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MEASURE IT, IMPROVE IT

Bank Regulation and Supervision in 180 Countries 1999 – 2011



James R. Barth, Gerard Caprio Jr., and Ross Levine



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INTRODUCTION

Seldom have there been more reasons than now to investigate and compare bank regulation around the world. One can point to the global banking crisis of 2007-2009, the banking problems that still plague many European countries in 2013, and the more than 100 systemic banking crises that have devastated economies around the world since 1970. All these crises reflect, at least in part, defects in bank regulation and supervision.¹ The stakes could not be higher. As documented extensively in the academic literature, banks play a crucial role in economic growth, poverty, entrepreneurship, labor market conditions, and the economic opportunities of citizens.²

The problem is that measuring bank regulation and supervision around the world is hard. Hundreds of laws and regulations, emanating from different national and local governments, define the rules for what banks are allowed to do and how they can do it. These policies govern bank capital standards, entry requirements for new domestic and foreign competitors, ownership restrictions, and lending guidelines. Volumes of regulations in most countries delineate permitted activities for banks and provide shape and substance of how they do business. Extensive statutes also define the powers and organization of bank regulators and supervisors. This immense quantity and diversity of laws and rules poses a daunting challenge for any effort to compile comprehensive data or to aggregate it into meaningful comparisons of very different regulatory regimes. As a result, the systematic collection of data on bank regulatory and supervisory policies is only in its nascent stages. Yet without sound measures of banking policies across countries and over time, researchers will be hard-pressed to assess which approaches work best or to propose useful reforms.

In this paper, we offer a new database for more than 180 countries, covering the period from 1999 through 2011. Although we do not assess the impact of specific banking policies on the broader economy, we do seek to contribute to research on the design and implementation of policies by providing useful measures of the systems now in place. As the great 19th-century scientist Lord Kelvin reportedly argued, “[I]f you cannot measure it, you cannot improve it.”³

Our database builds on four surveys sponsored by the World Bank. About 16 years ago, the World Bank asked us to assemble the first cross-country database on bank regulation and supervision. With guidance and help from bank supervisors, financial economists, and World Bank staff, we developed and implemented an extensive survey.⁴ We had bank regulatory officials complete the survey—and often had several officials from the same country complete the survey in order to verify the consistency of responses. Survey I covered

1 On documenting systemic crises, see Laeven and Valencia (2008). On the linkages between recent banking stresses and policy defects, see Barth, Caprio, and Levine (2012).

2 The literature on finance, growth, poverty, and the distribution of economic opportunities is quite large, and is reviewed by Levine (2006) and Demirguc-Kunt and Levine (2010).

3 Available at <http://zapatopi.net/kelvin/quotes/>

4 We sometimes use the term “regulation” to describe a wide array of banking policies and compliance mechanisms.

118 countries, included over 300 questions, and was mostly completed in 1999.⁵ For the second survey, we extended and revised the questionnaire based on input from World Bank staff, country officials, and academics. The World Bank released Survey II in 2003, which provides information on bank regulatory and supervisory policies in 2002. Survey II includes information from 151 countries covering over 400 questions. Survey III was posted on the World Bank's website in the summer of 2007, and it provides information on banking policies in 2006 for 142 countries. In these first three surveys, we were extensively involved in writing the questionnaire, implementing the survey, and assembling the data. For Survey IV, we played a less prominent role in managing the survey.⁶ Specifically, we helped the World Bank conduct a major revision of the questionnaire, but we did not implement the survey. Released in 2012, Survey IV provides information on banking policies in 125 countries for 2011. Overall, the surveys cover 180 countries, although the exact number varies between the surveys.

The dataset that we make available online differs from the raw survey responses posted by the World Bank in two key regards.⁷ First, we devote considerable effort to resolving inconsistencies and missing values by reviewing each of the four surveys individually and considering the time-series of answers for each country. For example, there are cases when a country provides the same information about a technical regulatory rule in Surveys I, II, and IV, but provides a different answer for Survey III. In such cases, we examine country documents and websites to assess whether there is any reason for such odd changes and reversals, in order to assess whether they represent coding mistakes or actual changes in policy. In the case of missing data entries, we reviewed national publications and contacted national regulatory officials in an effort to complete the dataset. Although we are certain that the resultant dataset is less than perfect, we believe this review process has yielded a more comprehensive and accurate set of data.

The second and more important way in which our data differs from the World Bank's raw survey responses is in our construction of indexes. For each of the four surveys, we provide summary indexes of major categories of bank regulatory policy. This is crucial because of the size of the surveys. There are hundreds of questions in each survey, many with sub-questions and sub-components of those sub-questions. As a result, there are limitations to formulating sound impressions from the raw data about either cross-country differences or changes in policies over time. To draw more meaning from all the survey data, therefore, we aggregate the responses into indexes that summarize crucial aspects of bank regulation and supervision. We construct indexes of policies toward capital, ownership, permitted bank activities, the entry of new banks, the powers of supervisors, the ability of private investors to monitor and influence bank behavior, and many other regulatory issues. All told, we have constructed more than 50 indexes. We provide a detailed description of their construction in the online dataset.

The dataset also provides information on the organization of regulatory agencies and the size and structure of the overall banking system. We document whether a country has a single regulator or multiple regulators, and whether countries authorize their central banks to play a key role in bank supervision. We also document the size of each country's banking system, the concentration of the system, the role of government-owned and foreign-owned banks, and how these characteristics have changed over time. The dataset, therefore,

⁵ The responses to the survey were received in 1998 through 2000, but the majority of the answers refer to policies in the year 1999.

⁶ More specifically, the survey was coordinated by the World Bank's María Soledad Martínez Pería and Martin Cihak, with input from numerous bank regulation experts both inside and outside the World Bank. PKF (U.K.) and Auxilium helped with compiling and following up on the survey responses. The survey was financed in part with support from the U.K. Department for International Development (DFID).

⁷ Our dataset is posted at http://faculty.haas.berkeley.edu/ross_levine/Regulation.htm.

The World Bank posts the data from survey IV at <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23267421-pagePK:64168182-piPK:64168060-theSitePK:8816097,00.html>.

The World Bank posts the data for earlier years at <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20345037-pagePK:64214825-piPK:64214943-theSitePK:469382,00.html>.

facilitates the analysis of the relationships among national banking authorities, the details of financial supervision, and the size and structure of the banking system. Moreover, researchers can easily combine these data with other datasets to explore the causes and consequences of different policies.

Besides describing the data, this paper provides a wealth of cross-country and cross-time comparisons. We analyze changes in bank regulatory and supervisory practices over time, and examine the degree to which banking policies have converged across countries. We also document how the organization of bank regulatory authorities and the structure of banking systems differ around the world. Although there is some convergence in bank regulation, there remains substantial heterogeneity in policies, organization, and structure.

The remainder of the paper is organized as follows. Section II provides an overview of the survey. Section III discusses the indexes of bank regulatory and supervisory policies for a wide array of issues, from permissible bank activities and capital requirements to the powers of the supervisory entities and the ability of private investors to monitor bank behavior. Section III also examines the extent to which bank regulations and supervisory practices have been converging across countries during the tumultuous period since 1999. Section IV is the conclusion.

AN OVERVIEW OF THE SURVEY DATA

The extensive database on bank regulation and supervision (available at <http://business.auburn.edu/~barthjr/Web%20Dataset.htm> and http://faculty.haas.berkeley.edu/ross_levine/Regulation.htm) is based on four surveys conducted by the World Bank. Appendix table 1 contains the entire list of questions from Survey IV, while the online dataset contains the questions for all four surveys. The surveys cover a broad cross-section of countries.

FIGURE
1

Countries participating in the World Bank Surveys

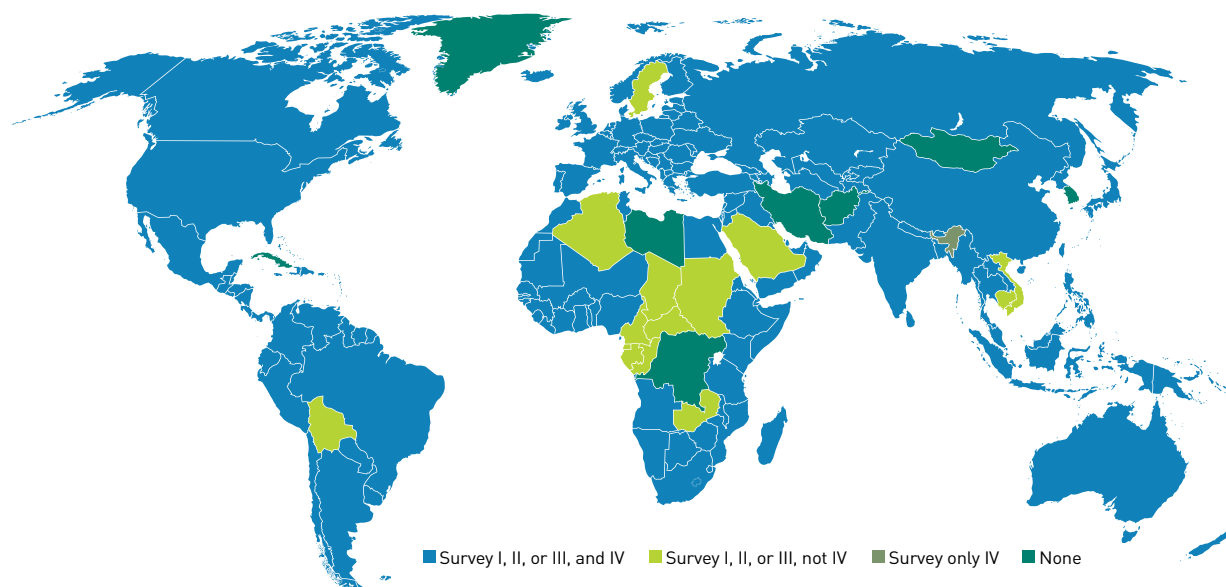


Figure 1 illustrates the countries that responded to the various surveys, and appendix table 2 provides detailed information on those that responded to each of the surveys. Appendix table 3 lists the countries that responded to Survey IV, and sorts them by region and per capita GDP levels. It is clear that coverage is fairly good, with countries represented from all parts of the world and all levels of income. The fewest number of countries responding are in the lower-income category with small populations. For the four surveys, 118 countries responded to Survey I; 151 countries responded to Survey II; and 143 countries responded to both Surveys III and IV. In all, 84 countries responded to all four surveys. Barth, Caprio, and Levine (2001, 2006, and 2008) assess the results of Survey I, II and III, while Martinez Peria and Cihak (2012) discuss data from Survey IV.

Before defining and reviewing the bank regulation and supervision data, we begin in table 1 by documenting cross-country differences in key banking system indicators, using Survey IV for illustrative purposes. As shown, table 1 provides information on banking system size, the number of banks, the proportion of banking assets in government-owned banks (defined as banks in which the

government owns 50 percent or more of the shares), the proportion of banking assets in foreign-owned banks, the number of official bank supervisors per bank in the country, and the percent of the 10 largest banks in a country that are rated by one of the major international ratings agencies.

TABLE

1

Some basic differences in banking systems around the world

	Total bank assets / GDP (percent)	Total bank claims on private sector/ GDP (percent)	Number of banks per 100,000 people	Percent of total assets accounted for by 5 largest banks	Percent of total bank assets government- owned	Percent of total bank assets foreign owned	Professional supervisors per bank	Percent of 10 biggest banks rated by international agencies
Angola	34	21	0.1	79	19	59	N/A	N/A
Argentina	35	14	0.2	55	44	26	3.4	100
Armenia	46	26	0.7	46	0	67	1.7	20
Australia	155	151	0.2	77	0	13	9.2	100
Austria	349	N/A	9.9	35	12	18	N/A	80
Bahrain	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100
Bangladesh	64	46	0.03	38	34	7	N/A	0
Belarus	77	42	0.3	84	72	27	4.2	80
Belgium	331	N/A	1	91	0	60	0.8	50
Belize	89	62	N/A	100	0	100	N/A	0
Benin	N/A	24	N/A	N/A	N/A	N/A	N/A	N/A
Bhutan	46	44	0.6	100	48	6	4.3	0
Bosnia and Herzegovina	60	55	0.5	76	1	92	2	N/A
Botswana	52	25	0.5	92	7	93	3.9	0
Brazil	105	53	0.1	71	44	18	2.1	100
Bulgaria	105	N/A	0.4	54	3	81	2.7	100
Burkina Faso	N/A	18	N/A	N/A	N/A	N/A	N/A	N/A
Burundi	35	17	0.1	87	49	16	3.3	N/A
Canada	195	N/A	N/A	86	0	N/A	0.8	70
Cayman Islands	N/A	N/A	437.5	38	0	100	0.1	0
Chile	107	74	0.1	74	19	39	4.1	60
China	189	N/A	0.02	63	N/A	N/A	N/A	N/A
Colombia	42	31	0.04	63	6	20	25.3	70
Cook Islands	N/A	N/A	N/A	100	8	92	0.8	0
Costa Rica	64	47	0.3	78	54	31	7.4	70
Côte d'Ivoire	N/A	18	N/A	N/A	N/A	N/A	N/A	N/A
Croatia	116	69	0.7	75	4	89	3.3	10
Cyprus	729	N/A	3.5	69	1	35	0.8	30
Denmark	245	N/A	2.2	83	1	21	N/A	70
Dominican Republic	33	22	0.1	87	31	8	10.8	80
Ecuador	36	29	0.2	70	17	2	4	N/A
Egypt	64	27	0.05	N/A	N/A	N/A	11.8	70
El Salvador	63	40	0.2	85	6	93	10.1	50
Estonia	140	N/A	1.3	93	0	99	3.9	0
Ethiopia	25	N/A	0.02	84	61	0	1.7	N/A
Fiji	78	65	0.6	100	0	100	5	80
Finland	256	N/A	1.8	91	0	74	0.7	60
France	368	N/A	1.1	87	2	12	N/A	100
Gambia	60	14	0.8	72	0	80	1.4	0
Germany	124	N/A	2.3	25	32	12	N/A	100
Ghana	37	14	0.1	45	10	51	5.4	0
Gibraltar	N/A	N/A	N/A	79	0	100	0.5	0
Greece	212	N/A	0.2	78	11	21	6.1	80
Guatemala	46	23	0.1	80	2	10	10.4	80
Guernsey	N/A	N/A	N/A	12	5	74	2	100

AN OVERVIEW OF THE SURVEY DATA

	Total bank assets / GDP (percent)	Total bank claims on private sector/ GDP (percent)	Number of banks per 100,000 people	Percent of total assets accounted for by 5 largest banks	Percent of total bank assets government-owned	Percent of total bank assets foreign owned	Professional supervisors per bank	Percent of 10 biggest banks rating by international agencies
Guinea-Bissau	N/A	6	N/A	N/A	N/A	N/A	N/A	N/A
Guyana	63	30	0.8	97	0	56	3.8	0
Honduras	73	49	0.2	69	1	50	6.7	70
Hong Kong, China	705	N/A	2.7	43	N/A	N/A	1.1	100
Hungary	705	N/A	0.3	63	4	83	3.9	80
Iceland	193	115	1.6	100	41	0	5	0
India	80	51	0.01	38	74	7	8.3	100
Indonesia	47	26	0.1	50	38	34	7.7	90
Iraq	18	9	N/A	N/A	N/A	N/A	N/A	N/A
Ireland	483	N/A	1	72	21	63	1.6	100
Isle of Man	N/A	N/A	36.2	70	0	100	0.2	100
Israel	148	N/A	0.2	94	0	3	6.5	50
Italy	204	N/A	1.3	66	0.1	18	0.9	100
Jamaica	50	26	0.3	95	0	95	11.4	29
Jersey	N/A	N/A	N/A	65	18	100	0.1	100
Jordan	N/A	73	N/A	N/A	N/A	N/A	N/A	40
Kazakhstan	N/A	39	0.2	72	23	17	1.1	100
Kenya	N/A	33	0.1	50	5	37	1.4	80
Korea, Rep.	112	102	0.03	80	22	77	N/A	100
Kosovo	56	35	0.5	N/A	N/A	N/A	3.1	38
Kuwait	119	71	N/A	N/A	N/A	N/A	N/A	100
Kyrgyz Republic	26	N/A	0.4	55	20	46	2.6	0
Latvia	N/A	N/A	1.3	59	16	69	1.3	N/A
Lebanon	N/A	78	N/A	N/A	N/A	N/A	N/A	50
Lesotho	57	15	0.2	100	3	97	1.3	N/A
Liechtenstein	N/A	N/A	47.2	92	29	4	0.3	20
Lithuania	86	N/A	0.6	80	0	81	3.1	90
Luxembourg	1942	N/A	29	31	5	94	0.3	40
Macao, China	238	57	5.2	73	0.2	99	0.6	30
Madagascar	24	N/A	0.05	82	0	100	1.9	0
Malawi	37	16	0.1	83	9	29	2.3	0
Malaysia	203	120	0.1	59	0	22	7.5	90
Maldives	98	57	1.9	98	39	61	1.8	0
Mali	N/A	18	N/A	N/A	N/A	N/A	N/A	N/A
Malta	814	N/A	6.3	71	0	86	0.7	20
Mauritius	112	89	1.4	65	1	68	1.9	20
Mexico	42	19	0.04	74	13	85	10.8	100
Moldova	60	34	0.4	69	13	42	3.1	0
Montenegro	96	68	1.7	77	N/A	88	4	10
Morocco	88	69	N/A	N/A	N/A	N/A	N/A	N/A
Mozambique	37	28	0.1	92	0	92	N/A	0
Myanmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Namibia	70	55	0.2	100	0	86	3.3	25
Nepal	65	56	0.1	26	24	17	N/A	N/A
Netherlands	469	N/A	0.5	84	14	N/A	2.8	100
New Zealand	205	N/A	0.4	84	3	95	0.4	100
Nicaragua	64	31	0.2	96	1	24	3.7	44
Niger	N/A	13	N/A	N/A	N/A	N/A	N/A	N/A
Nigeria	52	29	0.02	48	0	6	16.7	100
Norway	53	N/A	0.6	76	0	30	0.8	100
Oman	49	43	N/A	N/A	N/A	N/A	N/A	70
Pakistan	47	21	0.02	51	21	59	7.3	0
Palestinian Territory	N/A	N/A	N/A	78	0	62	4.1	50
Panama	269	84	2.7	47	11	62	1.3	100
Paraguay	54	39	0.2	67	6	40	2.8	N/A
Peru	42	24	0.1	87	0	49	11.9	40
Philippines	70	30	0.04	53	13	11	12.2	100

