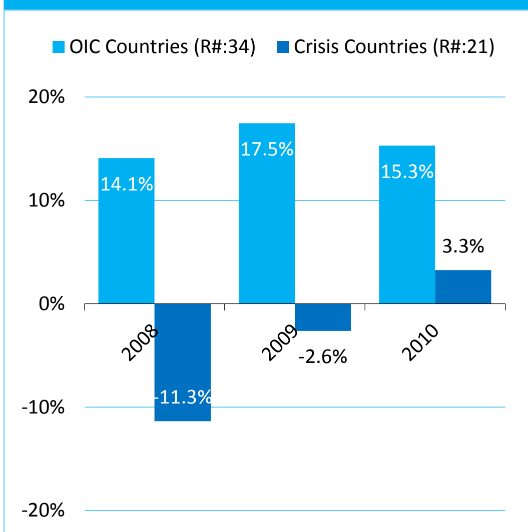
[1] See, e.g., Dan (2010), Lau (2010), Levine (2010), Merrouche and Neir (2010), and Barth et al (2012).

[2] Available for download at http://go.worldbank.org/WFIEF81AP0. See Box 2 on page 14 for a full list of OIC jurisdictions involved in the surveys.

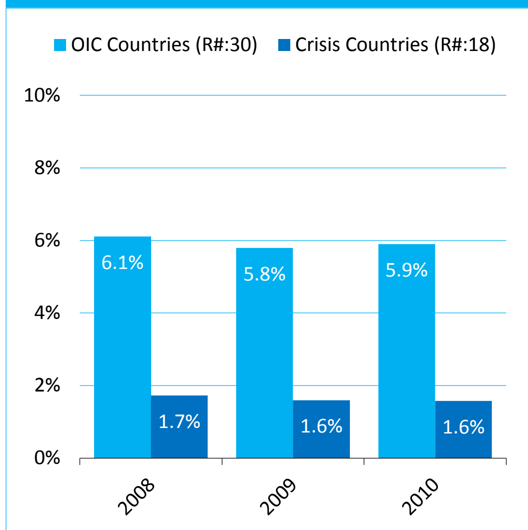
[3] The actual number of reporting OIC countries, in fact, varies depending on the concept under consideration.

Figure 1
What was the after-tax return on equity for the commercial banking system at the end of...?



Source: The World Bank 2011-2012 Bank Regulation and Supervision Survey

Figure 2
What was the aggregate-operating-costs-to-assets ratio for the commercial banking system in at the end of...?



Source: The World Bank 2011-2012 Bank Regulation and Supervision Survey

(13) banking sector characteristics, and (14) consumer protection. For reasons of comparability between the 2007 and 2011-2012 surveys, we first investigate the similarity of questions asked in the latter two and notice that about a half of the questions are matching.[4] Also, almost half of the questions added were in particular on issues highlighted by the crisis (e.g., macro-prudential regulation and consumer protection) and on matters related to the implementation of the new Basel rules. The surveys were generally addressed to the head of banking supervision in the central bank or to the head of a separate banking supervision agency. In some countries, the responses were provided directly by the agency head. In other countries, the agency head delegated the completion of the questionnaire to the relevant senior-level staff.

In the view of the above, the present study seeks answers to the following two main questions from a regulatory and supervisory point of view. First, what are the features of the regulatory and supervisory frameworks of OIC countries, and (how) did they differ from the countries that were directly hit by the global financial crisis (i.e. the crisis countries)? Second, how have national regulatory and supervisory practices changed over the course of (but, not necessarily, in response to) the global financial crisis around the world in general and in OIC countries in particular? These specific questions are being asked in the widely argued context of why OIC countries, like many other developing countries, fared better and remained relatively unscathed during and in the aftermath of the recent global financial crisis.

The crisis countries, in total 21[5], are identified using the database assembled by Laeven and Valencia (2010). All remaining countries are treated as non-crisis countries. Based on a large number of univariate statistical tests, this study finds significant differences between OIC and crisis countries as well as between pre- and post-crisis episodes in several aspects of regulation and supervision. With few exceptions, only the results which are statistically significant are presented here.

DIFFERENCES BETWEEN OIC AND CRISIS COUNTRIES

OIC countries are widely argued to have been relatively resilient to – and remained unaffected from – the first-round adverse effects of the recent global financial crisis. Supporting this argument, based on responses from 34 OIC countries to the 2011-2012 BRSS, the simple average after-tax return on equity for the commercial banking system in OIC countries found to be 14.1%, 17.5% and 15.3% respectively for 2008, 2009 and 2010[6], whereas responses from crisis countries reveal significant negative results for banking returns, with the exception of 2010 (Figure 1). Yet, as far as the operational costs are concerned, it is observed that, over the period 2008-2010, the average aggregate operating cost of banks relative to assets in OIC countries is more than three times that in the crisis countries (Figure 2). At the first glance, these two figures suggest that an average financial sector in

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[4] Apparently, a few questions have been reformulated to result in more precise answers.
[5] See Box 2 on page 14 for a full list of crisis countries.
[6] Only 25 OIC countries were reporting for year 2010.

OIC member countries is operationally inefficient and, yet, profit-wise immune and resilient. Below we look at the possible regulatory and supervisory reasons behind this.

On the other hand, much has already been written about the causes of the recent global crisis,[7] and discussion on the explanations of the crisis is still going on. In this section, we do not attempt to sort out among the many possible contributing factors that brought about the crisis, but rather focus on the potential role of gaps in regulation and supervision. To this effect, we assess whether there were significant differences in the regulatory and supervisory structure of countries that were seriously affected from the recent global crisis and OIC countries majority of which were untouched by the first-round effects of the crisis. More specifically, we analyse the BRSS responses by OIC countries and compare them to crisis-hit countries around the world, using univariate mean t-tests to identify which parts of the regulatory and supervisory framework were different between these groups of countries. We report differences between these groups based on both the 2007 and 2011–12 surveys. The reason why this section of the study considers both surveys is because regulation and supervision could have changed during the crisis and we do not want to interpret differences found during the crisis as explaining why some countries experienced the crisis more strongly than others. From this analysis, provided in Annex Table 1, a number of major findings stand out:

1) Financial institutions in OIC countries face stricter capital conditions. When compared to the crisis countries, OIC countries involved in the surveys tended to impose on financial institutions more stringent capital definitions, had less discretion in how banks calculated capital requirements; and, exhibited higher actual capital ratios. Based on responses to the 2011–12 BRSS, for example, while 80% and 100% of the crisis countries (20 of them responding) said they allowed Tier 2 and Tier 3 in regulatory capital, respectively, only 36% and 86% per cent among OIC countries did so (also Figure 3). The average actual risk-based capital ratio during the crisis period was also significantly higher in OIC countries, particularly in 2008 and 2009, which is reflected in Figure 4 as well. Moreover, crisis countries were also more likely to allow hybrid debt instruments to be part of Tier 1 – as compared to OIC countries (also Figure 5). Furthermore, both the 2007 and 2011–12 BRSSs show that the crisis countries were also more likely to allow the initial disbursement or subsequent injections of capital to be done with assets other than cash or government securities. In 2011-2012 survey, only 3% of the OIC countries (37 responding) said that the assets as such (i.e. those other than cash or government securities) can be used for this purpose – vis-à-vis 70% of the crisis countries (19 responding) (Annex Table 1).

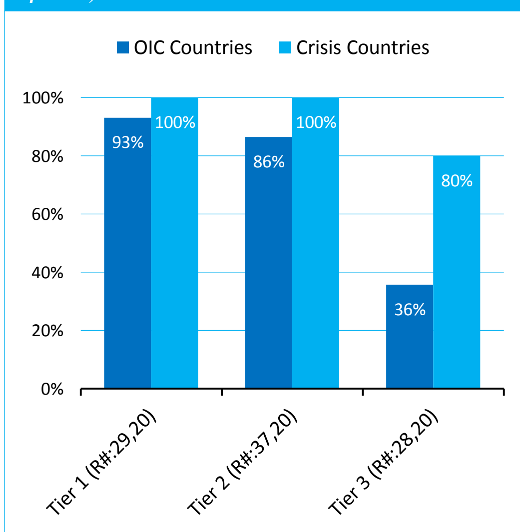
2) Financial institutions in OIC countries also face more stringent restrictions to engage in non-bank activities such as insurance, investment banking, real estate, as well as in non-financial activities.