MEASURE IT, IMPROVE IT: BANK REGULATION AND SUPERVISION IN 180 COUNTRIES 1999 – 2011

	Total bank assets / GDP (percent)	Total bank claims on private sector/ GDP (percent)	Number of banks per 100,000 people	Percent of total assets accounted for by 5 largest banks	Percent of total bank assets government- owned	Percent of total bank assets foreign owned	Professional supervisors per bank	Percent of 10 biggest banks rating by international agencies
Poland	74	N/A	0.1	49	22	62	6.8	90
Portugal	314	N/A	1.1	74	23	22	1	80
Puerto Rico	N/A	N/A	0.3	59	18	2	1	100
Qatar	122	44	1	74	N/A	0	4.4	90
Romania	61	40	0.1	57	8	84	3.6	60
Russia	75	44	0.7	48	41	18	4.3	N/A
Samoa (Western)	55	47	2.2	100	0	71	2	0
Senegal	N/A	26	N/A	N/A	N/A	N/A	N/A	N/A
Serbia	83	50	0.5	45	18	74	1.9	0
Seychelles	109	24	8.1	94	31	69	1.4	0
Sierra Leone	30	10	0.2	74	38	62	2.6	0
Singapore	676	113	3.2	39	0	71	1.1	100
Slovakia	84	N/A	0.3	72	1	94	2.7	N/A
Slovenia	143	N/A	0.9	60	51	28	1.5	50
South Africa	130	80	0.1	92	0.1	28	3.4	100
Spain	376	N/A	0.7	64	0	8	1	100
Sri Lanka	54	27	0.1	73	59	14	1.7	100
Suriname	49	24	1.7	88	33	21	0.7	11
Swaziland	44	25	0.4	N/A	16	84	2.3	N/A
Switzerland	548	193	4.2	67	16	12	0.2	90
Syria	79	N/A	0.1	69	71	0	3.3	10
Taiwan	261	N/A	0.1	73	18	11	9.4	90
Tajikistan	25	N/A	N/A	84	14	6	N/A	0
Tanzania	36	15	0.1	64	5	49	1.8	0
Thailand	122	102	0.05	63	18	7	13.1	100
Togo	N/A	31	N/A	N/A	N/A	N/A	N/A	N/A
Tonga	59	44	2.9	100	13	87	1.7	67
Trinidad and Tobago	77	32	0.6	95	24	46	7.9	N/A
Tunisia	N/A	65	N/A	N/A	N/A	N/A	N/A	80
Turkey	89	43	0.1	60	32	17	6.3	100
Uganda	28	14	0.1	61	3	75	3.6	0
Ukraine	100	62	0.4	37	17	48	1.8	N/A
United Arab Emirates	N/A	N/A	N/A	N/A	N/A	N/A	N/A	50
United Kingdom	607	206	0.5	68	26	18	0.8	100
United States	84	57	2.1	47	0	N/A	0.3	100
Uruguay	64	23	0.4	75	46	54	12.1	100
Vanuatu	128	68	1.7	100	14	86	1.5	75
Venezuela	282	19	0.1	62	33	17	N/A	N/A
Virgin Islands, British	N/A	N/A	5.5	95	4	95	0.8	67
Yemen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zimbabwe	49	N/A	0.2	54	8	46	1.6	100
High	1,942	206	437.5	100	74	100	25.3	100
Low	18	6	0.01	12	0	0	0.1	0
Median	78	39	0.4	73	8.5	49	2.7	70

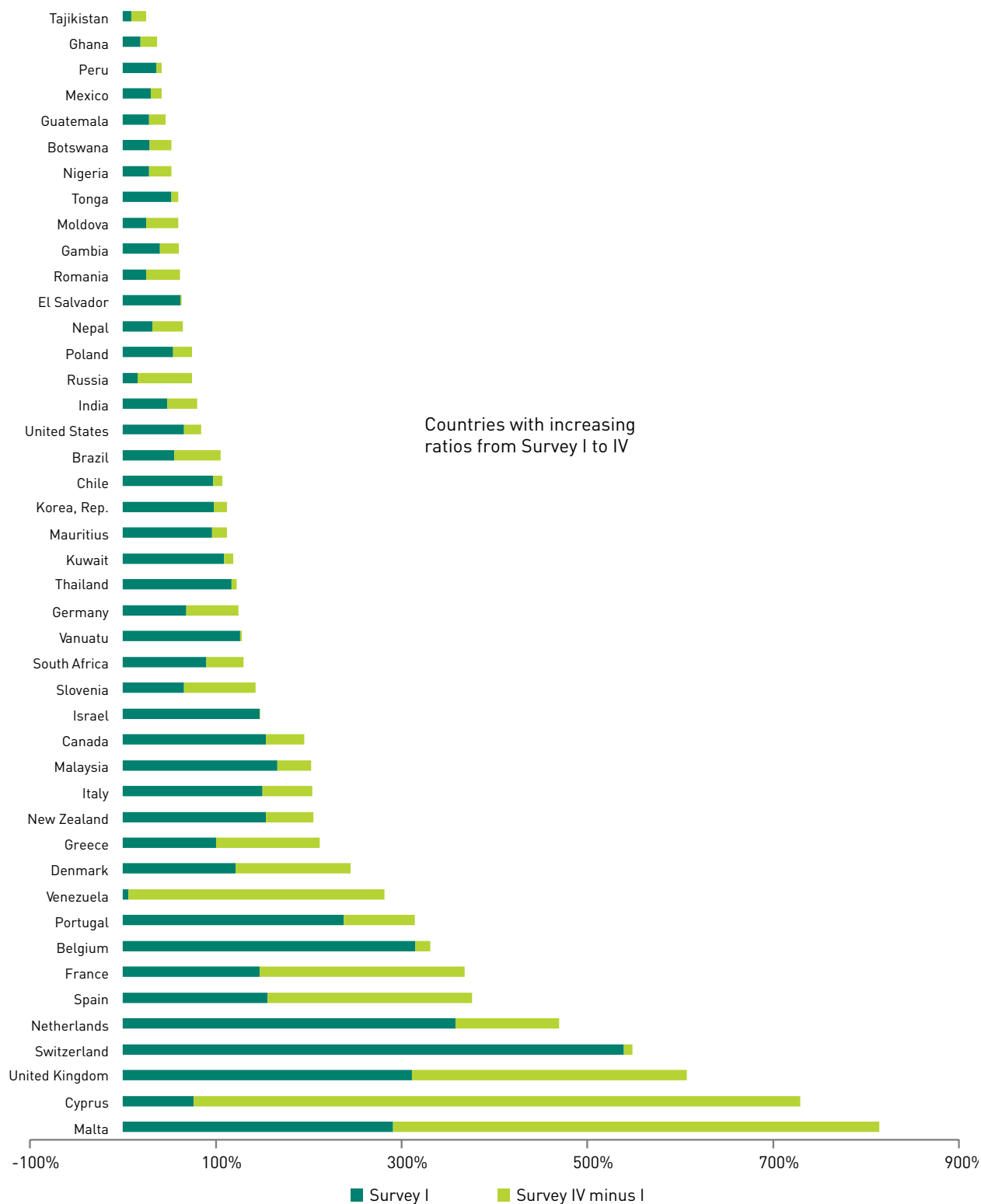
For many of the banking system indicators depicted in table 1, the range of variation is impressive. Some examples will illustrate this point. Luxembourg has the highest ratio of bank assets-to-GDP at a striking 1,942 percent, while Iraq has the lowest ratio at 18 percent.⁸ These figures are not surprising, given that Luxembourg is a very small country with internationally active banks, while Iraq is still recovering from war. The share of foreign-owned bank assets ranges from 100 percent in several offshore financial centers to 0 percent in Ethiopia. In the case of government ownership of bank assets, shares range from 0 percent for several countries to 74 percent in India. (China did not respond to this question, but available information indicates the figure exceeds 90 percent. In the 2007 survey, China reported that the share was slightly less than 70 percent. That share, however, only captured the four big state-owned banks. Its figure would have been well over 90 percent even if it had included all government-owned banks). Banking density also varies to an astonishing degree, though less so if one removes offshore banking centers, such as the Cayman Islands, the Isle of Man, and Seychelles. The median number of banks per 100,000 people is 0.4, with the lowest figure being 0.01 for India. Large banks control a substantial share of bank assets, with the median share of the top five banks in a country being 73 percent. Although all big banks are audited by international accounting firms, a distressing number of countries, including Botswana and Iceland, do not require such auditing of their large banks.

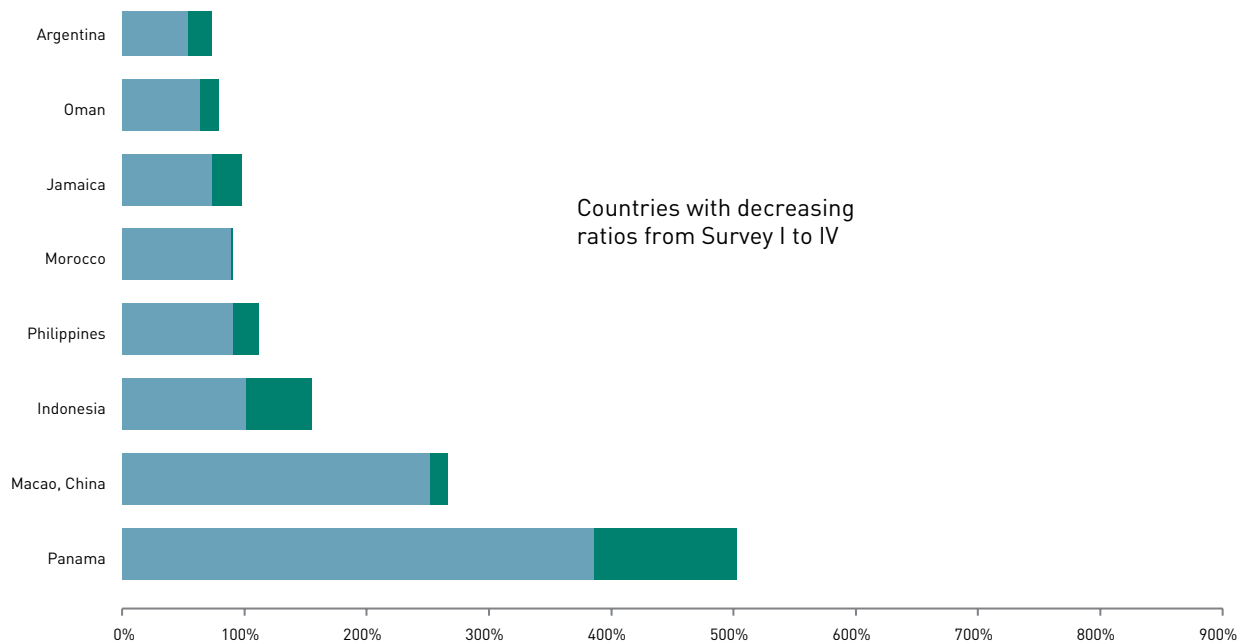
Besides providing a snapshot of the structure of banking systems in 2011, the data also illustrate the evolution of banking systems since 1999. As shown in figure 2, many countries experienced rapid growth in the ratio of bank assets to GDP between Survey I (1999) and Survey IV (2011). Figure 2 provides information on all countries for which there are data for *both* Surveys I and IV. In the left panel of figure 2, we graph all countries in which the ratio of bank assets to GDP increased by more than 1 percentage point between Survey I and Survey IV. In the right panel, we show all countries with a ratio that decreased by greater than -1 percentage point. In 44 countries the ratio increased, while it decreased in eight countries. Figure 3 shows the maximum ratio of bank assets to GDP for each country across all four surveys, as well as in which survey the high point occurred. Most countries reported the highest ratio in Survey IV.

⁸ One problem in comparing bank assets across countries is that different countries use different accounting standards. As appendix table 7 shows, most countries use International Financial Reporting Standards (IFRS), while only six use U.S. GAAP. When one converts U.S. bank assets from U.S. GAAP to IFRS, total bank assets increase by roughly \$5 trillion in 2012, which is largely due to measuring derivatives on a gross rather than net basis (see Barth and Prabha, 2012). The biggest effect that different accounting standards will have in measuring a country's bank assets is likely to be in the United States, and is concentrated at the biggest banks, which account for the bulk of all derivatives.

FIGURE
2

Total bank assets /GDP





Bank concentration and ownership have also changed materially. We illustrate the changes between Survey I and Survey IV for all countries that provided information in both surveys. The right panel in figure 4 shows that some countries experienced sharp reductions in bank concentration, which is measured by the share of assets in the five largest banks. Most of the countries that experienced these pronounced reductions in concentration have small financial systems. The left panel in figure 4 shows that far more countries experienced increases in concentration. Those countries include Germany, Malaysia, Turkey, Spain, Italy, Brazil, Chile, Australia, South Korea, Canada, and the United States. Across all countries that provided data on bank concentration for Survey I and Survey IV, the average level of bank concentration climbed from 66 percent in Survey I to 70 percent in Survey IV.

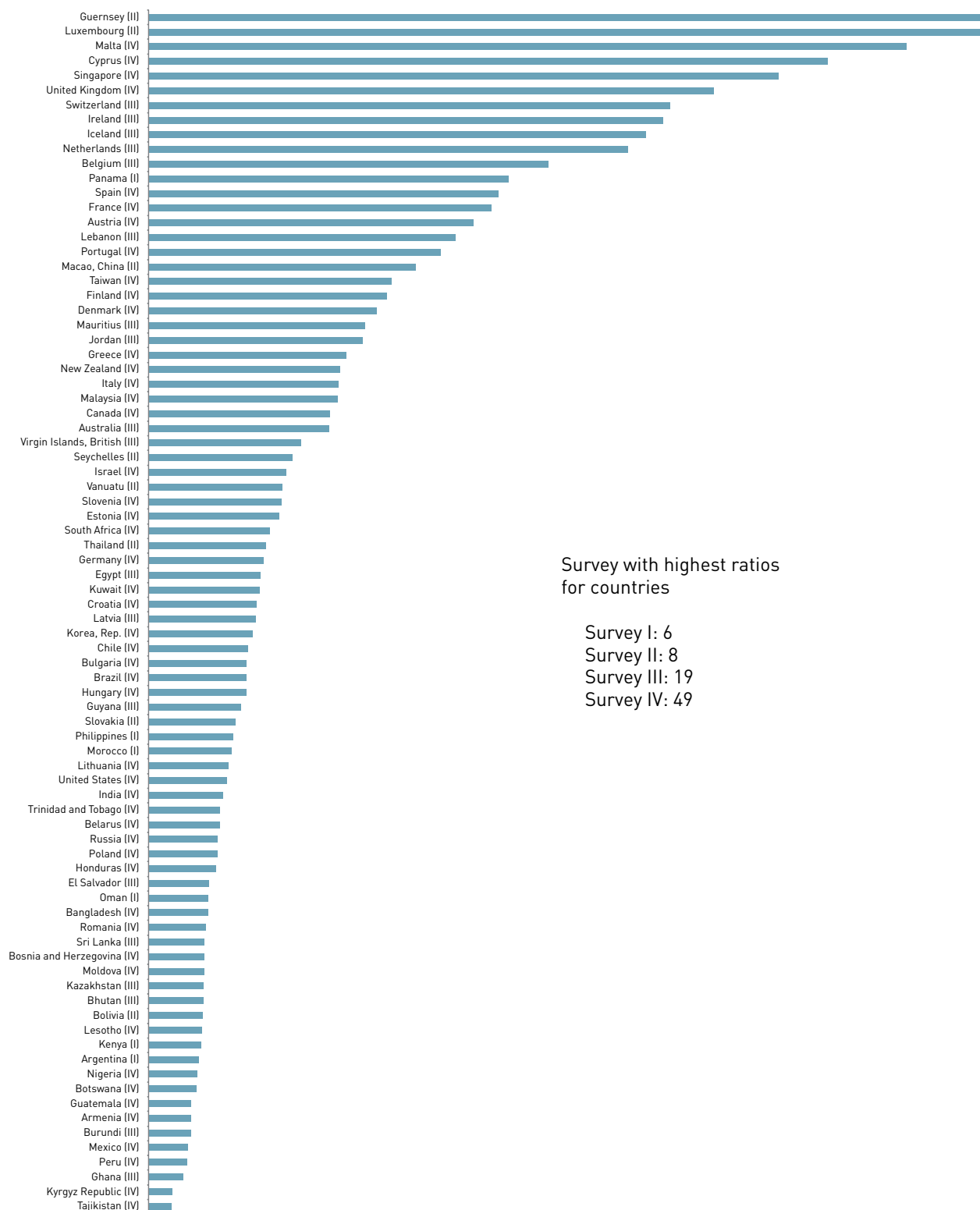
In many countries, state ownership of banks also changed appreciably between Survey I and Survey IV. Figure 5 shows that a substantial number of countries experienced large decreases in state ownership. This was especially true for several big countries, including Germany, India and Russia, which had previously had high levels of government ownership. As with all of the figures, we include only those countries that supplied data in both Survey I and Survey IV. A number of countries also reported large increases in the share of bank assets controlled by state-owned banks. The most striking case is the United Kingdom, where the share increased from zero to 26 percent, due to the bailout of the Royal Bank of Scotland in 2008. On average, countries that provided data on state ownership for both Survey I and Survey IV reported a decline in the share of assets held by state-owned banks from 21 percent in 1999 to 15 percent in 2011.

One of the most significant changes, and one that has greatly complicated the world of bank regulation and supervision, is the dramatic increase in the share of total bank assets at foreign-owned banks, as shown in figure 6. A bank is considered foreign-owned if 50 percent or more of the bank's assets are foreign-owned. From Survey I to Survey IV, 76 percent of the countries experienced an increase in the share of bank assets in foreign-owned banks. Across all countries that provided data for both surveys, the average percentage of bank assets in foreign-owned banks increased to 47 percent in 2011 from 29 percent in 1999. This substantial increase highlights the growing need of cross-country coordination of globally active banks.

FIGURE

3

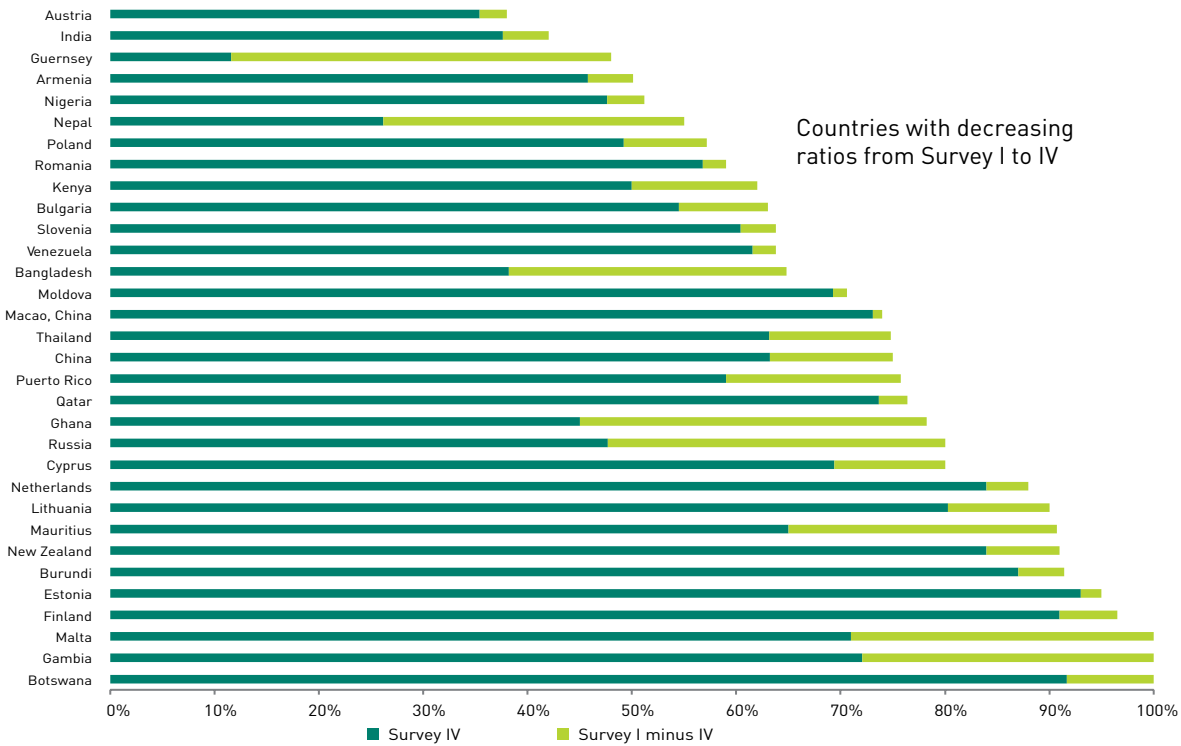
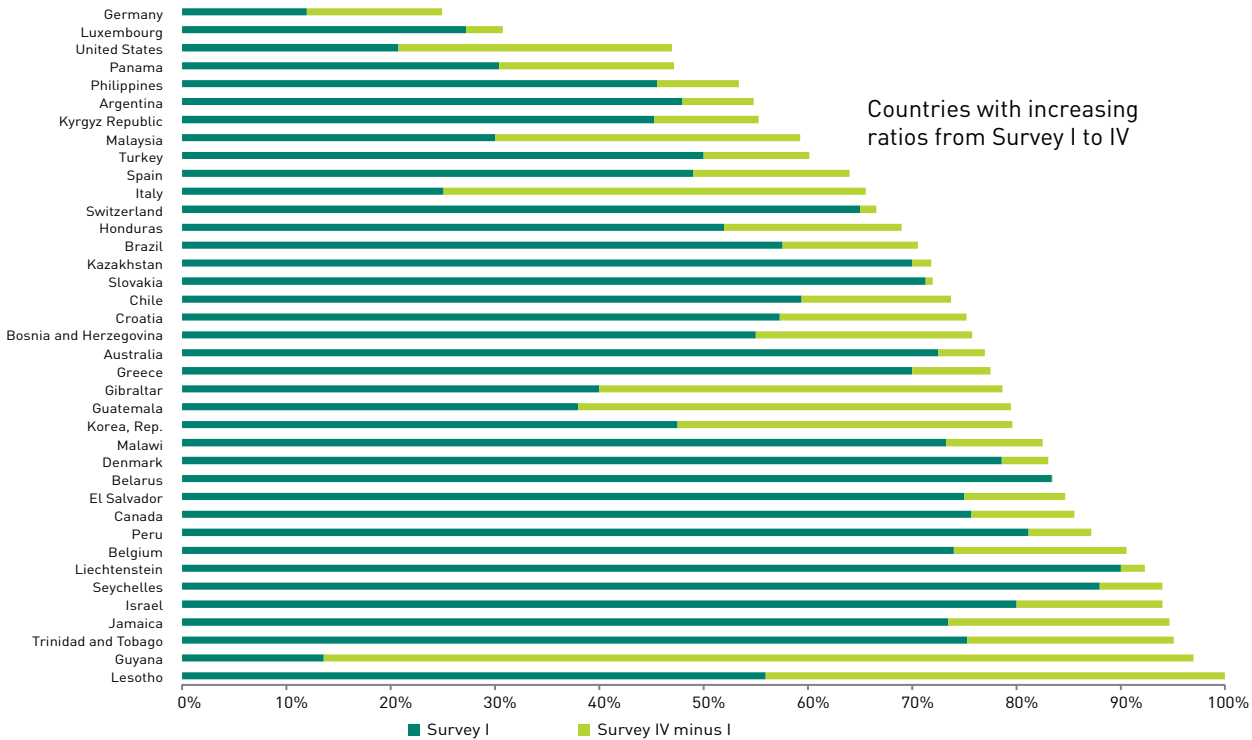
Highest total bank assets / GDP ratio based on Surveys I-IV



FIGURE

4

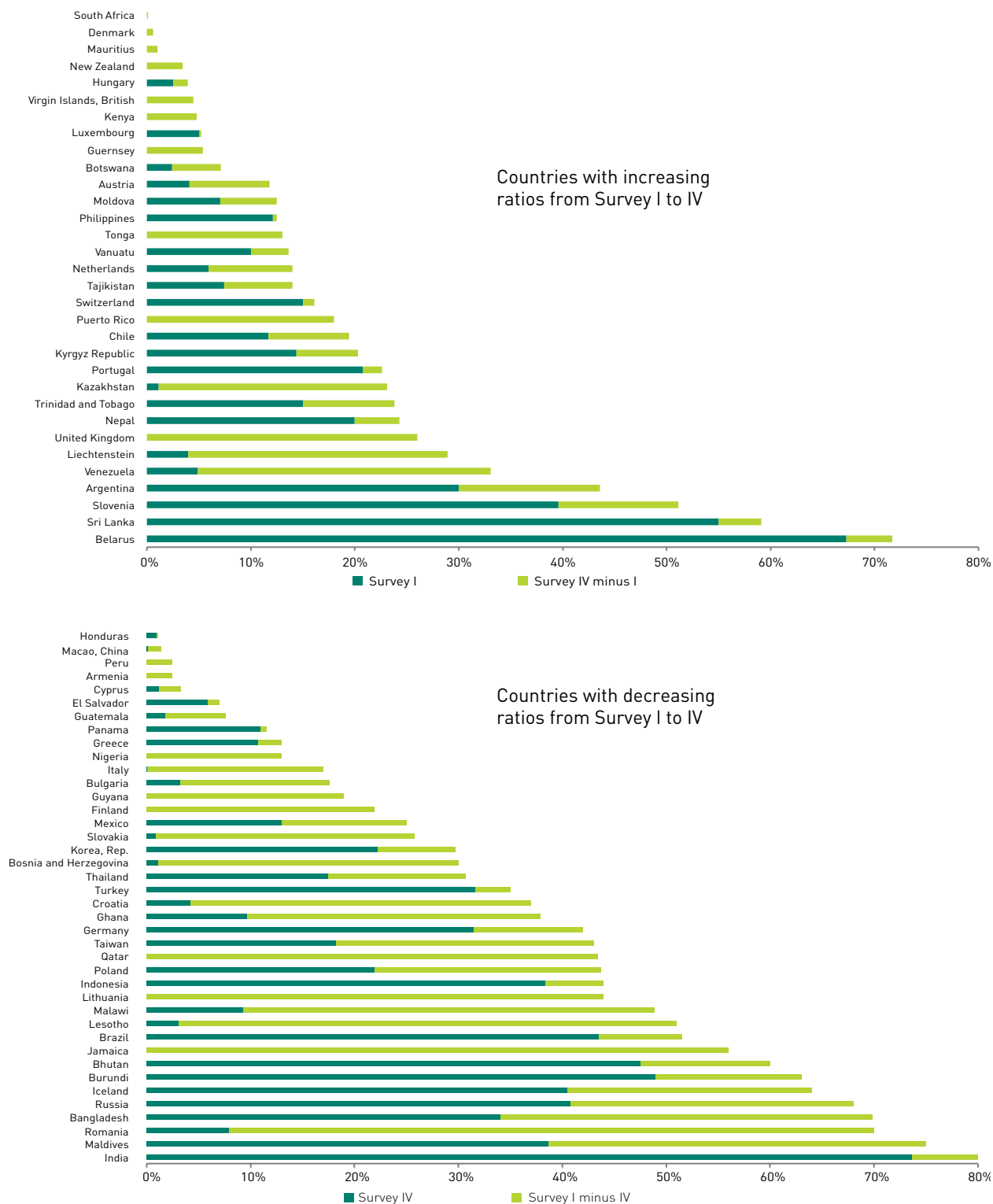
Percentage of assets accounted for by 5 largest banks



FIGURE

5

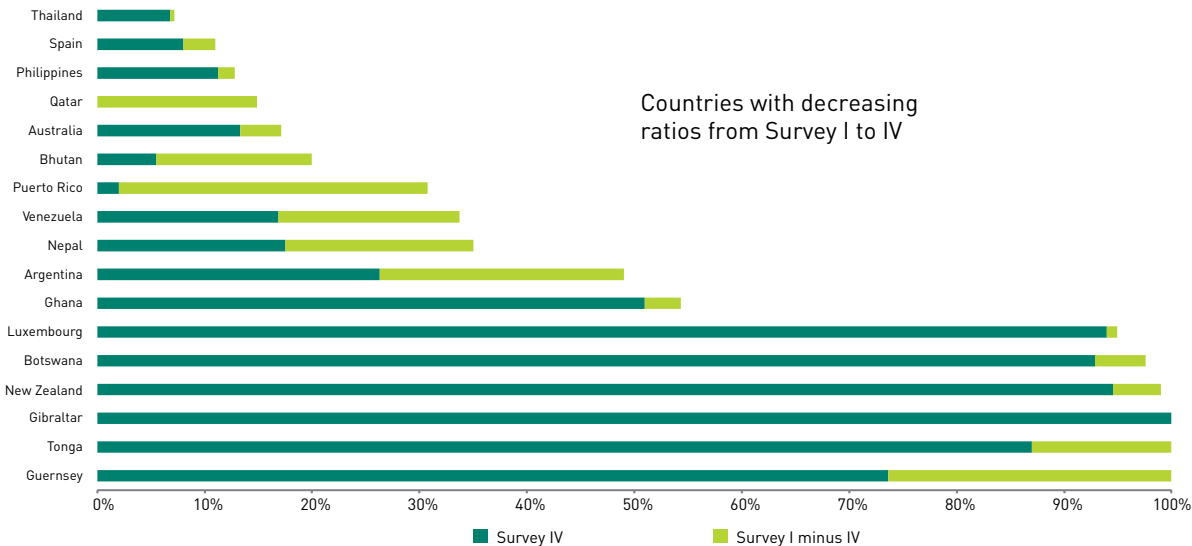
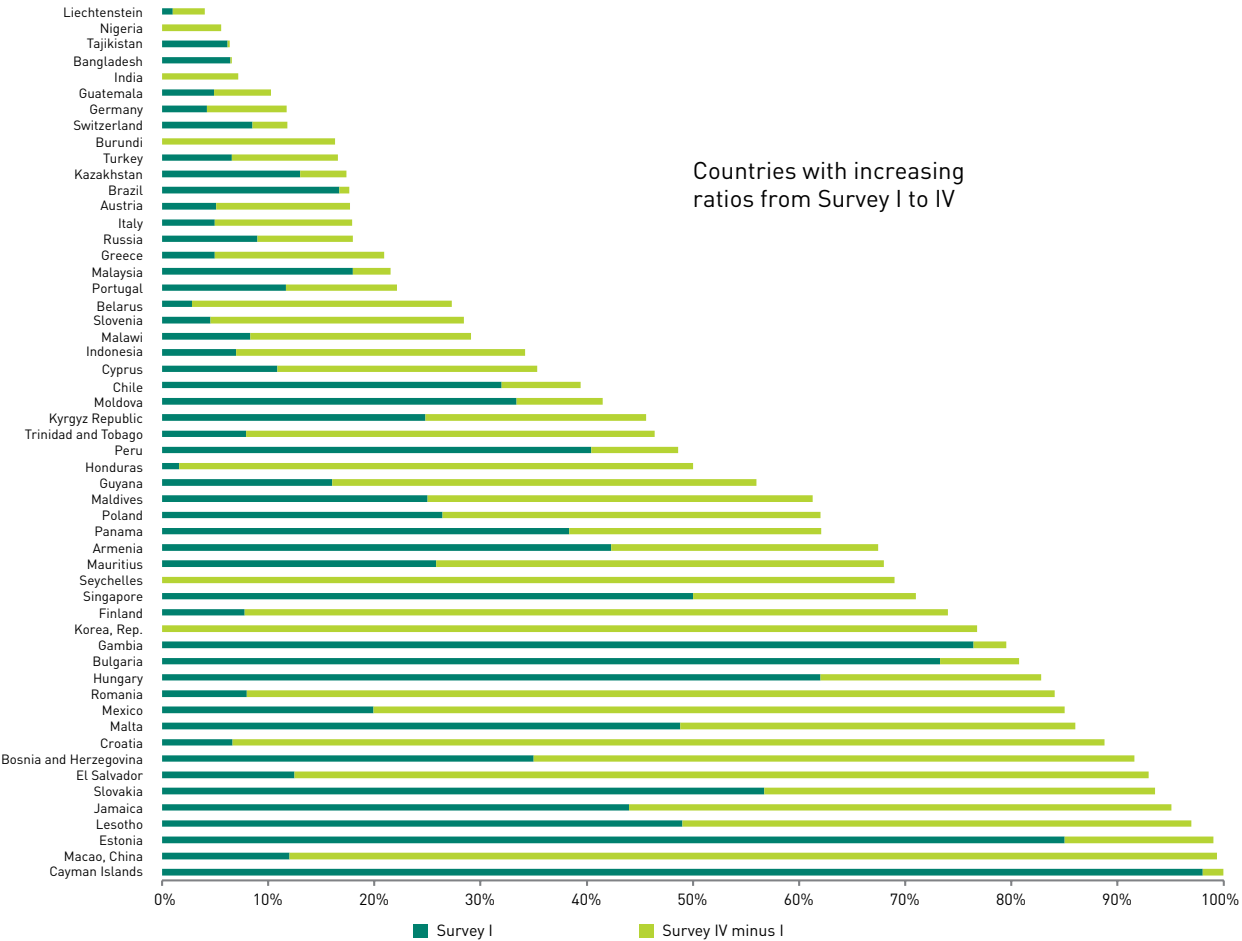
Percentage of total bank assets government-owned



FIGURE

6

Percentage of total bank assets foreign owned



TABLE

2

Countries with single vs. multiple bank supervisory authorities

	Single bank supervisory authority (126 countries)				Multiple bank supervisory authorities (10 countries)
Middle East and Africa (42 countries)	Angola Benin Botswana Burkina Faso Burundi Côte d'Ivoire Egypt Ethiopia Gambia Ghana	Guinea-Bissau Iraq Israel Jordan Kenya Kuwait Lesotho Madagascar Malawi Mali	Malta Morocco Mozambique Namibia Niger Oman Qatar Romania Senegal Seychelles	Sierra Leone South Africa Swaziland Syria Tanzania Togo Uganda United Arab Emirates Yemen Zimbabwe	Nigeria Tunisia
Americas (23 countries)	Argentina Brazil Canada Chile Colombia	Costa Rica Dominican Republic Ecuador Guatemala Guyana	Honduras Jamaica Mexico Nicaragua Paraguay	Peru Suriname Trinidad and Tobago Uruguay Venezuela	El Salvador Puerto Rico United States
Asia/Pacific (19 countries)	Australia Bhutan Fiji Hong Kong, China India	Indonesia Korea, Rep. Malaysia Maldives Nepal	New Zealand Pakistan Philippines Samoa (Western) Singapore	Sri Lanka Thailand Tonga	Taiwan
Europe (39 countries)	Armenia Belarus Belgium Bosnia and Herzegovina Bulgaria Croatia Cyprus Estonia Finland	France Greece Hungary Ireland Italy Kazakhstan Kosovo Kyrgyz Republic Latvia	Luxembourg Norway Serbia Slovakia Slovenia Spain Switzerland Tajikistan Turkey	Ukraine United Kingdom Lithuania Moldova Montenegro Netherlands Portugal Russia	Germany Iceland Austria Denmark
Offshore centers (13 countries)	Bahrain Belize Cayman Islands Gibraltar	Guernsey Isle of Man Jersey Liechtenstein	Macao, China Mauritius Panama Vanuatu	Virgin Islands, British	

Beyond these general characteristics of banking systems, there are also cross-country differences in the organization of bank regulatory and supervisory institutions. Tables 2-4 provide information on whether countries have single or multiple supervisory authorities, whether the bank supervisor is in the central bank or a separate agency (or both, as in the case in some countries), and whether there is a single financial supervisor for the entire financial system. Table 2 shows that the vast majority of countries – 126 – have a single bank supervisory authority. Only 10 have multiple authorities, though the United States is one of them.