[7] See, e.g., Caprio, Demirgüç-Kunt, and Kane, 2010; Demirgüç-Kunt and Serven, 2010; Rajan, 2010, among others

In only 3% of OIC countries*, the initial disbursement or subsequent injections of capital to be done with **assets other than cash or government securities**, compared to 70% of the crisis countries

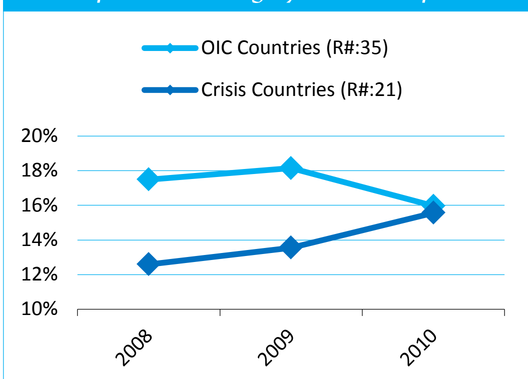
* 2011-2012 BRSS. In total, 37 OIC countries were reporting

Figure 3
Which of the following are legally allowed in regulatory capital? (2011, % of Yes)



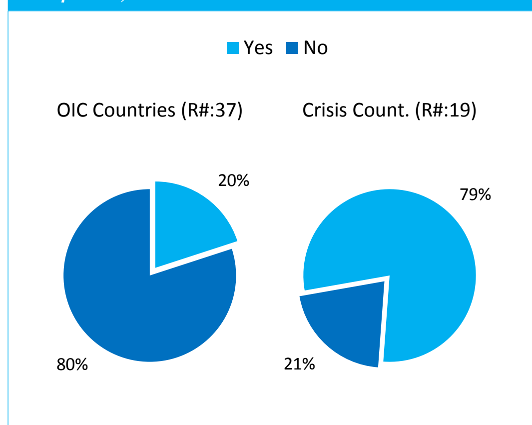
Source: The World Bank 2011-2012 Bank Regulation and Supervision Survey

Figure 4
What was the actual risk-based capital ratio of the banking system as of ...?



Source: The World Bank 2011-2012 Bank Regulation and Supervision Survey

Figure 5
Are hybrid debt capital instruments allowed as part of Tier 1 capital? (2011, % of Yes)



Source: The World Bank 2011-2012 Bank Regulation and Supervision Survey

94% of the OIC countries* had an asset classification system in 2007, compared to 60% of the crisis countries

* In total, 30 OIC countries were reporting

Using an index from 1 to 4[8] to measure the severity of restrictions imposed on bank activities, where higher values denote greater restrictions, the present report finds, based on the two BRSSs under study, that the crisis countries were more likely to allow for a full range of non-bank activities to be conducted directly in financial institutions – when compared to OIC countries (also Figure 6). Furthermore, both 2007 and 2011-2012 surveys indicate that the financial institutions in OIC countries are less likely allowed to engage in non-financial businesses (except those which are auxiliary to finance business) and/or have voting shares in nonfinancial firms (Annex Table 1).

3) OIC countries were more likely to have in place requirements for non-performing loans and provisioning and were more careful in the treatment of bad loans and loan losses. While only 60% of the crisis countries (20 responding) had such systems in place in the 2007 survey, 94% of the OIC countries (34 responding) had an asset classification system under which banks had to report the quality of their loans using a common regulatory scale. In the 2011–12 survey, this ratio has increased to 65% for the crisis countries whereas it has declined to 76% for OIC countries.[9] Moreover, the asset classification system in 97% and 100% of the OIC countries (36) responding to the 2011-2012 survey covered "all types of borrowers" (e.g. including government) and "all loans and advances to a borrower", respectively – compared to 73% and 67% of the respondent crisis countries. Also, the classification system in 56% of these OIC countries imposed a uniform classification requirement for specific borrowers (e.g. government or state-owned enterprises), while this was the case in only 20% of the crisis countries. On the other hand, again based on the 2011-12 survey, 50% of the crisis countries (18) allowed accrued, though unpaid, interest/principal to enter the bank income statement even when loans were non-performing, whereas only 8% of OIC countries (37) did so. Furthermore, according to the 2011–12 BRSS, while 81% of OIC countries (37) had a regulatory requirement for general provisions on loans and advances, only 25% of the crisis countries (20) had such provisions in place (also Figure 7). Finally, the 2011–12 survey shows that only 30% of the crisis countries had minimum levels of specific provisions for loans and advances set by the regulator, as compared to as much as 95% of the OIC countries in the sample (37) had such requirements in place (Annex Table 1).

4) Regulatory bodies in OIC countries were more able to demand financial institutions to put up more equity or to suspend bonuses and management fee payments. Based on the 2011–12 BRSS, in 89% of the OIC countries, the regulator had the power to request banks to put up new equity, while this was possible only in 65% of the crisis countries. Similarly, according to the 2011–12 survey, in all OIC countries (100%) reporting to the survey (38), the regulator could request banks to constitute provisions to cover actual or potential losses while this was the case in 90% of the crisis countries (20). Finally, according to the 2007 survey, in 74% of the OIC countries

[8] 1: Unrestricted, 2: Permitted, 3: Restricted, 4: Prohibited
[9] Respectively, 20 and 37 crisis and OIC countries were reporting.

(34), regulators could suspend banks' decision to pay certain management fees. However, this was possible in only 37% of crisis countries.[10] Most notably, again based on the 2007 survey, in more than two-thirds (68%) of the OIC countries (34), regulators had in fact taken such actions over the past 5-year period starting from 2007, by suspending the distribution of either dividends, bonuses or management fees – as compared to in only about one-fourth (26%) of the crisis countries (19) (Annex Table 1).

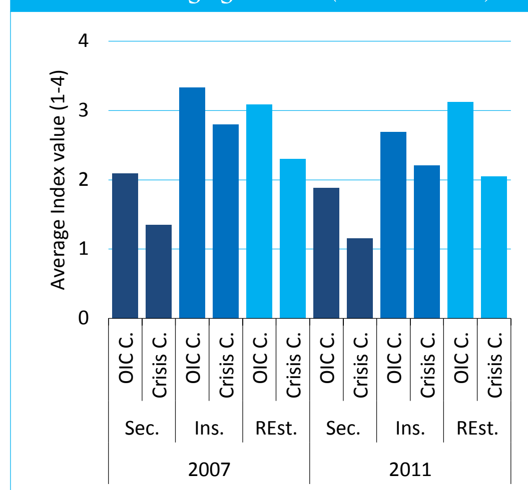
5) Although the OIC countries had weaker information disclosure requirements, the incentives for the private sector and other depositors to monitor bank risks were stronger in these countries. At the start of the crisis, financial institutions in 91% of the OIC countries (33), compared to 100% of the crisis countries (20), were required by regulator to produce consolidated accounts covering all bank and any non-bank financial subsidiaries.[11] According to the same survey results, 70% of the crisis countries (20) also required banks to disclose their risk management procedures to the public – compared to only 34% of the OIC countries (32). Based on 2011-2012 survey results, and again when compared to the crisis countries, OIC countries were less likely to require financial institutions to disclose to the public their governance and risk management frameworks, regulatory capital and capital adequacy ratios, and transactions with related parties. While the proportion of the crisis countries which required their financial institutions to disclose the latter three information to the public were 95%, 95% and 90%, respectively; only 81%, 81% and 73% of the OIC countries opted to do so. On the other hand, in only 37% and 13% of the OIC countries issuances of bonds and commercial paper received a credit rating, respectively, whereas this was the case in 94% and 78% of the crisis countries.[12] Yet, the 2007 survey reveals that 100% of the crisis countries (20) had an explicit deposit insurance scheme, compared to 38% of the 34 respondent OIC countries (also Figure 8). Apparently, owing to the strong deposit insurance frameworks in the crisis countries, the private sector and other depositors in these countries had little incentive to monitor the activities of financial institutions which they were depositors with (Annex Table 1).

6) The financial supervisory framework (as well as industry) in OIC countries is apparently associated with lesser developed risk models. Majority of the OIC countries (38) reporting on this subject in the 2011-2012 survey indicated that their supervisory agencies had been using less developed risk rating methodologies (e.g. a rating system using only ratios and indicators built with reported information, or one which combines quantitative information with qualitative assessments of management and controls) whereas majority of the crisis countries (20) indicated the use of more advanced and broader risk rating methods which combine quantitative and qualitative

[10] Yet, this picture was reversed a little bit in 2011-2012 survey where 79% of the 19 crisis countries reporting had enforcement powers to require banks to reduce or suspend bonuses and other remuneration to bank directors and managers – while 54% of the 37 OIC countries reporting had such powers.
[11] The difference between the two averages is statistically significant only at 10% significance level.
[12] For this item, 30 OIC and 18 crisis countries were reporting.