Table 3 provides information on whether the central bank is a bank supervisory authority. That was the case in 89 countries, while 38 assigned the central bank no supervisory authority at all. The remaining nine countries that provided information indicated that the central bank was one among multiple supervisors. The United States was one of those countries.

Since banks are not the only financial firms, information was also requested as to whether a country has a single financial supervisory authority or multiple authorities. Table 4 provides information on the scope of

coverage by financial supervisory authorities in countries. In 101 countries, there are multiple authorities covering the financial sector, while in 25 countries there is a single authority covering the entire financial sector. Most of the countries with a single authority are relatively small in terms of both population and GDP.

TABLE

3

Countries with the central bank as a supervisory authority

	Central bank only (89 countries)			Central bank among multiple supervisors (9 countries)	Central bank not a supervisory authority (38 countries)		
Middle East and Africa (42 countries)	Angola Benin Botswana Burkina Faso Burundi Côte d'Ivoire Egypt Ethiopia Gambia Ghana Guinea-Bissau Iraq Israel	Jordan Kenya Kuwait Lesotho Malawi Mali Morocco Mozambique Namibia Niger Oman Qatar Romania	Senegal Seychelles Sierra Leone South Africa Swaziland Syria Tanzania Togo Uganda United Arab Emirates Yemen Zimbabwe	Nigeria Tunisia	Madagascar Malta		
Americas (23 countries)	Argentina Brazil	Guyana Jamaica	Suriname Trinidad and Tobago	El Salvador United States	Canada Chile Colombia Costa Rica Dominican Republic	Ecuador Guatemala Honduras Mexico Nicaragua	Paraguay Peru Puerto Rico Uruguay Venezuela
Asia/Pacific (19 countries)	Bhutan Fiji Hong Kong, China India Indonesia Korea, Rep.	Malaysia Maldives Nepal New Zealand Pakistan Philippines	Samoa (Western) Singapore Sri Lanka Thailand Tonga	Taiwan	Australia		
Europe (39 countries)	Armenia Belarus Belgium Bulgaria Croatia Cyprus Greece Ireland	Italy Kazakhstan Kosovo Kyrgyz Republic Lithuania Moldova Montenegro Netherlands	Portugal Russia Serbia Slovakia Slovenia Spain Tajikistan Ukraine	Germany Iceland Austria Denmark	Bosnia and Herzegovina Estonia Finland France	Hungary Latvia Luxembourg Norway	Switzerland Turkey United Kingdom
Offshore centers (13 countries)	Bahrain Belize	Mauritius Vanuatu			Cayman Islands Gibraltar Guernsey	Isle of Man Jersey Liechtenstein	Macao, China Panama Virgin Islands, British

TABLE

4

Scope of supervisory authority

	Single financial supervisory authority for financial sector (25 countries)		Multiple financial supervisory authorities for financial sector (101 countries)			
Middle East and Africa (31 countries)	Lesotho Malawi Malta		Angola Botswana Burundi Egypt Ethiopia Gambia Ghana	Iraq Israel Kenya Kuwait Madagascar Mozambique Namibia	Nigeria Oman Qatar Seychelles Sierra Leone South Africa Swaziland	Syria Tanzania Tunisia Uganda United Arab Emirates Yemen Zimbabwe
Americas (23 countries)	Colombia Ecuador El Salvador Guyana	Honduras Puerto Rico Uruguay	Argentina Brazil Canada Chile	Costa Rica Dominican Republic Guatemala Jamaica	Mexico Nicaragua Paraguay Peru	Suriname Trinidad and Tobago United States Venezuela
Asia/Pacific (21 countries)	Bhutan Fiji Korea, Rep.		Australia Bangladesh Hong Kong, China India Indonesia	Malaysia Maldives Myanmar Nepal New Zealand	Pakistan Philippines Samoa (Western) Singapore Sri Lanka	Taiwan Thailand Tonga
Europe (38 countries)	Armenia Austria Denmark Estonia Finland	Hungary Iceland Latvia Liechtenstein Norway	Belarus Belgium Bosnia and Herzegovina Bulgaria Croatia Cyprus France	Germany Greece Ireland Italy Kosovo Kyrgyz Republic Lithuania	Luxembourg Moldova Montenegro Netherlands Portugal Romania Russia	Serbia Slovenia Spain Switzerland Tajikistan Turkey Ukraine
Offshore centers (13 countries)	Gibraltar Macao, China		Bahrain Belize Cayman Islands	Guernsey Isle of Man Jersey	Lebanon Mauritius Panama	Vanuatu Virgin Islands, British

AGGREGATING THE DATA: THE ART AND SCIENCE OF FORMING INDEXES

There are formidable conceptual challenges to aggregating information from the surveys into meaningful and useful measures of bank regulatory practices. While fully aware of the challenges, we have formulated a set of indexes to measure the major features of each country's regulatory regime and to gauge how these features have evolved over time. Table 5 shows a full list of variables in the dataset, along with the definition, quantification, and specific survey questions behind each variable.

In the paper, we describe some of the indexes and provide some cross-country and time-series comparisons. In the online data file, we show precisely how each aggregate index is constructed from the individual components of the survey. We also organize the data file so that researchers can construct their own indexes from the individual responses.

A. SCOPE OF BANK ACTIVITIES AND FINANCIAL CONGLOMERATE VARIABLES

National regulators license banks and specify their permissible activities. Countries may restrict banks to a narrow range of activities, or allow them to engage in a broad array. Since the scope of activities may be used to define what is meant by a "bank," and since the scope of permissible activities differs across countries, the very meaning of "bank" varies widely as well. Furthermore, bank regulations define the extent to which banks and nonbanks may combine to form various kinds of financial conglomerates.

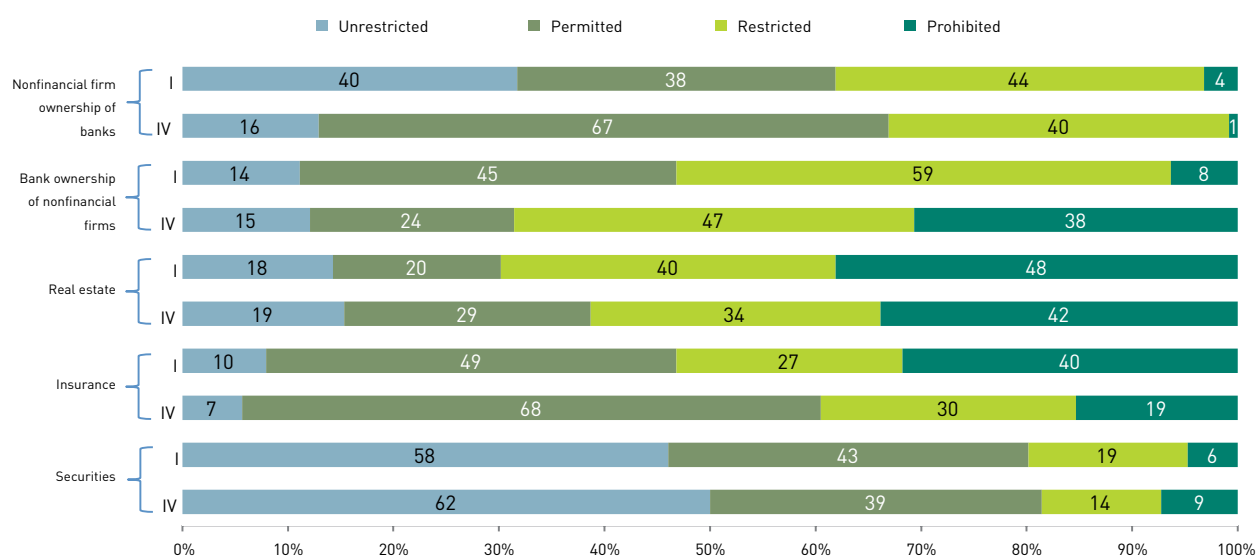
From the survey questions, we construct indexes of the degree to which national regulations restrict banks from engaging in (1) securities activities, (2) insurance activities, and (3) real estate activities. We define securities activities to include securities underwriting, brokering, dealing, and all aspects of the mutual fund industry. Insurance activities involve insurance underwriting and selling. Real estate activities refer to real estate investment, development, and management. The index values for securities, insurance, and real estate activities range from 1 to 4, where larger values indicate more restrictions on banks performing each activity. A "4" signifies that the activity is prohibited, while a "3" indicates that it is tightly restricted. A "2" means that the activity is permitted but with some limits, and "1" signals that the activity is permitted without any restrictions.

Figure 7 provides information on the distribution of countries by the degree of their restrictiveness in Survey I and Survey IV. The underlying data file contains this information by country for all four surveys. Figure 7 shows that securities activities are the least restricted of activities, while real estate is the most restricted. In Survey IV, only 9 of 124 countries said they actually prohibit

banks from securities activities. In contrast, 42 countries prohibit them from real estate activities and only 19 countries prohibit banks from insurance. Guyana and Uganda are the only countries that completely prohibit banks from engaging in all three activities (securities, insurance, and real estate). However, 12 other countries put at least some restrictions on all three areas.

FIGURE 7

Regulatory restrictions on bank activities and the mixing of banking and commerce: Percentage distribution of 126 countries in Survey I and 124 countries in Survey IV by degree of restrictiveness.


TABLE 5

Information on bank regulatory, supervisory, and deposit insurance variables

Variable	Definition	Quantification	World Bank Survey IV questions
1. Bank activity regulatory variables			
Securities activities	The extent to which banks may engage in underwriting, brokering and dealing in securities, and all aspects of the mutual fund industry.	(Higher values indicate more restrictive.) a = 1; b = 2; c = 3; and d = 4.	4.1 What are the conditions under which banks can engage in securities activities? a. A full range of these activities can be conducted directly in banks. b. A full range of these activities are offered but all or some of these activities must be conducted in subsidiaries, or in another part of a common holding company or parent. c. Less than the full range of activities can be conducted in banks, or subsidiaries, or in another part of a common holding company or parent. d. None of these activities can be done in either banks or subsidiaries, or in another part of a common holding company or parent.

Variable	Definition	Quantification	World Bank Survey IV questions
Insurance activities	The extent to which banks may engage in insurance underwriting and selling.	(Higher values indicate more restrictive.) a = 1; b = 2; c = 3; and d = 4.	4.2 What are the conditions under which banks can engage in insurance activities? a. A full range of these activities can be conducted directly in banks. b. A full range of these activities are offered but all or some of these activities must be conducted in subsidiaries, or in another part of a common holding company or parent. c. Less than the full range of activities can be conducted in banks, or subsidiaries, or in another part of a common holding company or parent. d. None of these activities can be done in either banks or subsidiaries, or in another part of a common holding company or parent.
Real estate activities	The extent to which banks may engage in real estate investment, development, and management.	(Higher values indicate more restrictive.) a = 1; b = 2; c = 3; and d = 4.	4.3 What are the conditions under which banks can engage in real estate activities? a. A full range of these activities can be conducted directly in banks. b. A full range of these activities are offered but all or some of these activities must be conducted in subsidiaries, or in another part of a common holding company or parent. c. Less than the full range of activities can be conducted in banks, or subsidiaries, or in another part of a common holding company or parent. d. None of these activities can be done in either banks or subsidiaries, or in another part of a common holding company or parent.
Overall restrictions on banking activities	Sum of (I.I) + (I.II) + (I.III)	(Higher values indicate more restrictive.) Sum of (I.I) + (I.II) + (I.III)	
2. Financial conglomerate variables			
Bank owning non-financial firms	The extent to which banks may own and control non-financial firms.	(Higher values indicate more restrictive.) a = 1; b = 2; c = 3; and d = 4.	4.4 What are the conditions under which banks can engage in non-financial businesses except those businesses that are auxiliary to banking business (e.g. IT company, debt collection company etc.)? a. Non-financial activities can be conducted directly in banks. b. Non-financial activities must be conducted in subsidiaries, or in another part of a common holding company or parent. c. Non-financial activities may be conducted in subsidiaries, or in another part of a common holding company or parent, but subject to regulatory limit or approval. d. None of these activities can be done in either banks or subsidiaries, or in another part of a common holding company or parent.
Non-financial firms owning banks	The extent to which non-financial firms may own and control banks.	(Higher values indicate more restrictive.) a = 1; b = 2; c = 3; and d = 4.	2.6 Can non-financial firms own voting shares in commercial banks? a. Non-financial firm may own 100% of the equity in a commercial bank. b. Non-financial firm may own 100% of the equity in a commercial bank, but prior authorization or approval is required. c. Limits are placed on ownership of banks by non-financial firms, such as maximum percentage of a commercial bank's capital or shares. d. Non-financial firms cannot own any equity investment in a commercial bank.

Variable	Definition	Quantification	World Bank Survey IV questions
Nonbank financial firms owning banks	The extent to which nonbank financial firms may own and control banks.	(Higher values indicate more restrictive.) a = 1; b = 2; c = 3; and d = 4.	2.7 Can nonbank financial firms (e.g. insurance companies, finance companies, etc.) own voting shares in commercial banks? a. Nonbank financial firm may own 100% of the equity in a commercial bank. b. Nonbank financial firm may own 100% of the equity in a commercial bank, but prior authorization or approval is required. c. Limits are placed on ownership of banks by nonbank financial firms, such as maximum percentage of a commercial bank's capital or shares. d. Nonbank financial firms cannot own any equity investment in a commercial bank.
Overall financial conglomerates restrictiveness	Sum of (II.I) + (II.II) + (II.III)	(Higher values indicate more restrictive.) Sum of (II.I) + (II.II) + (II.III)	
3. Competition regulatory variables			
Limitations on foreign bank entry/ ownership	Whether foreign banks may own domestic banks and whether foreign banks may enter a country's banking industry.	(Lower values indicate greater stringency.) Yes = 0; No = 1.	1.8 Are foreign entities prohibited from entering through the following? a. Acquisition b. Subsidiary c. Branch d. Joint venture
Entry into banking requirements	Whether various types of legal submissions are required to obtain a banking license.	(Higher values indicate greater stringency.) Yes = 1; No = 0. 1.6(a) + 1.6(b) + 1.6(e) + 1.6(f) + 1.6(g) + 1.6(h) + 1.6(i) + 1.6(d)	1.6 Which of the following are legally required to be submitted before issuance of the banking license? a. Draft bylaws b. Intended organizational chart d. Market / business strategy e. Financial projections for first three years f. Financial information on main potential shareholders g. Background/experience of future board directors h. Background/experience of future senior managers i. Source of funds to be used as capital
Fraction of entry applications denied	The degree to which applications to enter banking are denied.	Percent [1.7(b) + 1.10 (b) + 1.11(b) + 1.12(b)] / [1.7(a) + 1.10(a) + 1.11(a) + 1.12(a)]	1.7 In the past 5 years (2006-2010), how many applications for commercial banking licenses from domestic entities (i.e. those 50% or more domestically owned) have been: a. Received b. Denied 1.10 In the past 5 years (2006-2010), how many applications from foreign banks to enter through the acquisition of a domestic bank were: a. Received b. Denied 1.11 In the past 5 years (2006-2010) how many applications from foreign banks to enter through a new subsidiary were: a. Received b. Denied 1.12 In the past 5 years (2006-2010) how many applications from foreign banks to enter by opening a branch were: a. Received b. Denied

AGGREGATING THE DATA: THE ART AND SCIENCE OF FORMING INDEXES

table 5 continued

Variable	Definition	Quantification	World Bank Survey IV questions
Domestic denials	The degree to which domestic applications to enter banking are denied.	Percent $1.7(b) / 1.7(a)$	1.7 In the past 5 years (2006-2010), how many applications for commercial banking licenses from domestic entities (i.e. those 50% or more domestically owned) have been: a. Received b. Denied
Foreign denials	The degree to which foreign applications to enter banking are denied.	Percent $[1.10(b) + 1.11(b) + 1.12(b)] / [1.10(a) + 1.11(a) + 1.12(a)]$	1.10 In the past 5 years (2006-2010), how many applications from foreign banks to enter through the acquisition of a domestic bank were: a. Received b. Denied 1.11 In the past 5 years (2006-2010) how many applications from foreign banks to enter through a new subsidiary were: a. Received b. Denied 1.12 In the past 5 years (2006-2010) how many applications from foreign banks to enter by opening a branch were: a. Received b. Denied
4. Capital regulatory variables			
Overall capital stringency	Whether the capital requirement reflects certain risk elements and deducts certain market value losses from capital before minimum capital adequacy is determined.	(Higher values indicate greater stringency.) Yes = 1; No = 0. $3.1(a) + 3.2(a) + 3.2(b) + 3.18.3(d)*3 + 1$ (if 3.18.2 < .75)	3.1 Which regulatory capital adequacy regimes did you use as of end of 2010 and for which banks does each regime apply to (if using more than one regime)? a. Basel I 3.2 Which risks are covered by the current regulatory minimum capital requirements in your jurisdiction? a. Credit risk 3.18.2 What fraction of revaluation gains is allowed as part of capital? 3.18.3 Are the following items deducted from regulatory capital? d. Unrealized losses in fair valued exposures
Initial capital stringency	Whether certain funds may be used to initially capitalize a bank and whether they are officially verified.	(Higher values indicate greater stringency.) For question 1.4.2: Yes = 1; No = 0; For questions 1.4.3 and 1.5: Yes = 0; No = 1. $1.4.2 + 1.4.3 + 1.5$	1.4.2 Are the sources of funds to be used as capital verified by the regulatory/supervisory authorities? 1.4.3 Can the initial disbursement or subsequent injections of capital be done with assets other than cash or government securities? 1.5 Can initial capital contributions by prospective shareholders be in the form of borrowed funds?
Capital regulatory index	Sum of (IV.I) + (IV.III)	(Higher values indicate greater stringency.) Sum of (IV.I) + (IV.III)	

Variable	Definition	Quantification	World Bank Survey IV questions
5. Official supervisory action variables			
Official supervisory power	Whether the supervisory authorities have the authority to take specific actions to prevent and correct problems.	(Higher values indicate greater power.) For question 5.10: a = 0; b or c = 1. For questions 5.9, 5.12(b), 12.3.2, 10.5(b), 11.1(f), 11.1(j) and 11.1(k): Yes = 1; No = 0. For questions 11.5(a), 11.5(b) and 11.5(c): BS = Bank supervisor = 1; DIA = Deposit insurance agency = 0.5; BR/AMC = Bank restructuring or asset management agency = 0.5; C = Court = 0; and OTH = Other - please specify = 0. $5.10 + 5.9 + 5.12(b) + 12.3.2 + 10.5(b) + 11.1(f) + 11.1(j) + 11.1(k)*2 + 11.5(a) + 11.5(b)*2 + 11.5(c)*2$	5.9 Are auditors required to communicate directly to the supervisory agency any presumed involvement of bank directors or senior managers in illicit activities, fraud, or insider abuse? 5.10 Does the banking supervisor have the right to meet with the external auditors and discuss their report without the approval of the bank? a. No b. Yes, it happens on a regular basis. c. Yes, it happens on an exceptional basis. 5.12 In cases where the supervisor identifies that the bank has received an inadequate audit, does the supervisor have the powers to take actions against ... b. The external auditor 10.5 Do banks disclose to the supervisors ...? b. Off-balance-sheet items 11.1 Please indicate whether the following enforcement powers are available to the supervisory agency f. Require banks to constitute provisions to cover actual or potential losses j. Require banks to reduce or suspend dividends to shareholders k. Require banks to reduce or suspend bonuses and other remuneration to bank directors and managers 11.5 Which authority has the powers to perform the following problem bank resolution activities? Enter the initials of the corresponding authority from the following list of options: a. Declare insolvency b. Supersede shareholders' rights c. Remove and replace bank senior management and directors 12.3.2 Can the supervisory authority force a bank to change its internal organizational structure?
Prompt corrective power	Whether a law establishes predetermined levels of bank solvency deterioration that force automatic actions, such as intervention.	(Higher values indicate more promptness in responding to problems.) Yes = 1; No = 0. $11.3* [11.1(a) + 11.1(f) + 11.1(j) + 11.1(k)*2 + 12.3.2]$	11.1 Please indicate whether the following enforcement powers are available to the supervisory agency. a. Cease-and-desist-type orders for imprudent bank practices f. Require banks to constitute provisions to cover actual or potential losses j. Require banks to reduce or suspend dividends to shareholders k. Require banks to reduce or suspend bonuses and other remuneration to bank directors and managers 11.3 Does the supervisory agency operate an early intervention framework (e.g. prompt corrective action) that forces automatic action when certain regulatory triggers/ thresholds are breached? 12.3.2 Can the supervisory authority force a bank to change its internal organizational structure?

AGGREGATING THE DATA: THE ART AND SCIENCE OF FORMING INDEXES

table 5 continued

Variable	Definition	Quantification	World Bank Survey IV questions
Restructuring power	Whether the supervisory authorities have the power to restructure and reorganize a troubled bank.	(Higher values indicate greater restructuring power.) BS = Bank supervisor = 1; DIA = Deposit insurance agency = 0.5; BR/AMC = Bank restructuring or asset management agency = 0.5; C = Court = 0; and OTH = Other - please specify = 0. $11.5(b) + 11.5(c)*2$	11.5 Which authority has the powers to perform the following problem bank resolution activities? Enter the initials of the corresponding authority from the following list of options: BS = Bank supervisor, C = Court, DIA = Deposit insurance agency, BR/AMC = Bank restructuring or asset management agency, OTH = Other - please specify). b. Supersede shareholders' rights Other - please specify c. Remove and replace bank senior management and directors Other - please specify
Declaring insolvency power	Whether the supervisory authorities have the power to declare a deeply troubled bank insolvent.	(Higher values indicate greater power.) For question 11.5: BS = Bank supervisor = 1; DIA = Deposit insurance agency = 0.5; BR/AMC = Bank restructuring or asset management agency = 0.5; C = Court = 0; and OTH = Other - please specify = 0. For question 11.6: Yes = 1; No = 0. $11.5(a) + 11.5(b)$	11.5 Which authority has the powers to perform the following problem bank resolution activities? Enter the initials of the corresponding authority from the following list of options: BS = Bank supervisor, C = Court, DIA = Deposit insurance agency, BR/AMC = Bank restructuring or asset management agency, OTH = Other - please specify)." a. Declare insolvency Other - please specify b. Supersede shareholders' rights Other - please specify
Supervisory forbearance discretion	Whether the supervisory authorities may engage in forbearance when confronted with violations of laws and regulations or other imprudent behavior.	(Higher values indicate less supervisory discretion.) For question 11.1(b): Yes = 1; No = 0. For questions 11.3, 12.12 and 12.12.1: Yes = 0; No = 1. $11.1(b)+11.3+12.12+12.12.1$	11.1 Please indicate whether the following enforcement powers are available to the supervisory agency- b. Forbearance (i.e. to waive regulatory and supervisory requirements) 11.3 Does the supervisory agency operate an early intervention framework (e.g. prompt corrective action) that forces automatic action when certain regulatory triggers/ thresholds are breached? 12.12 If an infraction of any prudential regulation is found in the course of supervision, must it be reported? 12.12.1 Are there mandatory actions that the supervisor must take in these cases?
Court involvement	The degree to which the court dominates the supervisory authority.	(Higher values indicate less supervisory discretion.) Yes = 1; No = 0. $(1 \text{ if } 11.6(a) = 11.6(b) = 11.6(c) = 11.6(d) = 1, 0 \text{ otherwise}) + 11.6(e) + 11.7$	11.6 Is court approval required for the following bank resolution activities? a. Declare insolvency d. Undertake bank resolution mechanisms b. Supersede shareholders' rights c. Remove and replace bank senior management and directors e. Appoint and oversee a bank liquidator/receiver 11.7 Can the bank shareholders appeal to the court against a resolution decision of the banking supervisor?

Variable	Definition	Quantification	World Bank Survey IV questions
Loan classification stringency	The classification of loans in arrears as substandard, doubtful and loss.	(Higher values indicate greater stringency.) If there is a loan classification system, the actual minimum number of days beyond which a loan in arrears must be classified as substandard, then doubtful, and finally loss are summed. 9.1.3(a) + 9.13(b) + 9.13(c) (days)	9.1.3 After how many days is a loan in arrears classified as ...? a. Substandard? b. Doubtful? c. Loss?
Provisioning stringency	The minimum required provisions as loans become substandard, doubtful and loss.	(Higher values indicate greater stringency.) The sum of the minimum required provisioning percentages when a loan is successively classified as substandard, doubtful, and loss. If a range is provided, the minimum percentage is used. 9.6.3(a) + 9.6.3(b) + 9.6.3(c) (percent)	9.6.3 What is the minimum provisioning required as loans become ...? a. Substandard? b. Doubtful? c. Loss?
Diversification index	Whether there are explicit, verifiable, quantifiable guidelines for asset diversification and banks are allowed to make loans abroad.	(Higher values indicate more diversification.) For question 7.2: Yes = 1; No = 0. For question 7.2.2: Yes = 0; No = 1. 7.2 + 7.2.2	7.2 Are there any regulatory rules or supervisory guidelines regarding asset diversification? 7.2.2 Are banks prohibited from making loans abroad?
6. Official supervisory structural variables			
Supervisor tenure	The average tenure of a professional bank supervisor.	Years	12.39 What is the average tenure of banking supervisors (i.e. what is the average number of years that staff have been supervisors)?
Independence of supervisory authority-political	The degree to which the supervisory authority is independent within the government from political influence.	(Higher values indicate greater independence.) Yes = 1; No = 0.	12.4 To whom is the supervisory agency legally responsible or accountable? c. A legislative body, such as Parliament or Congress
Independence of supervisory authority-bank	The degree to which the supervisory authority is protected by the legal system from the banking industry.	(Higher values indicate greater independence.) Yes = 0; No = 1.	12.9 Can individual supervisory staff be held personally liable for damages to a bank caused by their actions or omissions committed in the good faith exercise of their duties?
Independence of supervisory authority-fixed term	The degree to which the supervisory authority is able to make decisions independently of political considerations.	(Higher values indicate greater independence.) A fixed term of 4 years or greater = 1; less than 4 years or no fixed term = 0.	12.6 Does the head of the supervisory agency have a fixed term? 12.6.1 If yes, how long (in years) is the term?
Independence of supervisory authority-overall	Sum of (VI.II) + (VI.III) + (VI.IV)	(Higher values indicate greater independence.) Sum of (VI.II) + (VI.III) + (VI.IV)	

AGGREGATING THE DATA: THE ART AND SCIENCE OF FORMING INDEXES

table 5 continued

Variable	Definition	Quantification	World Bank Survey IV questions
Multiple supervisors	This variable indicates whether there is a single official regulator of banks, or whether multiple supervisors share responsibility for supervising the nation's banks.	Yes = 1; No = 0.	12.1 What body/agency supervises commercial banks for prudential purposes? c. Multiple bank supervisory agencies / superintendencies
Single vs. multiple financial supervisory authority	This variable indicates whether or not there is a single financial supervisory authority.	Yes = 1; No = 0.	12.1 What body/agency supervises commercial banks for prudential purposes? b. A single bank supervisory agency / superintendency including the central bank
7. Private monitoring variables			
Certified audit required	Whether there is a compulsory external audit by a licensed or certified auditor.	Yes = 1; No = 0. 5.1 * 5.1.1(a)	5.1 Is an audit by a professional external auditor required for all commercial banks in your jurisdiction? 5.1.1 If yes, does the external auditor have to ...: a. Obtain a professional certification or pass a specific exam to qualify as such
Percent of 10 biggest banks rated by International rating agencies	The percentage of the top 10 banks that are rated by international rating agencies.	$10.8/10*100$ if $13.1 > 9$, $10.8/13.1$ if $13.1 < 10$ Percent	10.8 How many of the top 10 banks (in terms of total domestic assets) are rated by international credit rating agencies (e.g. Moody's, Standard and Poor)? 13.1 How many commercial banks were there at the end of...? 2010
Percent of 10 biggest banks rated by domestic rating agencies	The percentage of the top 10 banks that are rated by domestic rating agencies.	Percent	10.9 How many of the top 10 banks (in terms of total domestic assets) are rated by domestic credit rating agencies? 13.1 How many commercial banks were there at the end of...? 2010
No explicit deposit insurance scheme	Whether there is an explicit deposit insurance scheme and whether depositors were fully compensated the last time a bank failed.	(Higher values indicate more private supervision.) Yes = 1; No = 0. 1 if 8.1 = 0 or 8.17.2 = 0; 0 if 8.1 = 1 and 8.17.2 = 1.	8.1 Is there an explicit deposit insurance protection system for commercial banks? 8.17.2 Were insured depositors wholly compensated (to the extent of legal protection) the last time a bank failed?
Bank accounting	Whether the income statement includes accrued or unpaid interest or principal on nonperforming loans and whether banks are required to produce consolidated financial statements.	(Higher values indicate more informative bank accounts.) For questions 10.2.4, 10.1 and 10.5.2: Yes = 1; No = 0. For question 10.2.5: Yes = 0; No = 1. $10.2.4 + 10.2.5 + 10.1 + 10.5.2$	10.1 Are banks required to prepare consolidated accounts for accounting purposes? 10.2.4 Does accrued, though unpaid, interest/principal enter the income statement while the loan is still performing? 10.2.5 Does accrued, though unpaid, interest/principal enter the income statement while the loan is nonperforming? 10.5.2 Are bank directors legally liable if information disclosed is erroneous or misleading?

Variable	Definition	Quantification	World Bank Survey IV questions
Private monitoring index	Measures whether there are incentives/ability for the private monitoring of firms, with higher values indicating more private monitoring.	(Higher values indicate more private oversight.) Yes = 1; No = 0. VII.I + (1 if VII.II=100%; 0 otherwise) + (1 if VII.III=100%; 0 otherwise) + VII.IV + VII.V + [1 if 3.18(c) = 3.18.1(d) = 1; 0 otherwise] + 10.5.1(b) + 10.5(c) + 11.1.1	3.18 Which of the following items are allowed as part of Tier 1 capital and in what percentages? Enter Yes or No and include corresponding percentages for each option below c. Subordinated debt 3.18.1 Which of the following items are allowed as part of Tier 2 capital and in what percentages? Enter Yes or No and include corresponding percentages for each option below d. Subordinated debt 10.5.1 Do banks disclose to the public ...? b. Off-balance sheet items 11.1.1 Are bank regulators/supervisors required to make public formal enforcement actions, which include cease and desist orders and written agreements between a bank regulatory/supervisory body and a banking organization?
8. Deposit insurance scheme variables			
Deposit insurer power	Whether the deposit insurance authority has the authority to make the decision to intervene in a bank, take legal action against bank directors or officials, and has ever taken any legal action against bank directors or officers.	(Higher values indicate more power.) Yes = 1; No = 0. 8.4(c) + 8.4.1 + 8.4.2 + 8.4.3	8.4 Does the deposit insurance agency/fund administrator have the following powers as part of its mandate? c. Bank intervention authority 8.4.1 Does the deposit insurance authority by itself have the legal power to cancel or revoke deposit insurance for any participating bank? 8.4.2 Can the deposit insurance agency/fund take legal action for violations of laws, regulations, and bylaws (of the deposit insurance agency) against bank directors or other bank officials? 8.4.3 Has the deposit insurance agency/fund ever taken legal action for violations against laws, regulations, and bylaws (of the deposit insurance agency) against bank directors or other bank officials?
Deposit insurance funds-to-total bank asset	The size of the deposit insurance fund relative to total bank assets.	Ratio	8.13.1 If prefunded, what is the ratio of accumulated funds to total bank assets as of end of 2010?
Funding with insured deposits	The degree to which moral hazard exists.	(Higher values indicate more moral hazard.) 8.11*13.4 / 13.2 Percent	8.11 What percentage of the total deposits of participating commercial banks was actually covered by the scheme as of end of...? 2010 13.2 What were the total assets of all commercial banks at the end of ...? (In thousands of local currency) 2010 13.4 What were the total deposits of all commercial banks at the end of ...? (In thousands of local currency) 2010
Various factors mitigating moral hazard	The degree to which moral hazard exists.	(Higher values indicate greater mitigation of moral hazard.) For questions 8.13(b), 8.14 and 8.10: Yes = 1; No = 0; For questions 8.13(a) and 8.13(c): Yes = 1; No = 0. 8.13 + 8.14 + 8.10	8.10 Is there formal coinsurance, i.e. are ALL depositors explicitly insured for less than 100% of their deposits? 8.13 Funding is provided by ...: a. Government b. Banks c. Combination/Other (please explain) 8.14 Do deposit insurance fees/premiums charged to banks vary based on some assessment of risk?
9. Market structure indicators			
Bank concentration (deposit)	The degree of concentration of deposits in the five largest banks.	Percent	13.6.1 Of commercial banks in your country, what percent of total deposits was held by the five largest banks at the end of...? 2010

AGGREGATING THE DATA: THE ART AND SCIENCE OF FORMING INDEXES

table 5 continued

Variable	Definition	Quantification	World Bank Survey IV questions
Bank concentration (asset)	The degree of concentration of assets in the five largest banks.	Percent	13.6 Of commercial banks in your country, what percent of total assets was held by the five largest banks at the end of...? 2010
Foreign-owned banks	The extent to which the banking system's assets are foreign owned.	Percent	13.7.2 What percent of the banking system's assets was in banks that were foreign-controlled (e.g. where foreigners owned 50% or more equity) at the end of ...? 2010
Government-owned banks	The extent to which the banking system's assets are government-owned.	Percent	13.7.1 What percent of the banking system's assets was in banks that were government-controlled (e.g. where government owned 50% or more equity) at the end of...? 2010
10. External governance variables			
Strength of external audit	The effectiveness of external audits of banks.	(Higher values indicate better strength of external audit.) For questions 5.1, 5.1.2, 5.1.1(a), 5.7(a), 5.9 and 5.12(b): Yes = 1; No = 0. For question 5.10: a = 0; b or c = 1. 5.1 + 5.1.2 + 5.1.1(a) + 5.7(a) + 5.10 + 5.9 + 5.12(b)	5.1 Is an audit by a professional external auditor required for all commercial banks in your jurisdiction? 5.1.1 If yes, does the external auditor have to ...: a. Obtain a professional certification or pass a specific exam to qualify as such 5.1.2 Are specific requirements for the extent or nature of the audit spelled out? 5.7 Do supervisors receive a copy of the following ... a. The auditor's report on the financial statements 5.9 Are auditors required to communicate directly to the supervisory agency any presumed involvement of bank directors or senior managers in illicit activities, fraud, or insider abuse? 5.10 Does the banking supervisor have the right to meet with the external auditors and discuss their report without the approval of the bank? a. No b. Yes, it happens on a regular basis. c. Yes, it happens on an exceptional basis. 5.12 In cases where the supervisor identifies that the bank has received an inadequate audit, does the supervisor have the powers to take actions against ... b. The external auditor
Financial statement transparency	The transparency of bank financial statements practices.	(Higher values indicate better transparency.) For questions 10.2.4, 10.1, 10.5.1(b), 10.5.1(c) and 10.5.2: Yes = 1; No = 0. For question 10.2.5: Yes = 0; No = 1. 10.2.4 + 10.1 + 10.5.1(b) + 10.5.1(c) + 10.5.2 + 10.2.5	10.1 Are banks required to prepare consolidated accounts for accounting purposes? 10.2.4 Does accrued, though unpaid, interest/principal enter the income statement while the loan is still performing? 10.2.5 Does accrued, though unpaid, interest/principal enter the income statement while the loan is nonperforming? 10.5.1 Do banks disclose to the public ...? b. Off-balance-sheet items c. Governance and risk management framework 10.5.2 Are bank directors legally liable if information disclosed is erroneous or misleading?
Accounting practices	The type of accounting practices used.	(Higher values indicate better practices.) Both (a) and (b) are yes = 1; Otherwise = 0. 10.2.2 or 10.2.1	10.2.1 Are applicable accounting standards for banks in your country prepared in accordance with U.S. Generally Accepted Accounting Principles (GAAP)? a. At individual bank level b. At consolidated level 10.2.2 Are applicable accounting standards for banks in your country prepared in accordance with IFRS? a. At individual bank level b. At consolidated level

Variable	Definition	Quantification	World Bank Survey IV questions
External ratings and creditor monitoring	The evaluations by external rating agencies and incentives for creditors of the bank to monitor bank performance.	(Higher values indicate better credit monitoring.) Yes = 1; No = 0. (1 if 3.18(c) = 3.18.1(d) = 1, 0 otherwise)*2 + 10.7 + (1 if 10.8 = 100%; 0 otherwise) + (1 if 10.9 = 100%; 0 otherwise)	3.18 Which of the following items are allowed as part of Tier 1 capital and in what percentages? Enter Yes or No and include corresponding percentages for each option below c. Subordinated debt 3.18.1 Which of the following items are allowed as part of Tier 2 capital and in what percentages? Enter Yes or No and include corresponding percentages for each option below d. Subordinated debt 10.7 Are commercial banks required by supervisors to have external credit ratings? 10.8 How many of the top 10 banks (in terms of total domestic assets) are rated by international credit rating agencies (e.g. Moody's, Standard and Poor)? 10.9 How many of the top 10 banks (in terms of total domestic assets) are rated by domestic credit rating agencies?
External governance index	Sum of (X.I) + (X.II) + (X.III) + (X.IV)	(Higher values indicate better corporate governance.) Sum of (X.I) + (X.II) + (X.III) + (X.IV)	

Banks differ markedly across countries — and their allowable activities can change over time within the same country. For example, figure 7 shows that Kosovo, Moldova, Slovakia, United Arab Emirates and Uruguay prohibit insurance and real estate activities but allow unrestricted securities activities. Three other countries – Hong Kong, Jersey and Switzerland — grant banks unrestricted access to all three activities. All of these countries, moreover, have a single bank supervisory authority.