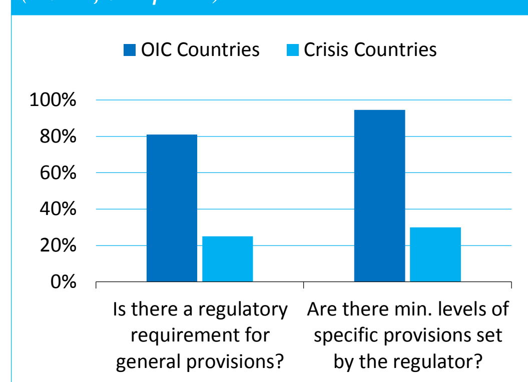
Financial institutions in OIC countries face stricter conditions on engaging in non-bank and non-financial activities

Figure 6
What are the conditions under which banks can engage in…? (Index value)



Source: The World Bank 2007 and 2011-2012 Bank Regulation and Supervision Surveys. Sec.: Securities Activities, Ins.: Insurance Activities, REst.: Real Estate Activities

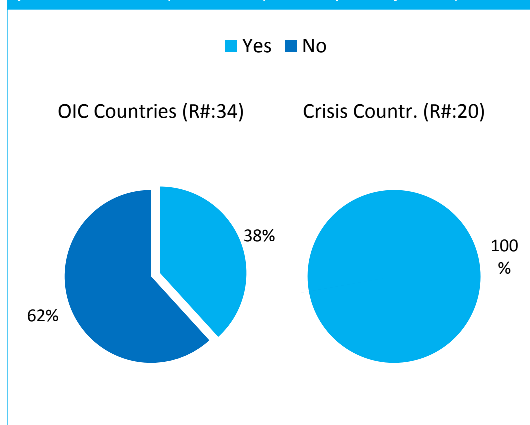
Figure 7
Provisions on loans and advances (2011, % of Yes)



Source: The World Bank 2011-2012 Bank Regulation and Supervision Survey

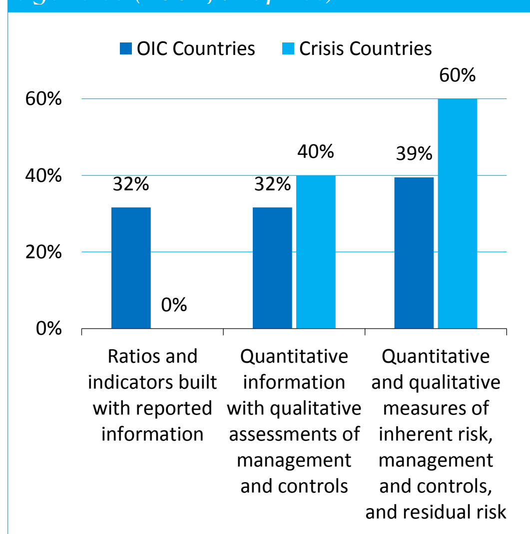
Only 37% of bond issuances in OIC countries* received credit rating, compared to 94% in crisis countries

Figure 8
Is there an explicit deposit insurance protection system? (2007, % of Yes)



Source: The World Bank 2007 Bank Regulation and Supervision Survey

Figure 9
Components of bank risk rating methodologies used by supervisory agencies (2007, % of Yes)



Source: The World Bank 2007 Bank Regulation and Supervision Survey

measures of inherent risk, management and controls, and residual risk by type of bank activity and/or risk category (also Figure 9). A similar picture was observed in the credit risk management methods and provision of losses. According to the 2007 survey, the primary system for loan classification in 91% of the OIC countries (34) was based simply on the number of days a loan was in arrears (as compared to 47% of the crisis countries (19)). Moreover, in only 21% of the respondent OIC countries was the classification system more advanced and based on a forward-looking estimate of the probability of default, compared to 50% of the crisis countries. On the other hand, in only 15% of the OIC countries (34), the minimum capital-to-asset ratio requirement varied as a function of an individual bank's credit risk and in only 12% as a function of the market risk. For crisis countries, however, this percentage of countries with varying minimum capital-to-asset ratio was as high as 60% for both of the credit and market risks (Figure 10 in addition to Annex Table 1).

7) Entry of foreign entities into banking sector in OIC countries is not easy, particularly through, branches. As much as 41% and 35% of the OIC countries responding to the 2007 and 2011-2012 surveys (34 and 37), respectively, indicated that foreign financial institutions were prohibited from entering the domestic market through branches.[13] These percentages were as low as 10% and 5% for the crisis countries responding to the latter two surveys, respectively.

8) Regulation on ownership structure of financial institutions is another point of difference between the OIC and crisis countries. Financial institutions in OIC countries are less likely to be owned by a single owner and there are significant restrictions on non-financial firms having voting shares in financial institutions. According to the responses to 2007 survey, 35% of the OIC countries (34) said there was a maximum percentage of bank capital that could be owned by a single owner, whereas this ratio was only 5% for the crisis countries. On the other hand, on a scale ranging from 1 to 4 (going from most unrestricted to most restricted), which measures the level of restrictions on non-financial firms having voting shares in financial institutions, OIC countries had an average index value of 2.61, compared to 1.95 average of the crisis countries, indicating the relatively higher level of restrictions in OIC countries (Annex Table 1).

9) The level of implementation of different regulatory capital adequacy regimes also varies significantly between OIC and crisis countries. For example, while two-thirds (66%) of OIC countries (38) responding to the 2011-2012 BRSS reported the use of Basel I capital adequacy rules as of end-2010, only 14% of the crisis countries (21) were doing so (also Figure 11). However, as far as Basel II rules are concerned, the proportion of OIC countries which had been implementing these rules was 45%, as compared to as much as 90% in the crisis countries.[14] This situation is in fact quite revealing in the sense that the crisis countries, despite their much higher adoption

[13] However, there is no evidence for significant resisstance to entries through acquisitions, subsidiaries, or joint ventures.
[14] The number of reporting OIC countries was 29 in the case of Basel II (instead of 38 as in the case of Basel I)

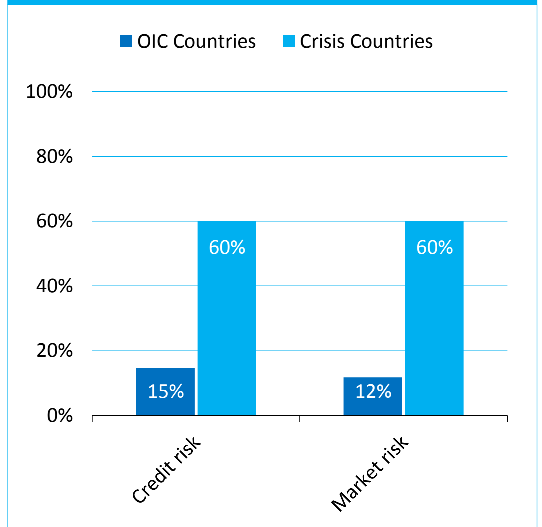
levels of Basel II (which is supposed to be more comprehensive than Basel I), were much more seriously impacted by the recent crisis, when compared to developing countries which include the OIC member countries as well (Annex Table 1).

10) Financial institutions in OIC member countries also face much stricter external auditing requirements. Based on responses to the 2011-2012 survey, in 38% of the OIC member countries (37), banks were required to nominate more than one external auditor. However, this was the case in only 10% of the crisis countries (20). On the other hand, in cases where the supervisor identified that a financial institution had received an inadequate audit, in 100% and 84% of these OIC countries, the supervisor had the powers to take actions against the bank and the external auditor, respectively. However, the supervisor authority had such powers in 75% and 60% of the 20 crisis countries reporting, respectively (Annex Table 1).

11) The latest global financial crisis has shown the policy-makers as well as regulators the critical importance of the proper alignment of the monetary incentives given to the top management with the long-term strategic goals as well as the desired levels of corporate risk appetite of the financial institutions they manage. This issue generally falls into the well-known context of bank governance. In this regard, the 2011-2012 survey results suggest that OIC countries were lagging behind most crisis countries in the supervisory control of monetary incentives given to bank management. To illustrate, the proportion of OIC countries (37 responding) which indicated that their supervisory bodies regularly evaluated remunerations or compensations of board directors, senior bank management and other bank staff (such as traders) as part of the supervisory process to ensure that they do not lead to excessive risk-taking was only 61%, 59% and 54%, respectively, for the latter three staff groups (also Figure 12). In the case of crisis countries, however, 94%, 100% and 94% of the countries (19) said they evaluated remunerations or compensations of board directors, senior bank management and other bank staff, respectively. This is in fact another contradiction, and a possible loophole, that this study finds between *de facto* and *de jure* regulatory practices in crisis countries, particularly when the excessive monetary incentives given to senior and other "key" staff of financial institutions in these countries before and, even, during the financial crisis are concerned.