We also constructed two indexes of the degree to which national regulations (1) restrict banks from owning non-financial firms and (2) restrict non-financial firms from owning banks. These particular regulations are quite important and always controversial. Figure 7 shows that the degree of restrictiveness varies widely across countries. Based on Survey IV, bank ownership of non-financial firms is more restricted than non-financial firms' ownership of banks. About 30 percent of the countries prohibit banks from owning non-financial firms, but only one of 124 countries prohibits ownership of banks by non-financial firms. Fifteen percent of the countries, including the U.S., impose some restrictions on the mixing of banking and commerce.

Comparing Survey IV to Survey I, figure 7 shows that there was a substantial increase in the number of countries – to 38 from 8 -- that prohibit banks from owning non-financial firms. The opposite is the case for prohibiting banks from engaging in insurance activities, with a decrease to 19 countries from 40. There was not much change with respect to regulatory restrictions for the other business activities. Overall, most countries allow some comingling between banks and non-financial firms.

We also construct an index of the overall restrictions on bank activities, which includes both the extent to which banks can both engage in financial activities such as securities as well as the extent to which banks can own non-financial firms. We include restrictions on banks owning non-financial firms in this overall index, because such restrictions affect their ability to diversify revenue streams and are therefore similar to the regulatory restrictions on other activities. Based on four of the indexes defined above, this index of overall restrictions on bank activities ranges from 4 to 16, with higher numbers indicating greater restrictiveness.

Figure 8 provides information on the change in the index of overall restrictions over time. Positive numbers indicate an increase in restrictions. As with many features of bank regulation and supervision, there is great cross-country heterogeneity. Of the countries in the figure, 43 increased restrictions and 36 reduced them. In 18 countries there was no change. The country that most increased its restrictions was Seychelles, while the country that most relaxed its restrictions was Romania. Among countries that supplied enough data to compare overall restrictions between Survey I and Survey IV, the average index value declines from 7.4 down to 7.2.

FIGURE
8

Change in the index of overall restrictions on bank activities: Surveys I to IV

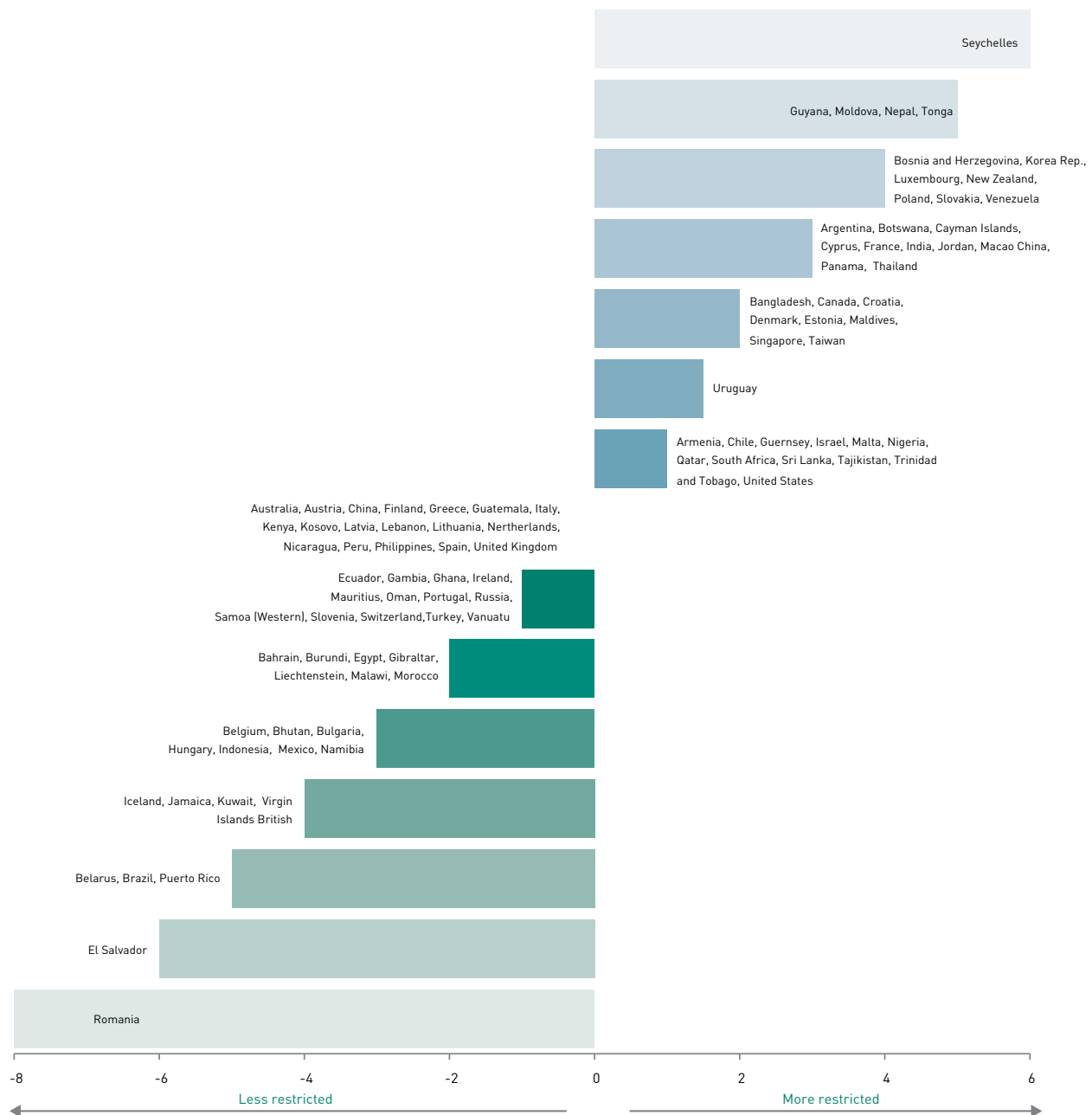


TABLE
6

Did countries tighten or ease overall restrictions on bank activities following the global financial crisis?

Tighten				Ease
Argentina	Egypt	Lebanon	Philippines	Bahrain
Armenia	Estonia	Liechtenstein	Poland	Brazil
Bangladesh	France	Luxembourg	Russia	El Salvador
Belgium	Gambia	Macao, China	Seychelles	Hungary
Bhutan	Ghana	Malawi	Singapore	Iceland
Bosnia and Herzegovina	Greece	Maldives	Slovakia	Indonesia
Botswana	Guatemala	Malta	South Africa	Jamaica
Burundi	Guyana	Mauritius	Spain	Kenya
Canada	India	Mexico	Taiwan	Kuwait
Cayman Islands	Ireland	Moldova	Thailand	Peru
Chile	Israel	Morocco	Trinidad and Tobago	Portugal
China	Italy	Netherlands	United Kingdom	Romania
Croatia	Jordan	New Zealand	United States	Sri Lanka
Cyprus	Korea, Rep.	Nicaragua	Uruguay	Switzerland
Denmark	Kosovo	Oman	Venezuela	Tajikistan
Ecuador	Latvia	Panama		Virgin Islands, British

We also examine whether countries tightened or eased the overall restrictions on bank activities following the global financial crisis. Here, we compared the index values for Survey III and IV. Table 6 shows that 80 percent of the countries tightened such restrictions following the crisis.

B. CAPITAL REGULATIONS

Capital regulations represent a mainstay of banking sector policies around the world. Many rules and policies determine the precise amount and nature of capital that banks must hold. The amount of required capital is typically characterized in terms of the ratio of capital to total bank assets. In terms of the nature of capital, there are policies concerning the definition of capital beyond cash or government securities, the definition and valuation of bank assets, and whether the regulatory and supervisory authorities verify the sources of capital.

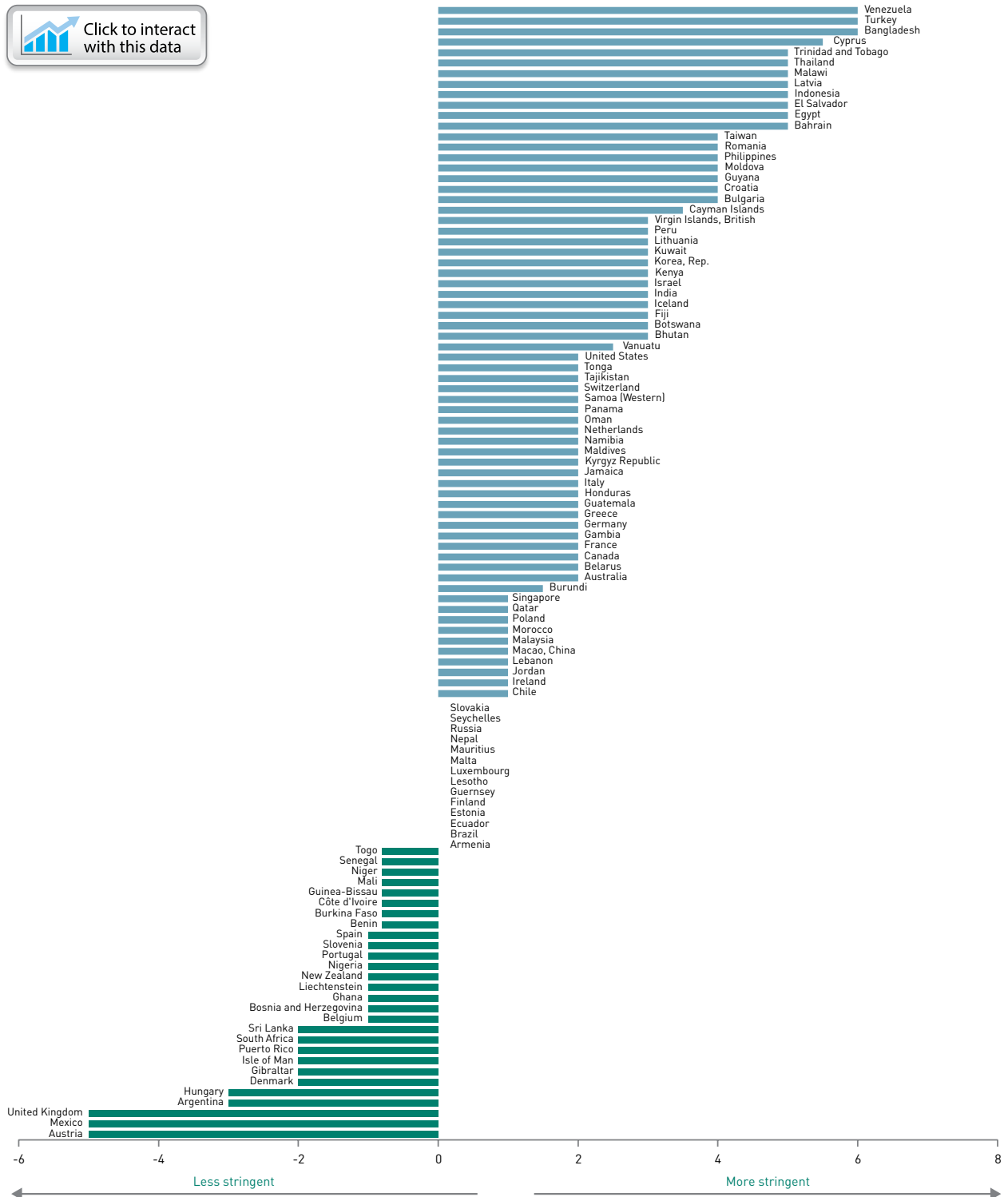
We construct indexes of the stringency of bank capital requirements by measuring both the amount and nature of capital banks must hold as well as regulations that govern the source of regulatory capital. The index is composed of the answers from specific survey questions: (1) Is the capital-asset ratio risk weighted in line with the Basel I guidelines? (2) Does the minimum capital-asset ratio vary as a function of an individual bank's credit risk? (3) Does the minimum capital-asset ratio vary as a function of market risk? (4) Before minimum capital adequacy is determined, which of the following are deducted from the book value of capital: Market value of loan losses not realized in accounting books? Unrealized losses in the securities portfolios? Unrealized foreign exchange losses? (5) What fraction of revaluation gains is allowed as part of capital? (6) Are the sources of funds to be used as capital verified by the regulatory/supervisory authorities? (7) Can the initial disbursement or subsequent injections of capital be done with assets other than cash or government securities? (8) Can initial disbursement of capital be done with borrowed funds?

Higher values of this index indicate more stringent capital regulation, with the scale ranging from zero to 10. Figure 9 indicates the change in the index of bank capital regulations between Surveys I and IV, where positive numbers indicate an increase in restrictions. Of the 107 countries that supplied enough data, 65 tightened capital requirements while 29 reduced them and 14 made no change.

FIGURE

9

Change in the index of bank capital regulations: Surveys I to IV



Since Survey IV covers the period after the emergence of the global financial crisis and the introduction of Basel III, we measure the post-crisis change in capital requirements by comparing the indexes for Survey III to Survey IV. Table 7 shows that 79 percent of the countries, including the United States, increased the stringency of their capital regulations after the crisis. At least at the time of the latest survey, however, Austria, Mexico and the United Kingdom actually relaxed their capital regulations.

TABLE
7

Did countries tighten or ease bank capital regulations following the global financial crisis?

Tighten				Ease
Argentina	Estonia	Kuwait	Poland	Austria
Australia	Fiji	Kyrgyz Republic	Romania	Bosnia and Herzegovina
Bahrain	Finland	Liechtenstein	Seychelles	Burundi
Bangladesh	Germany	Lithuania	Singapore	Gibraltar
Belarus	Greece	Macao, China	Slovakia	Guernsey
Belgium	Guyana	Malawi	Slovenia	Hungary
Botswana	Honduras	Mali	Tajikistan	Iceland
Brazil	India	Malta	Thailand	Isle of Man
Bulgaria	Indonesia	Moldova	Tonga	Malaysia
Canada	Ireland	Morocco	Trinidad and Tobago	Mexico
Cayman Islands	Israel	Namibia	United States	Portugal
Croatia	Italy	Netherlands	Vanuatu	Russia
Cyprus	Jamaica	Oman	Venezuela	South Africa
Denmark	Jordan	Panama	Virgin Islands, British	Spain
Egypt	Kenya	Peru		Sri Lanka
El Salvador	Korea, Rep.	Philippines		Switzerland
				United Kingdom

C. OFFICIAL SUPERVISORY POWER

An important aspect of supervision is whether the supervisory authorities possess the power to obtain enough information from banks to assess their financial soundness and to change their behavior if necessary. In some cases, the authorities may be required to take corrective action to address a problem, and in other cases the authorities may have the discretionary power to act as they see fit. Courts, moreover, may have the power in some jurisdictions to limit or even reverse actions taken by the supervisory authorities.

We construct an index of official supervisory power to measure the degree to which a country's bank supervisory agency has the authority to take specific actions. It is based on the answers from specific survey questions: (1) Does the supervisory agency have the right to meet with external auditors about banks? (2) Are auditors required to communicate directly to the supervisory agency about illicit activities, fraud, or insider abuse? (3) Can supervisors take legal action against external auditors for negligence? (4) Can the supervisory authority force a bank to change its internal organizational structure? (5) Are off-balance-sheet items disclosed to supervisors? (6) Can the supervisory agency order the bank's directors or management to set aside reserves for potential losses? (7) Can the supervisory agency suspend the directors' decision

to distribute dividends, bonuses, and management fees? (8) Can the supervisory agency supersede the rights of bank shareholders and declare a bank insolvent? (9) Can the supervisory agency suspend some or all ownership rights? (10) Can the supervisory agency supersede shareholder rights, remove and replace management, and remove and replace directors? The official supervisory index ranges from zero to 14, with higher numbers indicating greater power.

Figure 10 indicates the change in the index of supervisory power from Surveys I to IV, where positive numbers indicate an increase in such powers. On balance, slightly more countries weakened the powers of supervisory agencies. A number of countries, including the United States, indicated no change. One might think that whether a country weakens or strengthens official supervisory powers would help predict whether banks operate safely and soundly. However, our earlier work (Barth, Caprio, and Levine, 2006) found that an increase in supervisory power was not helpful in promoting bank development, performance, or stability. Indeed, we found that in countries with weak democratic institutions, official supervisory power was associated with increased corruption in the lending process and no beneficial effect on stability.