12) There is also an intense debate on the advantages and disadvantages of adopting a so-called model of unified (or, integrated) supervision by establishing a single supervisor for the entire financial sector where the powers to supervise the main financial intermediaries (e.g. banking, insurance, etc.) are centralized. Advocates of the integrated supervision believe that a single supervisor is more effective than multiple supervisors in monitoring risks across financial institutions and responding to real or potential threats that may undermine the stability of a financial system. In the view of the aforesaid, the 2007 and 2011-2012 BRSSs asked the countries whether or not there was a single authority which had the powers to supervise the entire financial system in their countries. In

Figure 10
Does the minimum capital-to-asset ratio requirement vary as a function of an individual bank's …? (2007, % of Yes)

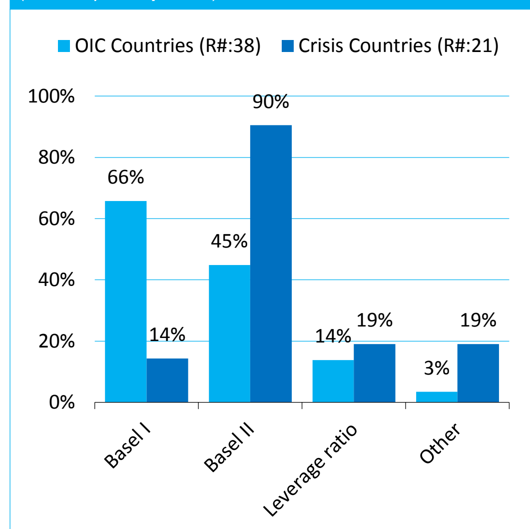


Source: The World Bank 2007 Bank Regulation and Supervision Survey

Less than half of OIC countries* implement Basel II as of 2010-end, compared to 90% of the crisis countries

* 2011-2012 BRSS. In total, 38 OIC countries were reporting

Figure 11
Which regulatory capital adequacy regimes did you use as of end of 2010? (2011, % of Yes)



Source: The World Bank 2011-2012 Bank Regulation and Supervision Survey

2007, only 12% of the OIC countries (34) responding said that there was a single authority, whereas 50% of the crisis countries did so. In a slightly reformulated manner, the 2011-2012 survey asked countries whether the authority in charge of supervising banks was also responsible for the supervision of the insurance, securities, and pension funds sectors. Respectively, in 20%, 6% and 14% of the 35 OIC countries reporting, the banking supervisory authority was also responsible for supervising the insurance companies, securities firms and pension funds. However, this was true for as much as 65%, 53% and 40% of the crisis countries (also Figure 12). Given a significant portion of the blame in the last global financial crisis went to regulators in crisis-affected countries, these figures clearly suggest that centralizing the regulatory powers in a single agency may not always be a good idea (Annex Table 1).

13) Finally, there is an apparent lack of well-defined rules and regulations relating to the various aspects of liquidity management, particularly the diversification of liquidity resources and contingency funding plans (e.g. stress testing). In 2007 BRSS, only 49% and 53% of the OIC countries (37) indicated that they regulatory rules or supervisory guidelines related to funding resource diversification and contingency funding plans, respectively. On the contrary, 85% and 100% of the crisis countries said they had such guidelines.

Overall, while these statistical tests do not imply causality, they nevertheless provide suggestive evidence that crisis countries suffered from greater weaknesses in their financial regulation and supervision frameworks.

DIFFERENCES BETWEEN PRE- AND POST-GLOBAL FINANCIAL CRISIS EPISODES

This section of the report aims to provide the first documentation of recent regulatory changes in the context of the global financial crisis in OIC countries by comparing responses to the 2007 and 2011-12 surveys. Again, the analysis is made in comparison with the crisis countries. Overall, the survey responses underscore the evolutionary, slow nature of regulatory and supervisory changes. It does not appear that the recent global financial crisis caused a major and swift change in regulatory frameworks around the world. Čihák, Demirguc-Kunt, Pería and Mohseni-Cheraghlou (2012) report that a significant portion of "Yes" or "No" responses remained unchanged between the 2007 and 2011–12 surveys, and, similarly, most of the quantitative indicators showed relatively little overall movement throughout the crisis. Notwithstanding this gradual evolution of regulatory frameworks, there have been some notable changes in some areas of regulation and supervision.

Annex Table 2 provides the subset of questions for which statistically significant changes are observed between the 2007 and 2011-12 surveys. The table presents responses from the 2007 and 2011-12 surveys for all countries combined, as well as for OIC and crisis countries separately. Furthermore, for each question, the table shows

Only 59% of OIC countries evaluated remunerations and compensations of senior bank management as part of the supervisory process, whereas 100% of crisis countries did so

* 2011-2012 BRSS. In total, 37 OIC countries were reporting

the *p*-value[15] from a test of differences in responses across the two surveys.

Overall, the study finds changes over the course of the crisis in the areas of domestic market entry, ownership structure, capitalization, governance, engagement in non-bank as well as non-financial activities, liquidity and diversification, external auditing requirements, deposit insurance, disclosure, market discipline, and supervisory powers. Furthermore, in some instances differences are found between the speed and magnitude of regulatory changes in OIC and crisis countries. The main results of the analysis, which are provided in Annex Table 2 in detail, are presented below.

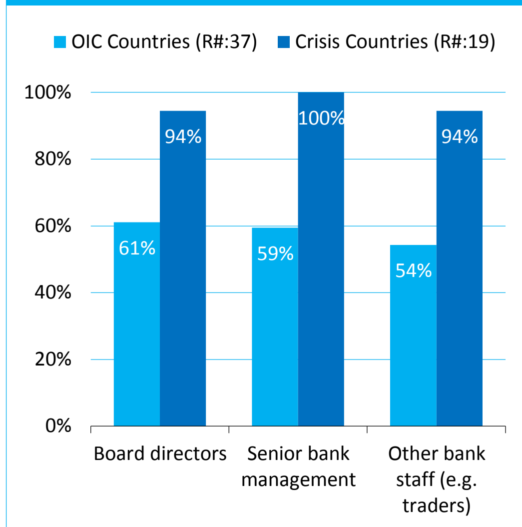
1) The present study finds that, although there has been a loosening of the rules on bank licensing in the crisis period, with OIC countries being no exception; the controls on the source of initial funds used for the establishment of a new financial institution have increased across the board. More specifically, the proportion in total 143 countries involved in the surveys of those required more than one license for each banking activity, e.g. commercial banking, securities operations and insurance, decreased from 47% to only 15% during the crisis period. The decrease was from 35% to 11% as far as the OIC countries (38) responding were concerned, and there was no significant change in the case of the crisis countries. Yet, 94% of the all countries reporting to the 2011-2012 survey (an increase from 87% in the 2007 survey) indicated that the sources of funds to be used in the capitalization of a new financial institution had to be verified by the regulatory authorities. There were increases in the proportion of OIC and crisis countries which also indicated that sources of funds had to be verified, however, these changes were not found to be significant. (Annex Table 2)

2) Financial institutions in OIC countries did not experience a significant increase in their actual (observed) risk-based and Tier 1 capital ratios during the crisis period, whereas changes among crisis countries, and world as a whole, were found to be quite significant. The simple average actual risk-adjusted capital ratio of banks in crisis countries (21 reporting) increased from 12.1% to 15.6% between 2005 and 2010, based on the responses to 2007 and 2011-2012 BRSSs. The increase around the world (126 countries reporting) was from 15.5% to 17.4%. Moreover, a similar observation was valid for Tier 1 capital ratios also. (Annex Table 2)

3) A comparison between the 2007 and 2011-2012 surveys suggests that, as the crisis unfolded and as banks tried to prop up their balance sheets, the practice of overestimating loan interest and principal payments got worse in the crisis countries and the world as a whole, but not in OIC countries. Around the world (140 reporting countries), the percentage of countries with their financial institutions allowing accrued interests/principals, even though unpaid and classified as non-performing, to enter their income statements increased significantly from 14% to 27% during the crisis

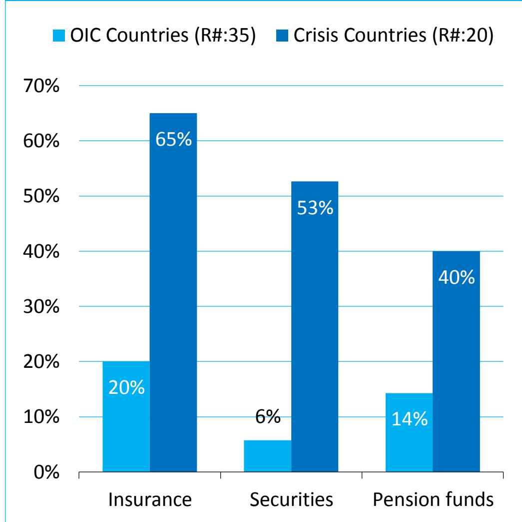
[15] Non-technically speaking, this value, again, helps us judge objectively on the level of statistical significance of the item under consideration.

Figure 12
Is the remuneration/compensation of … evaluated as part of the supervisory process to ensure that they do not lead to excessive risk-taking? (2011, % of Yes)



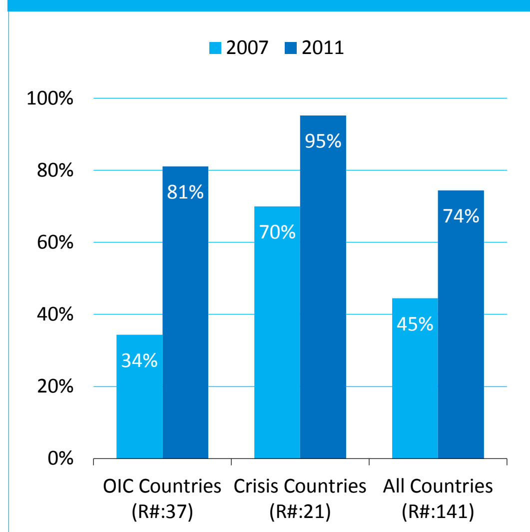
Source: The World Bank 2011-2012 Bank Regulation and Supervision Survey

Figure 13
Is the agency supervising banks also responsible for the supervision of … sectors? (2011. % of Yes)



Source: The World Bank 2011-2012 Bank Regulation and Supervision Survey

Figure 14
Must banks disclose their governance and risk management procedures to the public? (% of Yes)



Source: The World Bank 2007 and 2011-2012 Bank Regulation and Supervision Survey

81% of OIC countries* required governance and risk management frameworks to be disclosed in 2011-2012 BRSS, as compared to only 34% in 2007 survey.

* In total, 37 OIC countries were reporting

period. The increase was even more significant in the crisis countries where the percentage of countries where such interests/principals entered the income statements increased from 22% to 50%. (Annex Table 2)

4) As far as the regulatory changes in liquidity and diversification requirements are concerned, there was an increase in the proportion of countries in the world that imposed regulatory rules or supervisory guidelines regarding asset diversification. The share of countries in the world as such increased from 46% to 59% between the two surveys; however, there were again no significant changes in the OIC and crisis countries at the sub-group level. Furthermore, most of the crisis countries introduced new requirements for their financial institutions to hold reserves in foreign denominated currencies or other foreign denominated instruments (i.e. an increase from 5% to 30% in the proportion of the crisis countries introducing such requirements). This trend was also apparent on the global scale, yet, not for OIC countries. (Annex Table 2)

5) During the crisis period, most countries, including those in the OIC group, experienced significant relaxations of the restrictions on particular non-bank activities. Although it is partly visible from Figure 5, this hypothesis is statistically tested in this section. Results suggest that, for insurance activities, the restrictions were relaxed significantly not only around the world, but also in both OIC and crisis countries when considered as separate sub-groups. However, a similar argument was not valid for real estate or securities activities.

6) There was an overall (as well as OIC and crisis countries levels) increase in the share of countries requiring external audit reports as well as governance and risk management procedures to be disclosed publicly. The increase was 58% to 92% in OIC countries, from 74% to 95% in crisis countries, and from 75% to 87% in the world. This situation, in fact, points to the grown emphasis on increased transparency in external audits. A similar observation was made for the governance risk management practices as well. The share of countries in the world which required financial institutions in their countries to disclose to the public their governance and risk management practices was recorded at 74%, based on the 2011-2012 BRSS. This was much above the pre-crisis level of 45% calculated using the 2007 survey. In the crisis countries, the increase was from 70% to 95%. Yet, the most notable improvement was in the case of OIC countries. The share of OIC countries which required financial institutions in their countries to disclose such kind of information to the public increased from as low as 34% to 81% between the two surveys (also Figure 13). (Annex Table 2)

7) The share of countries around the world with explicit deposit insurance frameworks also increased across all countries, including OIC countries as a sub-group.[16] Between 2007 and 2011-2012 surveys, the share of OIC countries with explicit depositor protection schemes increased almost two-fold from 38% to 69%, whereas, across all

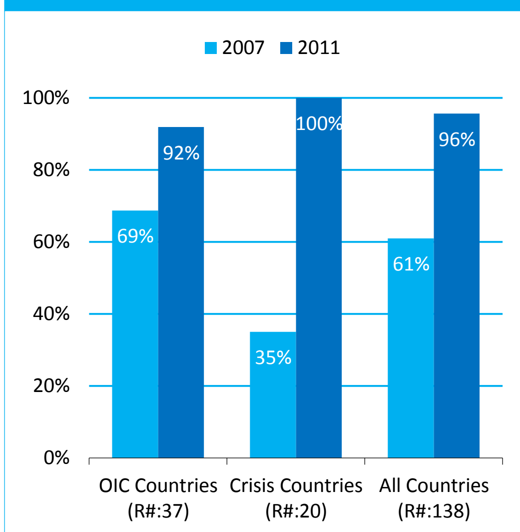
[16] There was no change in the situation of crisis countries as the share of crisis countries with a deposit insurance framework remained at 100%.

countries, the increase was from 55% to 76%. This situation, on the other hand, was a clear manifestation of the efforts by regulators and financial institutions to improve depositor sentiment and restore confidence in the market through implementation of deposit guarantees in the face of the recent financial crisis. Yet, this brings about the potential risk of diminishing incentives of the private sector and other depositors to monitor activities of financial institutions and, by virtue of this, putting an additional burden on the regulators' shoulders. (Annex Table 2)

8) There have been significant improvements in regard to the enforcement powers with regard to the implementation of various supervisory rules during the crisis period. Based on the 2011-2012 BRSS, in as much as 92% of OIC countries, 100% of the crisis countries and 96% of all countries around the world, the supervisory agencies had the power to give cease and desist-type orders[17] for imprudent staff practices at financial institutions. These percentages were respectively 69%, 35% and 61% for the latter three groups before the crisis (also Figure 15). The supervisory agencies in the crisis countries, though not those in OIC countries, have also seen improvements in their rights to suspend, whenever necessary, the distribution of various bonuses and management fees to directors and managers. In the 2007 survey, only 32% and 37% of the crisis countries indicated that their supervisory agencies were given the power to suspend the banks directors' decision to distribute bonuses and management fees, respectively. In the 2011-2012 survey, however, 79% of the crisis countries said that the supervisory agency had the power to require banks to reduce or suspend bonuses and other remuneration to bank directors and managers. Yet, in overall, there were also notable deteriorations in the powers of supervisory agencies in the world and in OIC countries to perform some more serious resolution activities on financial institutions such as superseding shareholder rights or remove and replace bank senior management and directors. In 2007 survey, for example, 94% of the OIC countries (35) said the bank supervisor had the power to remove and replace bank senior management and directors. However, this ratio decreased to 54% in the 2011-2012 BRSS. The decrease was from 92% to 78% in the world. On the other hand, between the 2007 and 2011-2012 surveys, the proportion of OIC and world countries in which the supervisor had the power to supersede shareholders' rights decreased from 50% to 31% and from 68% to 48%, respectively. Finally, among all countries in general, and OIC and crisis countries in particular, the share of countries which reportedly had a separate insolvency law for financial institutions increased significantly (also Figure 16). All in all, these point not only to significant developments in the area of market discipline, but also to growing regulatory efforts to have a more stringent control over potentially problematic financial institutions and practices (through proper resolution

[17] A cease-and-desist order may be issued by supervisory agency to prevent risky practices at a financial institution or the sale of fraudulent securities. After notification is given, a hearing is usually called to determine whether any wrongdoing has occurred, or if the action may continue. Failure to comply with a cease-and-desist order is punishable by the courts.

Figure 15
Are cease and desist-type orders for imprudent bank practices available to supervisory agency? (% of Yes)

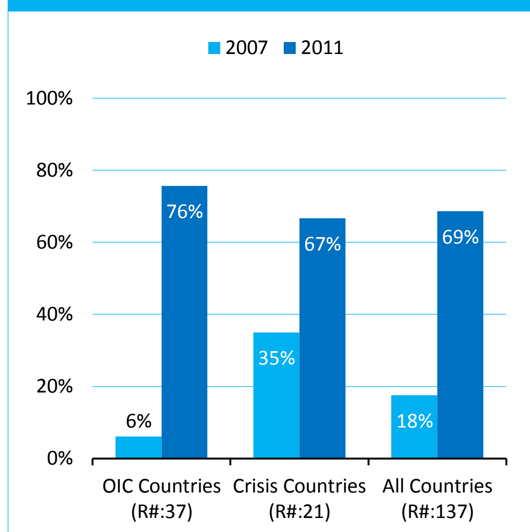


Source: The World Bank 2007 and 2011-2012 Bank Regulation and Supervision Survey

The practice of overestimating loan interest and principal payments got worse in the crisis countries as the financial crisis unfolded and as banks in these countries tried to prop up their balance sheets.