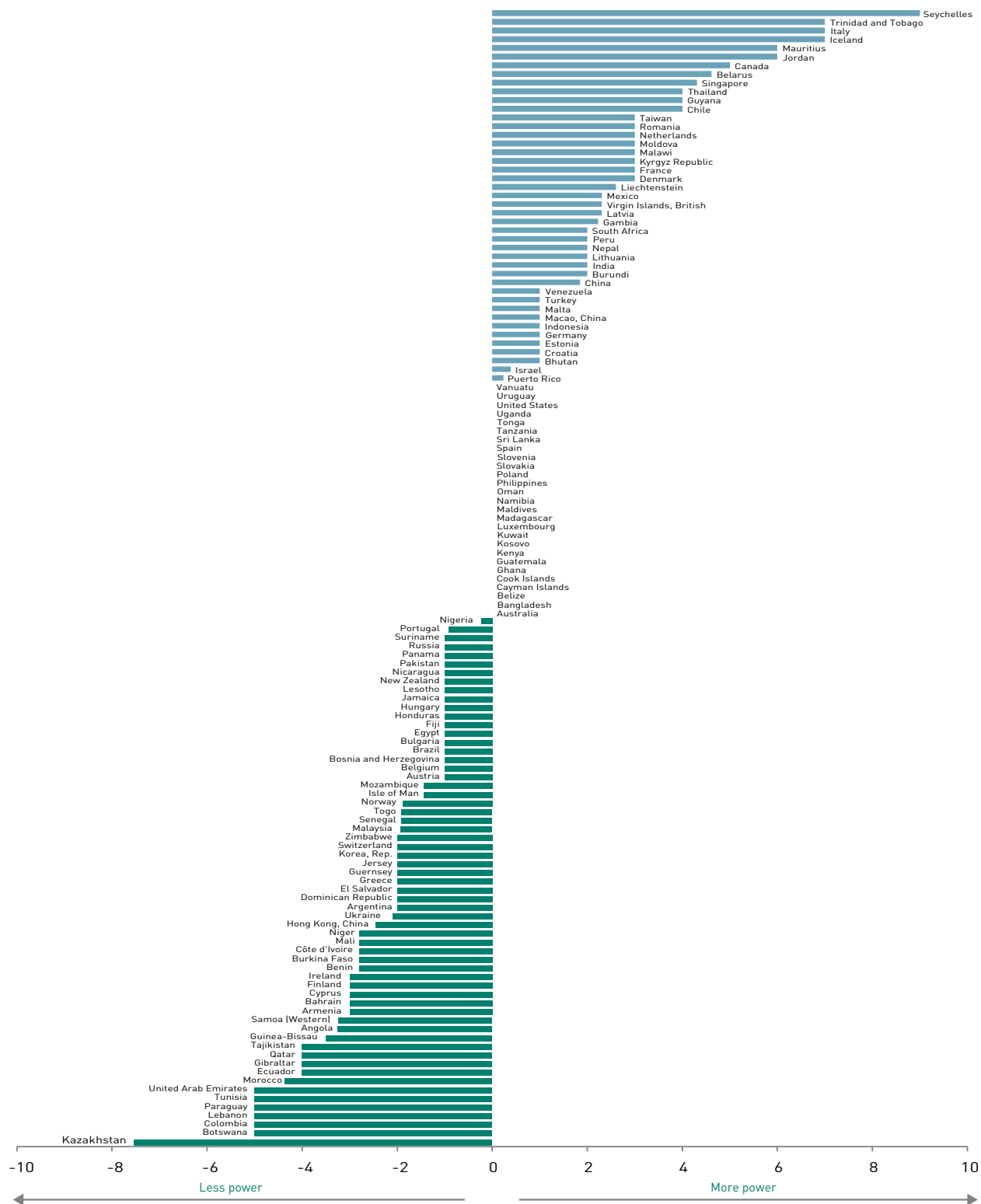
To determine whether countries tightened or relaxed supervisory powers after the global financial crisis, we compare the index values for Survey III and IV. Somewhat surprisingly, table 8 shows that 45 percent of the countries decreased such powers.

The surveys also provide information on whether supervisory authorities must report as well as take mandatory actions when they identify infractions of prudential regulations. Table 9 provides information in this regard. It is interesting that 127 countries indicate that infractions must be reported when found, while in only 11 countries is this not the case. Fully 105 countries require action to be taken when infractions are found, but 33 do not. Israel is a country that neither requires regulatory authorities to report infractions nor take action when they are found. The United Kingdom and the United States both require the reporting of infractions, but only the United States requires the regulators to take action. The table also provides information on whether supervisors are legally liable for their actions. Only 23 countries report that this is the case, whereas in 118 countries supervisors are not held liable.

FIGURE

10

Change in the index of official supervisory powers: Surveys I to IV



TABLE

8

Did countries increase or decrease official supervisory powers following the global financial crisis?

Increase		Decrease		
Belarus	Moldova	Angola	Ecuador	Malaysia
Bhutan	Netherlands	Argentina	Egypt	Maldives
Botswana	New Zealand	Armenia	El Salvador	Malta
Burkina Faso	Nicaragua	Australia	Estonia	Mauritius
Burundi	Niger	Austria	Fiji	Mexico
Finland	Norway	Bahrain	Gambia	Morocco
France	Oman	Bangladesh	Germany	Nigeria
Greece	Peru	Belgium	Ghana	Pakistan
Guatemala	Poland	Belize	Gibraltar	Philippines
Guernsey	Puerto Rico	Benin	Hungary	Portugal
Guinea-Bissau	Russia	Bosnia and Herzegovina	Indonesia	Romania
Guyana	Seychelles	Brazil	Israel	Senegal
Iceland	Slovakia	Bulgaria	Jordan	Singapore
India	Sri Lanka	Canada	Kazakhstan	Slovenia
Isle of Man	Suriname	Cayman Islands	Kenya	South Africa
Italy	Tajikistan	Chile	Korea, Rep.	Spain
Jamaica	Thailand	China	Kosovo	Switzerland
Jersey	Togo	Colombia	Latvia	Taiwan
Kuwait	Trinidad and Tobago	Cook Islands	Lesotho	Tonga
Kyrgyz Republic	Uruguay	Côte d'Ivoire	Liechtenstein	Turkey
Lebanon	Vanuatu	Croatia	Lithuania	Uganda
Luxembourg	Virgin Islands, British	Cyprus	Macao, China	United States
Malawi	Zimbabwe	Denmark	Madagascar	
Mali				

TABLE

9

Prudential bank regulations and their enforcement

	If an infraction of any prudential regulation is found in the course of supervision, must it be reported?	Are there mandatory actions that the supervisor must take in these cases?	Are supervisors legally liable for their actions?
Angola	Yes	Yes	No
Argentina	Yes	Yes	Yes
Armenia	Yes	Yes	No
Australia	Yes	Yes	No
Austria	Yes	Yes	No
Bahrain	Yes	Yes	No
Bangladesh	Yes	Yes	No
Belarus	Yes	Yes	No
Belgium	Yes	No	No
Belize	Yes	Yes	No
Benin	N/A	N/A	No
Bhutan	Yes	Yes	Yes
Bosnia and Herzegovina	Yes	Yes	No
Botswana	Yes	Yes	No
Brazil	Yes	Yes	No
Bulgaria	Yes	No	No
Burkina Faso	Yes	Yes	No
Burundi	Yes	Yes	No
Canada	Yes	No	No
Cayman Islands	Yes	No	No
Chile	Yes	Yes	Yes
Colombia	Yes	Yes	Yes
Cook Islands	Yes	Yes	No
Costa Rica	Yes	Yes	Yes
Côte d'Ivoire	Yes	Yes	No
Croatia	Yes	Yes	No
Cyprus	Yes	No	No
Denmark	Yes	No	No
Dominican Republic	Yes	Yes	No
Ecuador	Yes	No	Yes
Egypt	Yes	Yes	No
El Salvador	Yes	Yes	Yes
Estonia	Yes	No	No
Ethiopia	Yes	Yes	No
Fiji	Yes	Yes	No
Finland	No	Yes	No
France	Yes	No	No
Gambia	Yes	Yes	No
Germany	Yes	Yes	No
Ghana	Yes	Yes	No
Gibraltar	Yes	Yes	No
Greece	No	No	No
Guatemala	Yes	Yes	No
Guernsey	Yes	No	No
Guinea-Bissau	Yes	Yes	No
Guyana	Yes	Yes	No
Honduras	Yes	Yes	Yes

AGGREGATING THE DATA: THE ART AND SCIENCE OF FORMING INDEXES

table 9 continued

	If an infraction of any prudential regulation is found in the course of supervision, must it be reported?	Are there mandatory actions that the supervisor must take in these cases?	Are supervisors legally liable for their actions?
Hong Kong, China	Yes	No	No
Hungary	Yes	Yes	No
Iceland	Yes	Yes	No
India	Yes	No	No
Indonesia	Yes	Yes	No
Iraq	Yes	Yes	No
Ireland	Yes	Yes	No
Isle of Man	Yes	Yes	No
Israel	No	No	No
Italy	Yes	No	Yes
Jamaica	Yes	Yes	No
Jersey	No	No	No
Jordan	N/A	Yes	No
Kazakhstan	Yes	Yes	No
Kenya	Yes	Yes	No
Korea, Rep.	Yes	N/A	Yes
Kosovo	yes	Yes	No
Kuwait	Yes	Yes	No
Kyrgyz Republic	Yes	Yes	No
Latvia	No	Yes	Yes
Lebanon	Yes	N/A	Yes
Lesotho	N/A	N/A	No
Liechtenstein	No	Yes	No
Lithuania	No	No	Yes
Luxembourg	Yes	Yes	No
Macao, China	Yes	No	No
Madagascar	Yes	Yes	No
Malawi	Yes	Yes	No
Malaysia	Yes	No	No
Maldives	Yes	No	No
Mali	Yes	Yes	No
Malta	Yes	No	No
Mauritius	Yes	Yes	No
Mexico	Yes	Yes	Yes
Moldova	Yes	Yes	No
Montenegro	Yes	Yes	Yes
Morocco	No	Yes	No
Mozambique	Yes	Yes	Yes
Myanmar	Yes	Yes	Yes
Namibia	Yes	Yes	No
Nepal	N/A	Yes	No
Netherlands	No	No	No
New Zealand	Yes	No	No
Nicaragua	Yes	Yes	Yes
Niger	Yes	Yes	No
Nigeria	Yes	Yes	No
Norway	Yes	Yes	N/A
Oman	Yes	Yes	No
Pakistan	Yes	Yes	No
Palestinian Territory	Yes	Yes	No
Panama	Yes	Yes	Yes

table 9 continued

	If an infraction of any prudential regulation is found in the course of supervision, must it be reported?	Are there mandatory actions that the supervisor must take in these cases?	Are supervisors legally liable for their actions?
Paraguay	Yes	Yes	Yes
Peru	Yes	Yes	No
Philippines	Yes	Yes	No
Poland	Yes	No	No
Portugal	Yes	Yes	No
Puerto Rico	Yes	Yes	Yes
Qatar	Yes	Yes	No
Romania	Yes	Yes	No
Russia	No	Yes	No
Samoa (Western)	Yes	Yes	No
Senegal	Yes	Yes	No
Serbia	Yes	Yes	No
Seychelles	Yes	Yes	No
Sierra Leone	Yes	Yes	Yes
Singapore	Yes	No	No
Slovakia	Yes	Yes	No
Slovenia	Yes	Yes	Yes
South Africa	Yes	Yes	No
Spain	Yes	Yes	No
Sri Lanka	Yes	No	No
Suriname	Yes	No	No
Swaziland	Yes	Yes	No
Switzerland	Yes	Yes	No
Syria	Yes	Yes	No
Taiwan	Yes	Yes	No
Tajikistan	No	No	No
Tanzania	Yes	No	No
Thailand	Yes	Yes	No
Togo	Yes	Yes	No
Tonga	Yes	Yes	No
Trinidad and Tobago	Yes	Yes	No
Tunisia	Yes	Yes	No
Turkey	Yes	Yes	No
Uganda	Yes	Yes	No
Ukraine	Yes	No	No
United Arab Emirates	Yes	No	No
United Kingdom	Yes	No	No
United States	Yes	Yes	No
Uruguay	Yes	Yes	No
Vanuatu	Yes	Yes	No
Venezuela	Yes	Yes	No
Virgin Islands, British	Yes	No	No
Yemen	Yes	Yes	No
Zimbabwe	Yes	Yes	No
TOTAL			
Yes	127	105	23
No	11	33	118
N/A	4	4	1

PRIVATE MONITORING AND EXTERNAL GOVERNANCE

D. 1 PRIVATE MONITORING

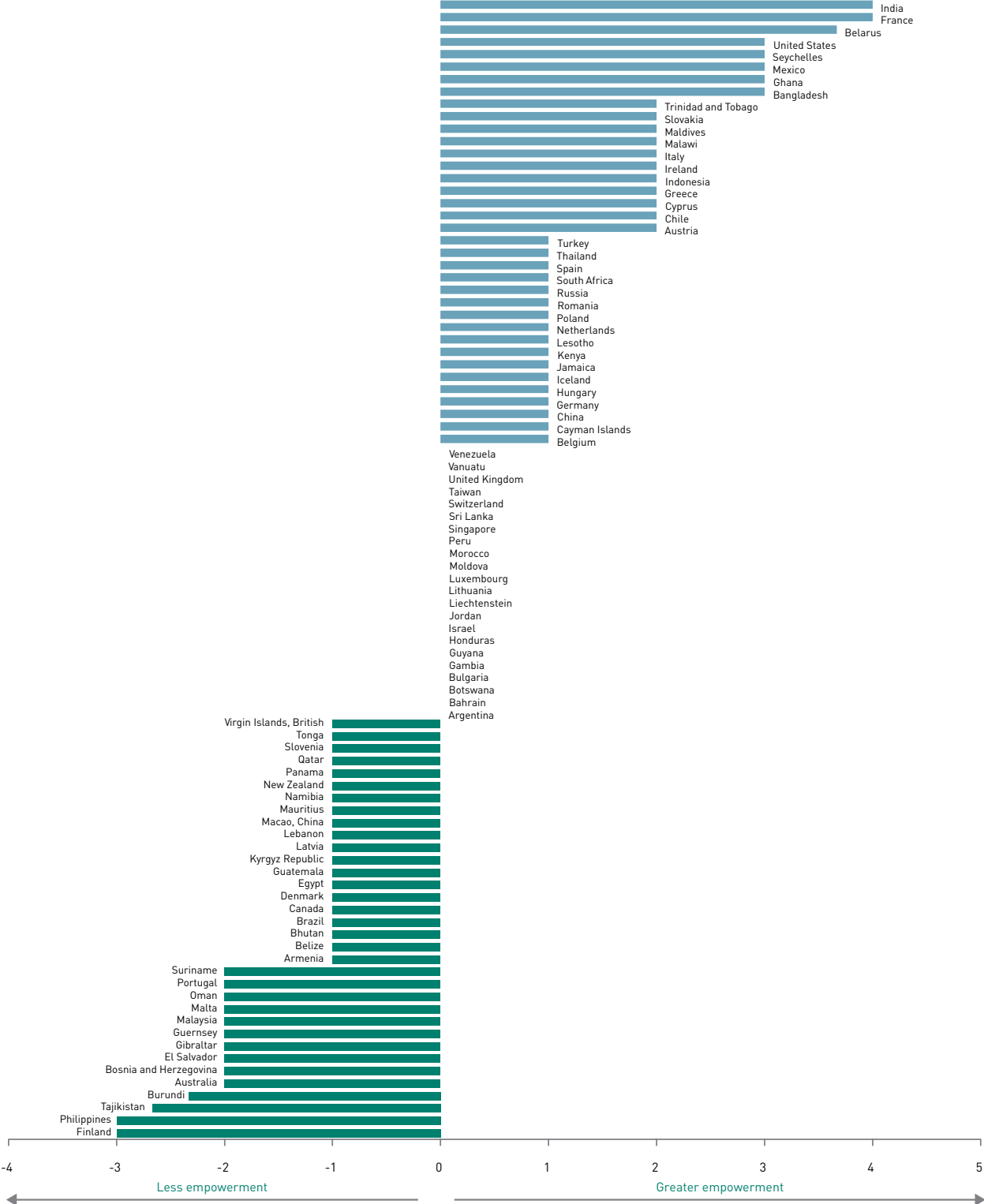
Regulatory and supervisory policies can also shape the incentives and ability of private investors to monitor and exert effective governance over banks. For example, the degree to which supervisory agencies require banks to obtain certified audits and independent credit ratings, or to disseminate comprehensive information about their activities, can influence the quality of private sector scrutiny. Likewise, the extent to which regulators hold bank directors legally liable for erroneous or misleading information can influence the quality of information that the banks provide to investors. That in turn affects investors' ability to monitor and govern the banks. The incentives of private investors to obtain information and exert governance over bank executives will also surely depend on whether bank regulators have credibly demonstrated that they will not bail out failed banks. Thus, private monitoring is not simply an absence of regulation. Official supervisory policies shape private monitoring by forcing information disclosure and defining the risks to private investors of potential bank problems.

We construct an index of the extent to which regulatory policies encourage private monitoring by building on an array of answers from the survey about disclosure requirements, deposit insurance, risk-management and other issues. Specifically, we aggregated data about the following issues: (1) Whether bank directors and officials are legally liable for the accuracy of information disclosed to the public; (2) Whether banks must publish consolidated accounts; (3) Whether banks must be audited by certified international auditors; (4) Whether 100 percent of the largest 10 banks are rated by international rating agencies; (5) Whether off-balance-sheet items are disclosed to the public; (6) Whether banks must disclose their risk-management procedures to the public; (7) Whether accrued but unpaid interest or principal enters the income statement even if a loan is nonperforming; (8) Whether subordinated debt is allowable as part of capital; and (9) Whether there is no explicit deposit-insurance system or no insurance was paid the last time a bank failed. The index ranges from zero to 12, with higher values indicating greater regulatory empowerment of private investors.

Figure 11 indicates the change in the index of private monitoring from Survey I to IV, with positive values indicating that private monitoring strengthened over time. Once again, there is wide diversity in the trends. Relatively small countries such as the Philippines, Finland, and Tajikistan reduced private monitoring to the greatest degree, while comparatively large countries like France, India, and the United States increased it the most. On average, there was a slight increase in private monitoring, with the index edging up from 7.7 in 1999 to 7.9 in 2011.