* 2007 and 2011-2012 BRSSs. In total, 19 crisis countries were reporting.

Figure 16
Is there a separate bank insolvency framework that is distinct from that of non-financial firms? (% of Yes)



Source: The World Bank 2007 and 2011-2012 Bank Regulation and Supervision Survey

mechanisms) which may pose significant challenges to overall stability of the domestic financial system. (Annex Table 2)

Yet, when considering all these results, one should be careful when attributing the changes observed between the 2007 and 2011-12 surveys solely to the crisis, as the results cannot be interpreted in a way that the changes observed were indeed triggered by the crisis.

Overall, while some of the reforms reported in this section are encouraging, apparently, the regulatory response to the crisis, particularly in crisis countries, has been slow, and there is room for further improving the regulatory and supervisory frameworks as well as private incentives to monitor risk-taking – with OIC countries being no exception.

SUMMARY AND CONCLUSION

The data extracted from the World Bank 2007 and 2011–12 Bank Regulation and Supervision Surveys provide interesting insights into the state of regulatory and supervisory practices in OIC and crisis countries, as well as around the world, against the backdrop of the recent global financial crisis. The dataset was used, in the present report, to illustrate the major differences in regulatory practices between OIC and crisis countries, and also to explore the ways in which financial regulation and supervision has changed over the course of the recent global financial crisis.

Comparing responses to the both surveys of OIC and crisis countries, we find that:

- OIC countries tended to impose more stringent definitions of capital, less flexibility in how banks calculated capital requirements, and also exhibited higher actual capital ratios. Hybrid debt instruments were less likely to be allowed part of Tier 1 capital, and the initial disbursement or subsequent injections of capital were more likely confined to liquid assets such as cash or government securities.
- Banks in OIC countries also faced more stringent restrictions to engage in non-bank activities such as insurance, investment banking and real estate activities, as well as in non-financial activities.
- Regulatory and supervisory authorities in OIC countries were also more cautious in the treatment of bad loans and loan losses. They were more likely to have in place requirements for non-performing loans and provisioning.
- Regulators in OIC countries were more able to demand financial institutions to recapitalize themselves, to constitute greater provisions, or to suspend bonuses or management fees.
- OIC countries had looser information disclosure requirements for financial institutions, however, the incentives for the private sector and other depositors to monitor banks' risky activities were stronger – owing mainly to weaker deposit insurance frameworks.
- Financial regulation and supervision framework (as well as industry) in OIC countries is generally associated with less developed risk management practices.

- Entry of foreign entities into domestic financial sector in OIC countries was more restricted, particularly through branches.
- Financial institutions in OIC countries were less likely to be owned by a single owner and there were significant restrictions on non-financial firms having voting shares in financial institutions in OIC countries.
- The level of adoption and use of more advanced regulatory capital adequacy regimes (e.g. Basel II) was lower in OIC countries.
- Financial institutions in OIC member countries faced much stricter external auditing requirements (e.g. nomination of multiple auditors and strong supervisory rights in cases of inadequate external audit).
- OIC countries were lagging behind in the supervisory control and evaluation of the monetary incentives (i.e. remunerations or compensations) given to senior bank staff with a view to ensuring that they do not lead to excessive risk-taking.
- Financial supervisory and regulation structure in OIC countries tended more towards separation of supervisory powers for different financial activities (e.g. banking, insurance, etc.) rather than centralizing the powers to supervise the main financial intermediaries in a single agent.
- Finally, there was an apparent lack of well-defined rules and regulations relating to the various aspects of liquidity management, particularly the diversification of liquidity resources and contingency funding plans.

On the other hand, comparing the responses from pre- and post-crisis episodes, we find that:

- It does not appear that the recent global financial crisis caused a major and sudden change in regulatory frameworks around the world, and most of the observed changes are relatively slow and gradual.
- There was both an across-the-board and an OIC-level loosening of the rules on bank licensing during the crisis period. Controls over the source of initial funds used for the establishment of new financial institution have increased around the word, however, without significant evidence at the OIC level.
- The practice of overestimating loan interest and principal payments got worse in the crisis countries (and the world as a whole) as the financial crisis unfolded and as banks in these countries were looking for the ways to support their balance sheets.
- OIC countries did not experience a significant increase in their actual risk-based and Tier 1 capital ratios during the crisis, but the crisis countries really did.
- There was a significant increase in the proportion of countries in the world that imposed regulatory rules or supervisory guidelines regarding asset diversification, however, again without significant evidence at the OIC and crisis countries sub-group levels.
- Most countries, including those in the OIC group, experienced significant relaxations of the restrictions on particular non-bank activities.

BOX 1
Recommendations for Policy

Financial regulatory and supervisory authorities in OIC countries should exert their efforts to:

- Maintain the quality and quantity of capital at their financial institutions by, inter alia, regularly updating the definitions of capital, by monitoring the capital requirements closely;
- Develop and upgrade supervisory risk-rating methodologies, including credit, operational, market, and insolvency risks;
- Strike an optimal balance between the level of explicit deposit protection frameworks and the self-monitoring incentives of the industry;
- Accelerate the adoption and implementation of more developed international capital adequacy regimes;
- Maintain the current level and quality of external audit requirements;
- Monitor and evaluate more closely the monetary incentives given to senior staff of financial institutions;
- Ensure harmony between different supervisory authorities that are in charge of the supervision of different financial intermediaries;
- Maintain a reasonable level of restrictions on non-bank and non-financial activities of financial institutions;
- Mainstream and improve resolution mechanisms for financial institutions in their jurisdictions;
- Ensure a reasonable level of enforcement powers related to various supervisory rules, such as the suspension of various bonuses, dividends and management fees, as well as replacement of senior staff at financial institutions;
- Improve transparency and information disclosure rules;
- Regulate the entrance of foreign institutions through acquisitions, subsidiaries and joint ventures into the domestic market to avoid possible spill-overs at times of crises;
- Improve regulatory rules or supervisory guidelines regarding liquidity management, including diversification of funding sources and contingency funding plans.

BOX 2
OIC and crisis jurisdictions participating in the survey

OIC Countries (38)	Crisis Countries (21)
Bahrain	*Systemic (13)*
Bangladesh	Austria
Benin	Belgium
Burkina Faso	Denmark
Côte D'ivoire	Germany
Egypt	Iceland
Gambia	Ireland
Guinea-Bissau	Kazakhstan
Guyana	Latvia
Indonesia	Luxembourg
Iraq	Netherlands
Jordan	Ukraine
Kazakhstan	UK
Kuwait	US
Kyrgyzstan	*Borderline (8)*
Lebanon	France
Malaysia	Greece
Maldives	Hungary
Mali	Portugal
Morocco	Russia
Mozambique	Slovenia
Niger	Spain
Nigeria	Switzerland
Oman	
Pakistan	
Palestine	
Qatar	
Senegal	
Sierra Leone	
Suriname	
Syria	
Tajikistan	
Togo	
Tunisia	
Turkey	
Uganda	
UAE	
Yemen	

Source: Čihák, Demirguc-Kunt, Pería and Mohseni-Cheraghlou (2012), Laeven and Valencia (2010)

- There was an overall (as well as OIC and crisis countries level) increase in the share of countries requiring external audit reports as well as governance and risk management procedures to be disclosed publicly.
- The share of countries around the world with explicit deposit insurance also increased across all countries, including OIC countries as a sub-group.
- There were a significant improvements related to the enforcement powers with regard to various supervisory rules during the crisis period, however, at the same time, there were significant deteriorations in the powers of supervisory agencies in the world and in OIC countries to perform some more serious resolution activities on financial institutions such as superseding shareholder rights or remove and replace bank senior management and directors.
- Among all countries in general, and OIC and crisis countries in particular, the share of countries which reportedly had a separate insolvency law for financial institutions increased significantly.

Overall, the results underscore the evolutionary nature of the regulatory and supervisory changes at the national level. Some policy recommendations for OIC countries follow and are summarised in Box 1. The recent financial crisis apparently did not trigger a major and sudden change in national regulatory and supervisory frameworks around the world and most of the observed changes are relatively slow and gradual. To conclude, while some of the reforms are encouraging, the results suggest that there is room for further improving the regulatory and supervisory frameworks as well as private incentives to monitor risk-taking.

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ANNEXES

Annex Table 1 – Differences between OIC and Crisis Countries (% of Yes, if not stated otherwise)

Theme	Question	Survey Year	OIC Count.	Crisis Count.	*p* value
Entry into Banking	Can the initial disbursement or subsequent injections of capital be done with assets other than cash or government securities?	2007 2011	0.47 0.03	0.60 0.70	0.3677 0.0000
	Are foreign entities prohibited from entering through - Branch	2007 2011	0.41 0.35	0.10 0.05	0.0065 0.0023
Financial Sector Characteristics	What was the after-tax return on equity for the commercial banking system at the end of...? (Average) - 2008 - 2009 - 2010	2011 2011 2011	14.1% 17.5% 15.3%	-11.3% -2.6% 3.3%	0.0072 0.0001 0.0162
	What was the aggregate operating costs to assets ratio for the commercial banking system in at the end of ...? (Average) - 2008 - 2009 - 2010	2011 2011 2011	6.1% 5.8% 5.9%	1.7% 1.6% 1.6%	0.0000 0.0000 0.0000
Ownership	Is there a maximum percentage of bank capital that can be owned by a single owner?	2007	0.35	0.05	0.0030
	If any voting shares can be owned by nonfinancial firms, what are the limits?	2007	2.61	1.95	0.0003
Capital	Does the minimum capital to asset ratio requirement vary as a function of an individual bank's credit risk?	2007	0.15	0.60	0.0013
	Does the minimum ratio vary as a function of market risk?	2007	0.12	0.60	0.0006
	Is subordinated debt required as part of regulatory capital?	2007	0.15	0.00	0.0230
	What is the minimum capital to asset ratio requirement? What was the minimum required risk-based regulatory capital ratio - 2008 - 2009 - 2010	2007 2011 2011 2011	0.09 0.09 0.10 0.10	0.08 0.08 0.08 0.08	0.0521 0.0003 0.0001 0.0026
	What is the actual risk-adjusted capital ratio in banks as of yearend 2005, using the 1988 Basle Accord definitions? (Average) What was the actual risk based capital ratio of the banking system as of end of ...? (Average) - 2008 - 2009 - 2010	2007 2011 2011 2011	0.15 0.17 0.18 0.16	0.12 0.13 0.14 0.16	0.0118 0.0472 0.1914 0.7811
	Do you require banks to perform an internal assessment of their capital adequacy against their economic capital?	2011	0.34	0.81	0.0002
	Which of the following are legally allowed in regulatory capital? - Tier 1 - Tier 2 - Tier 3	2011 2011 2011	0.93 0.86 0.36	1.00 1.00 0.80	0.1609 0.0232 0.0014
	Are hybrid debt capital instruments allowed as part of Tier 1 capital?	2011	0.20	0.79	0.0000
	Which regulatory capital adequacy regimes did you use as of end of 2010? - Basel I - Basel II - Leverage ratio - Other (please explain)	2011 2011 2011 2011	0.66 0.45 0.14 0.03	0.14 0.90 0.19 0.19	0.0000 0.0002 0.6335 0.1101
Activities	What are the conditions under which banks can engage in…? (1: Unrestricted, 2: Permitted, 3: Restricted, 4: Prohibited) (Average) - Securities activities - Insurance activities - Real estate activities	2007 2007 2007 2011 2011 2011	2.09 3.33 3.09 1.88 2.69 3.12	1.35 2.80 2.30 1.16 2.21 2.05	0.0013 0.0106 0.0261 0.0004 0.0285 0.0002
	What are the conditions under which banks can engage in nonfinancial businesses except those businesses that are auxiliary to banking business (e.g. IT company, debt collection company etc.) ? (Average)	2011	3.09	2.16	0.0032
	Can banks own voting shares in nonfinancial firms?	2007	2.79	2.05	0.0001
Liquidity & Diversification Requirements	Are banks required to hold either liquidity reserves or any deposits at the Central Bank?	2007 2011	1.00 0.97	0.95 0.95	0.3299 0.6889
	Do these reserves earn any interest?	2007	0.34	0.84	0.0002
	Are banks required to hold reserves in foreign denominated currencies or other foreign denominated instruments?	2007	0.30	0.05	0.0107
	Are banks prohibited from making loans abroad?	2007 2011	0.18 0.24	0.05 0.00	0.1340 0.0017
	Are there regulatory rules or supervisory guidelines regarding the following aspects of banks' liquidity management?	2011 2011	0.49 0.53	0.85 1.00	0.0031 0.0000

	- Diversification of funding sources - Contingency funding plans, including stress testing				
	What percent of the commercial banking system's assets is funded with deposits? - 2008 - 2009 - 2010	2007 2011 2011 2011	0.71 0.66 0.68 0.68	0.49 0.51 0.53 0.53	0.0006 0.0015 0.0009 0.0023
External Auditing requirements	Are auditors licensed or certified? Does the external auditor in your jurisdiction have to…? - Obtain a professional certification or pass a specific exam to qualify as such - Have a minimum required bank auditing experience - Be approved or reviewed by the supervisor	2007 2011 2011 2011	1.00 1.00 0.85 0.92	1.00 0.95 0.50 0.45	N/A 0.3299 0.0123 0.0008
	Are banks required to nominate more than one external auditor?	2011	0.38	0.10	0.0113
	Are auditors required to promptly inform banking supervisors when they intend to issue qualified opinions on the accounts?	2011	0.35	0.65	0.0333
	Are external auditors subject to independent oversight by supervisory agency	2011	0.35	0.10	0.0161
	In cases where the supervisor identifies that the bank has received an inadequate audit, does the supervisor have the powers to take actions against …? - The bank - The external auditor	2011 2011	1.00 0.84	0.75 0.60	0.0210 0.0730
	Among the ten biggest banks in your country, how many are audited by one of the 'big four' accounting firms (PwC, KPMG, E&Y, Deloitte)?	2011	7.97	9.76	0.0007
Bank Governance	Is the remuneration or compensation of the following individuals evaluated as part of the supervisory process to ensure that they do not lead to excessive risk-taking? - Board directors - Senior bank management - Other bank staff (e.g. traders)	2011 2011 2011	0.61 0.59 0.54	0.94 1.00 0.94	0.0015 0.0000 0.0000
Depositor Protection	Is there an explicit deposit insurance protection system?	2007 2011	0.38 0.69	1.00 1.00	0.0000 0.0027
Asset Classification, Provisioning, and Write-Offs	Is there a formal definition of a "non-performing loan" ? Do you have an asset classification system under which banks have to report the quality of their loans and advances using a common regulatory scale?	2007 2011	0.94 0.76	0.60 0.65	0.0088 0.4196
	Please specify whether the asset classification system… - Applies to all commercial banks - Covers all types of borrowers (e.g. including government) - Covers all loans and advances to a borrower - Imposes a uniform classification requirement for specific borrowers	2011	1.00 0.97 1.00 0.56	0.87 0.73 0.67 0.20	0.1643 0.0672 0.0192 0.0136
	The primary system for loan classification is based on … - The number of days a loan is in arrears - A forward looking estimate of the probability of default - Other	2007	0.91 0.21 0.26	0.47 0.50 0.39	0.0021 0.0360 0.3851
	Are there minimum levels of specific provisions for loans and advances that are set by the regulator?	2011	0.95	0.30	0.0000
	Is there a regulatory requirement for general provisions on loans and advances?	2011	0.81	0.25	0.0000
	Do you require banks to write off non-performing loans after a specific time period?	2011	0.32	0.00	0.0002
	Does accrued, though unpaid, interest/principal enter the bank's income statement while the loan is classified as non-performing?	2007 2011	0.06 0.08	0.22 0.50	0.1527 0.0038
Information Discloure Requirements	Must banks disclose their risk management procedures to the public?	2007	0.34	0.70	0.0119
	Do banks disclose to the public …? - Governance and risk management framework - Off-balance sheet items - Transactions with related parties	2011 2011 2011	0.81 0.81 0.73	0.95 0.95 0.90	0.0852 0.0852 0.0825
	Which bank activities are rated? - Bonds issuance? - Commercial paper issuance? - Other activity (e.g., issuance of bank certificates of deposit, pension and mutual funds, insurance companies, financial guarantees, etc.)?	2007 2007 2007	0.37 0.13 0.27	0.94 0.78 0.71	0.0000 0.0000 0.0037
Discipline/ Problem Institutions/ Exit	Are there any mechanisms of cease and desist-type orders, whose infraction leads to the automatic imposition of civil and penal sanctions on the banks directors and managers?	2007	0.69	0.35	0.0186
	Can the supervisory agency suspend the directors' decision to distribute…? - Dividends? - Bonuses? - Management fees?	2007 2007 2007	0.97 0.58 0.74	0.79 0.32 0.37	0.0856 0.0843 0.0114
	Have any such actions been taken in the last 5 years?	2007	0.68	0.26	0.0033
	Please indicate whether the following enforcement powers are available to the supervisory agency: - Require banks to reduce or suspend dividends to shareholders - Require banks to reduce or suspend bonuses and other remuneration to bank	2011 2011	1.00 0.54	0.95 0.79	0.3299 0.0565

	directors and managers				
	Is there a separate bank insolvency framework (that is distinct from that of non-financial firms)?	2007 2011	0.06 0.76	0.35 0.67	0.0209 0.4837
	Can the bank shareholders appeal to the court against a (resolution) decision of the bank supervisor?	2007 2011	0.70 0.71	0.95 0.76	0.0107 0.6731
Supervision	Is there a single financial supervisory agency for all of the main financial institutions (insurance companies, contractual savings institutions, savings banks)? Is the body/agency in charge of supervising banks also responsible for the supervision of the following financial sectors? - Insurance - Securities - Pension funds - Other (please explain)	2007 2011 2011 2011 2011	0.12 0.20 0.06 0.14 0.88	0.50 0.65 0.53 0.40 0.59	0.0057 0.0014 0.0010 0.0526 0.0432
	To whom are the supervisory bodies responsible or accountable? - The head of government (e.g. President, Prime Minister) - The Finance Minister or other cabinet level official - A legislative body, such as Parliament or Congress - Other	2007 2007 2007 2007 2011 2011 2011 2011	0.27 0.21 0.24 0.42 0.31 0.20 0.31 0.32	0.05 0.50 0.40 0.21 0.05 0.40 0.60 0.11	0.0208 0.0411 0.2527 0.1071 0.0070 0.1382 0.0449 0.0506
	Can the supervisory agency be held legally liable for damages to a bank caused by its actions?	2007 2011	0.41 0.34	0.68 0.71	0.0552 0.0064
	Which of the following best describes the bank risk rating methodology used by your agency? - A rating system using only ratios and indicators built with reported information - A rating system combining quantitative information with qualitative assessments of management and controls - A broader risk rating system combining quantitative and qualitative measures of inherent risk, management and controls, and residual risk by type of bank activity and/or risk category	2011	0.32 0.32 0.39	0.00 0.40 0.60	0.0002 0.5394 0.1456

ANNEXES (cont'd.)

Annex Table 2 – Differences between Pre- and Post-Crisis Episodes (*% of Yes, if not stated otherwise*)

Theme	Question		OIC	Crisis	All
Entry into Banking	Is more than one license required (e.g., one for each banking activity, such as commercial banking, securities operations, insurance, etc.)?	2007 2011 p	0.35 0.11 0.0137	0.45 0.33 0.4572	0.47 0.15 0.0000
	Are the sources of funds to be used as capital verified by the regulatory/supervisory authorities?	2007 2011 p	0.88 0.97 0.1575	0.85 0.95 0.3054	0.87 0.94 0.0309
	Which of the following are legally required to be submitted before issuance of the banking license? - Sources of funds to be disbursed in the capitalization of new bank?	2007 2011 p	0.97 1.00 0.3246	1.00 1.00 N/A	0.92 0.97 0.0409
	Can the initial disbursement or subsequent injections of capital be done with assets other than cash or government securities?	2007 2011 p	0.47 0.03 0.0000	0.60 0.70 0.5198	0.40 0.33 0.1532
Ownership	Of commercial banks in your country, what percentage of the assets is held by the 5 largest banks at (Average) - year-end 2005? - at the end of 2009? - at the end of 2010?	2007 2011 2011 p1 p2	0.71 0.59 0.55 0.0360 0.0215	0.68 0.64 0.64 0.5241 0.4788	0.73 0.68 0.68 0.0823 0.0914
Capital	What is the actual risk-adjusted capital ratio in banks as of year-end 2005, using the 1988 Basle Accord definitions? (2007) What was the actual risk based capital ratio of the banking system as of end of 2010? (2011-2012)	2007 2011 p	0.15 0.16 0.5168	0.12 0.16 0.0002	0.15 0.17 0.0158
	What is the actual ratio between shareholders' equity (Tier 1 regulatory capital) and total risk-weighted assets of banks as of yearend 2005? (2007) What was the actual Tier 1 capital ratio of the banking system as of end of 2010? (2011-2012)	2007 2011 p	0.13 0.16 0.1486	0.09 0.12 0.0002	0.13 0.17 0.0099
Activities	What are the conditions under which banks can engage in insurance activities? (1: Unrestricted, 2: Permitted, 3: Restricted, 4: Prohibited) (Average)	2007 2011 p	3.33 2.69 0.0010	2.80 2.21 0.0126	3.19 2.53 0.0000
	What are the conditions under which banks can engage in real estate activities? (1: Unrestricted, 2: Permitted, 3: Restricted, 4: Prohibited) (Average)	2007 2011 p	3.09 3.12 0.9094	2.30 2.05 0.4752	3.19 2.86 0.0113
External Auditing Requirements	Is it required by the regulators that bank audits be publicly disclosed? (2007) Is the audit report on the financial statements of a bank required to be publicly disclosed together with these financial statements? (2011-2012)	2007 2011 p	0.58 0.92 0.0009	0.74 0.95 0.0706	0.75 0.87 0.0095
Liquidity & Diversification Requirements	Are there explicit, verifiable, and quantifiable guidelines regarding asset diversification? (2007) Are there any regulatory rules or supervisory guidelines regarding asset diversification? (2011-2012)	2007 2011 p	0.73 0.65 0.4848	0.50 0.55 0.7590	0.46 0.59 0.0313
	Are banks required to hold reserves in foreign denominated currencies or other foreign denominated instruments?	2007 2011 p	0.30 0.32 0.8506	0.05 0.30 0.0408	0.25 0.34 0.1268
	Are banks prohibited from making loans abroad?	2007 2011 p	0.18 0.24 0.4960	0.05 0.00 0.3299	0.09 0.19 0.0090
Depositor Protection Schemes	Is there an explicit deposit insurance protection system for commercial banks?	2007 2011 p	0.38 0.69 0.0164	1.00 1.00	0.55 0.76 0.0003
Provisioning Requirements	Is there a formal definition of a "nonperforming loan"? (2007) Do you have an asset classification system under which banks have to report the quality of their loans and advances using a common regulatory scale? (2011-2012)	2007 2011 p	0.94 0.76 0.0292	0.60 0.65 0.7517	0.83 0.81 0.5665
Accounting/ Discloure Requirements	Does accrued, though unpaid, interest/principal enter the income statement while the loan is still non-performing?	2007 2011 p	0.06 0.08 0.7424	0.22 0.50 0.0875	0.14 0.27 0.0117
	Must banks disclose their risk management procedures to the public? (2007) Must banks disclose their governance and risk management frameworks to the public? (2011-2012)	2007 2011 p	0.34 0.81 0.0001	0.70 0.95 0.0378	0.45 0.74 0.0000
Discipline/ Problem Institutions/ Exit	Are there any mechanisms of cease and desist-type orders, whose infraction leads to the automatic imposition of civil and penal sanctions on the banks directors and managers? (2007) Please indicate whether the following enforcement power is available to the supervisory agency: cease and desist-type orders for imprudent bank practices (2011-2012)	2007 2011 p	0.69 0.92 0.0184	0.35 1.00 0.0000	0.61 0.96 0.0000
	Can the supervisory agency suspend the directors' decision to distribute bonuses? (2007) Can the supervisory agency require banks to reduce or suspend bonuses and	2007 2011 p	0.58 0.54 0.7791	0.32 0.79 0.0025	0.63 0.72 0.1424

	other remuneration to bank directors and managers? (2011-2012)				
	Can the supervisory agency suspend the directors' decision to distribute management fees? (2007) Can the supervisory agency require banks to reduce or suspend bonuses and other remuneration to bank directors and managers? (2011-2012)	2007 2011 p	0.74 0.54 0.0896	0.37 0.79 0.0077	0.64 0.72 0.1971
	Can the bank supervisor remove and replace management? (2007) Does the bank supervisor have the powers to remove and replace bank senior management and directors? (2011-2012)	2007 2011 p	0.94 0.54 0.0001	0.90 0.79 0.3565	0.91 0.78 0.0017
	Can the bank supervisor remove and replace directors? (2007) Does the bank supervisor have the powers to remove and replace bank senior management and directors? (2011-2012)	2007 2011 p	0.94 0.54 0.0001	0.95 0.79 0.1499	0.92 0.78 0.0008
	Regarding bank restructuring and reorganization, can the supervisory agency or any other government agency supersede shareholder rights? (2007) Does the bank supervisor have the powers to supersede shareholder rights? (2011-2012)	2007 2011 p	0.50 0.31 0.1342	0.65 0.50 0.3500	0.68 0.48 0.0007
	Is there a separate bank insolvency law? (2007) Is there a separate bank insolvency framework that is distinct from that of non-financial firms? (2011-2012)	2007 2011 p	0.06 0.76 0.0000	0.35 0.67 0.0438	0.18 0.69 0.0000