FIGURE
11

Change in the index of private monitoring from Surveys I to IV



To determine whether countries increased or decreased private monitoring powers after the global financial crisis, we compare the index values for Survey III and IV. Table 10 shows that about half of the countries increased such powers, while the other half decreased them.

TABLE 10 *Did countries increase or decrease private monitoring powers following the global financial crisis?*

Increase		Decrease	
Bangladesh	Italy	Argentina	Iceland
Belarus	Kenya	Armenia	Jordan
China	Kyrgyz Republic	Australia	Lebanon
Denmark	Latvia	Bahrain	Luxembourg
El Salvador	Lithuania	Bosnia and Herzegovina	Malta
France	Macao, China	Botswana	Moldova
Germany	Mexico	Bulgaria	Oman
Greece	Netherlands	Burundi	Peru
Guatemala	South Africa	Canada	Portugal
Hungary	Spain	Cayman Islands	Sri Lanka
India	Suriname	Finland	Switzerland
Indonesia	Thailand	Ghana	Trinidad and Tobago
Ireland	United States	Gibraltar	Venezuela
Israel		Guyana	

D. 2 EXTERNAL GOVERNANCE

Building on the Private Monitoring index, we construct a broader index of the degree to which regulations facilitate external governance by debt and equity holders. This index is based on answers from the following survey questions: (1) Is an audit by a professional external auditor required for all commercial banks in your jurisdiction? (2) Are specific requirements for the extent or nature of the audit spelled out? (3) Are auditors licensed or certified? (4) Do supervisors get a copy of the auditor's report? (5) Does the supervisory agency have the right to meet with external auditors to discuss their report without the approval of the bank? (6) Are auditors required by law to communicate directly with the supervisory agency about the possible involvement of bank directors or managers in illicit activities, fraud, or insider abuse? (7) Can supervisors take legal action against external auditors for negligence? (8) Does interest that has been accrued but unpaid enter the income statement while a loan is still performing? (9) Are financial institutions required to produce consolidated accounts covering all bank and any non-bank financial subsidiaries? (10) Are off-balance-sheet items disclosed to the public? (11) Must banks disclose their risk-management procedures to the public? (12) Are bank directors legally liable if information disclosed is erroneous or misleading? (13) Does accrued, though unpaid, interest or principal enter the income statement if the loan is nonperforming? (14) Are accounting practices for banks in accordance with International Accounting Standards (IAS)? (15) Are accounting practices for banks in accordance with U.S. Generally Accepted Accounting Principles (GAAP)? (16) Is subordinated debt allowable as part of capital? (17) Is subordinated debt required as part of capital? (18) Do regulations require

credit ratings for commercial banks? (19) What percentage of the top 10 banks is rated by international credit rating agencies (e.g. Moody's, Standard and Poor's)? and (20) How many of the top 10 banks are rated by domestic credit rating agencies? The values of the external governance index range from 0 to 19, with higher values indicating a great degree of external governance.

Figure 12 indicates the change in the index of external governance from Survey I to IV, where the positive values indicate an increase of external governance. Of the 42 countries providing data for both Survey I and Survey IV, 37 tightened external governance, three (Malaysia, Panama, and Fiji) eased it, and two (Argentina and Finland) made no changes. On average, the index values increased from 12.6 in 1999 to 15.3 in 2011. On table 11, we examine how countries changed their external governance following the recent banking crisis. Of 33 countries that provided data for both surveys, 22 tightened external governance, and 11 eased it from 1999 to 2011.

FIGURE
12

Change in the index of external governance from Surveys I to IV

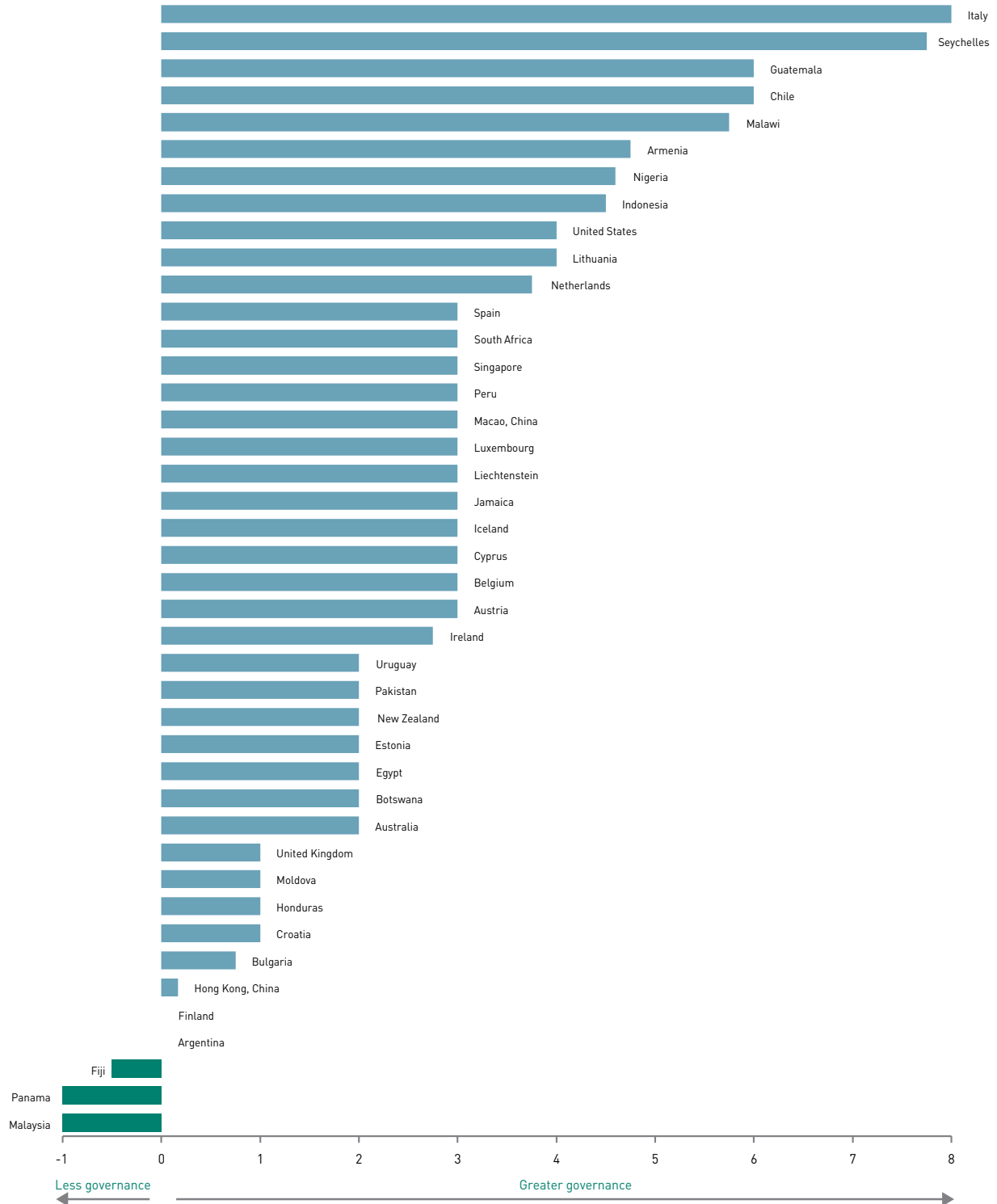


TABLE
11*Did countries tighten or ease external governance following the global financial crisis?*

Tighten				Ease	
Armenia	Cyprus	Liechtenstein	Seychelles	Egypt	New Zealand
Australia	Estonia	Luxembourg	Singapore	Hong Kong, China	Panama
Belgium	Honduras	Malawi	United States	Lithuania	South Africa
Botswana	Indonesia	Nigeria	Uruguay	Malaysia	Spain
Chile	Italy	Pakistan		Moldova	United Kingdom
Croatia	Jamaica	Peru		Netherlands	

E. EXPLICIT DEPOSIT INSURANCE SCHEMES

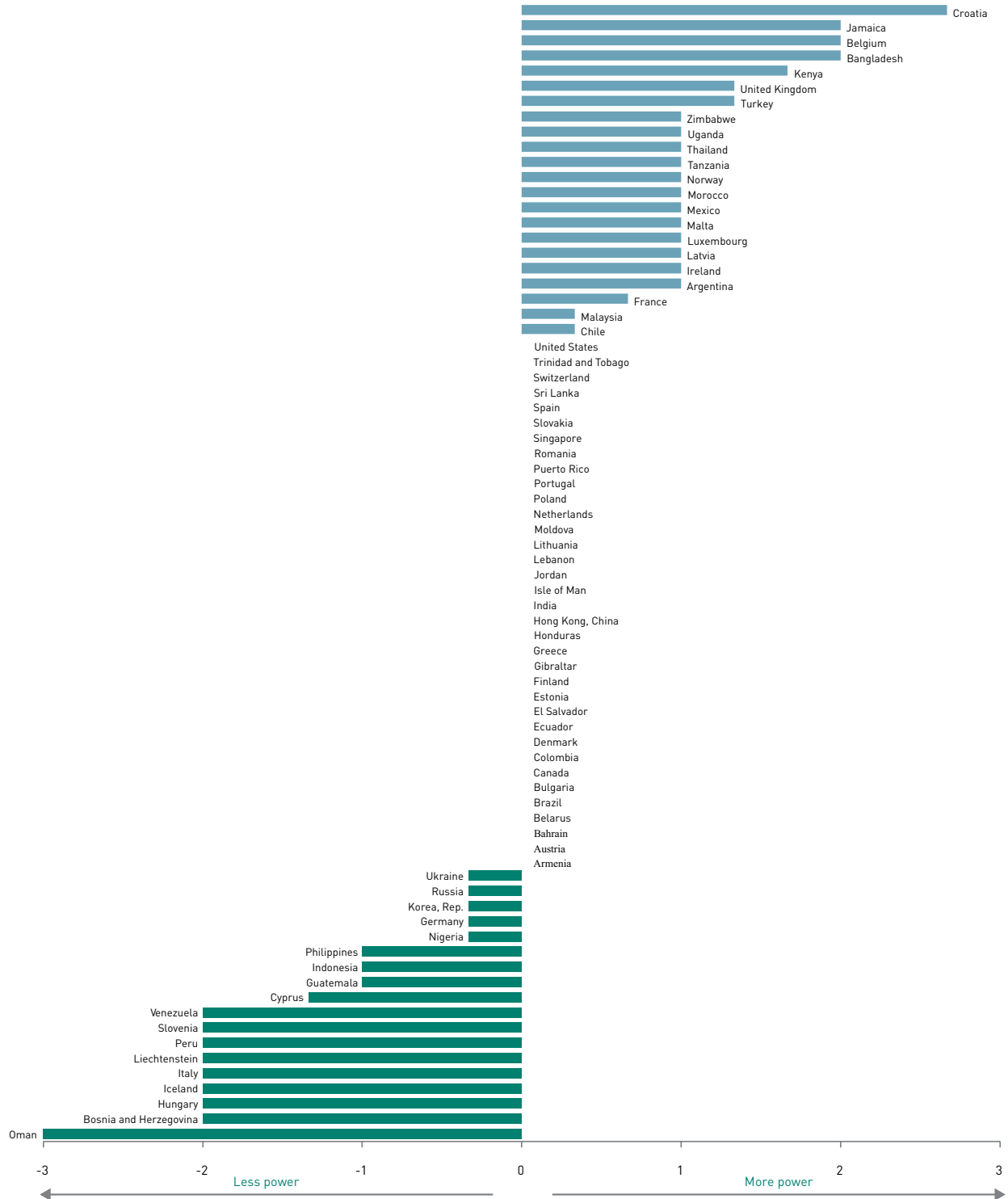
Policies governing deposit insurance can also shape the performance of banking systems. Countries often adopt deposit insurance to prevent bank runs. When depositors attempt to withdraw their funds all at once, some illiquid but solvent banks may be forced into insolvency. That can create a wider contagion that affects otherwise healthy banks. As a result, many countries enact deposit insurance schemes to reduce the probability of systemic crises. At the same time, deposit insurance can encourage excessive risk-taking by banks while reducing the incentives of depositors to monitor bank prudence. Thus, the precise design of deposit insurance schemes can materially shape the behavior of both banks and depositors. The design issues for deposit insurance include the limit and scope of coverage, the use of coinsurance, the sources of funding, premium structure, and management requirements.

We construct an index of deposit insurer power to measure each country's deposit insurance regime and to trace its evolution from 1999 to 2011. In particular, the deposit insurance index is based on answers to the following questions from the surveys: (1) Does the deposit insurance agency or fund administrator have intervention authority as part of its mandate? (2) Does the deposit insurance authority by itself have the legal power to cancel or revoke deposit insurance for a participating bank? (3) Can the deposit insurance agency take legal action against banks that violate the laws, regulations, and bylaws that govern the insurance? (4) Has the deposit insurance agency or fund ever taken legal action for violations against its laws, regulations, and bylaws? The values of the deposit insurance index range from 0 to 4, with higher values indicating more power.

Figure 13 indicates change in the index of deposit insurance from Surveys I to IV, with positive numbers indicating an increase of deposit insurance power. There are 75 countries providing data for both Surveys I and IV. Of these countries, 22 increased the power of depository-insurance agencies and 18 reduced it. Another 35 countries made no change. On average, there was a very slight increase in the index of deposit insurance power, from 1.06 in 1999 to 1.08 in 2011.

FIGURE
13

Change in the index of deposit insurance from Surveys I to IV



As table 12 shows, 98 of the 143 countries responding to Survey IV had established a deposit insurance protection system for banks. Such schemes are most common among high-income countries and least common among low-income countries. The table also shows a number of differences between deposit insurance regimes in (1) whether participation by banks is compulsory and (2) the scope of coverage. Of the countries providing data, 95 require domestic banks to participate, while 86 also require foreign bank subsidiaries and another 62 require foreign bank branches to participate. Roughly three-fourths of the countries provide insurance for foreign currency deposits but not for interbank deposits. The most common type of deposit insurance coverage is per depositor per institution, rather than per depositor or per depositor account.

TABLE
12 *Explicit deposit insurance protection system*

	Is there an explicit deposit insurance protection system for commercial banks?	Is participation in the deposit insurance system compulsory for the following banking entities?			Are the following types of deposits excluded from deposit insurance coverage?				The deposit insurance coverage type is:			
		Domestic banks	Foreign bank subsidiaries	Foreign bank branches	Foreign currency deposits	Interbank deposits	Deposits of the foreign branches of domestic banks	Deposits of the foreign subsidiaries of domestic banks	Per depositor account	Per depositor	Per depositor per institution	Other
Argentina	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	No
Armenia	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	No	Yes	No
Australia	Yes	Yes	Yes	No	No	No	No	Yes	No	No	Yes	No
Austria	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	No	Yes	No
Bahrain	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Bangladesh	Yes	Yes	No	Yes	No	Yes	No	No	No	Yes	No	No
Belarus	Yes	Yes	Yes	N/A	Yes	No	N/A	N/A	No	No	No	Yes (e)
Belgium	Yes	Yes	Yes	No	No	Yes	No	Yes	No	No	Yes	No
Bosnia and Herzegovina	Yes	Yes	No	No	No	Yes	Yes	Yes	No	No	Yes	No
Brazil	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes	No
Bulgaria	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	No
Canada	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No	No	Yes	No
Chile	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	No
Colombia	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	Yes	No
Croatia	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	No
Cyprus	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	No	Yes	No
Denmark	Yes	Yes	Yes	No	No	No	Yes	No	No	No	Yes	No
Dominican Republic	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes	No
Ecuador	Yes	Yes	Yes	Yes	No	No	No	No	N/A	Yes	N/A	N/A
El Salvador	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Estonia	Yes	Yes	Yes	No	No	Yes	No	Yes	No	No	Yes	No
Finland	Yes	Yes	Yes	No	No	No	No	No	No	No	Yes (a)	Yes
France	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No
Germany	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Gibraltar	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	No

PRIVATE MONITORING AND EXTERNAL GOVERNANCE

table 12 continued

	Is there an explicit deposit insurance protection system for commercial banks?	Is participation in the deposit insurance system compulsory for the following banking entities?			Are the following types of deposits excluded from deposit insurance coverage?				The deposit insurance coverage type is:			
		Domestic banks	Foreign bank subsidiaries	Foreign bank branches	Foreign currency deposits	Interbank deposits	Deposits of the foreign branches of domestic banks	Deposits of the foreign subsidiaries of domestic banks	Per depositor account	Per depositor	Per depositor per institution	Other
Greece	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	No	Yes	No
Guatemala	Yes	Yes	Yes	Yes	No	No	No	No	No	No	Yes	No
Guernsey	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Honduras	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	Yes
Hong Kong, China	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Hungary	Yes	Yes	No	No	No	Yes	No	No	No	No	Yes	No
Iceland	Yes	Yes	Yes	No	No	Yes	No	Yes	No	No	Yes	No
India	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	No	No
Indonesia	Yes	Yes	Yes	Yes	No	No	No	Yes	No	No	Yes	No
Iraq	Yes	N/A	N/A	N/A	No	Yes	No	No	No	No	No	No
Ireland	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No
Isle of Man	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Italy	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	No	Yes	No
Jamaica	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	No	Yes	Yes
Jersey	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Jordan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No
Kenya	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	No
Korea, Rep.	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	No	No	Yes	No
Kosovo	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No	Yes	No
Kyrgyz Republic	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	No
Latvia	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Lebanon	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Lesotho	Yes	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	No
Liechtenstein	Yes	Yes	Yes	No	No	Yes	No	Yes	No	No	Yes	No
Lithuania	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	Yes	No
Luxembourg	Yes	Yes	Yes	No	No	Yes	No	Yes	No	No	Yes	No
Macao, China	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	Yes	No
Malaysia	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No	Yes	No
Malta	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes
Mexico	Yes	Yes	Yes	Yes	No	No	Yes	No	No	No	Yes	No
Moldova	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No	Yes	No
Montenegro	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No	Yes	No
Morocco	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Mozambique	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes	No
Myanmar	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	N/A	N/A	N/A
Netherlands	Yes	Yes	Yes	No	No	Yes	No	Yes	No	No	Yes	No
Nicaragua	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	No	No
Nigeria	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	Yes	N/A
Norway	Yes	Yes	Yes	No	No	Yes	No	Yes	No	No	Yes	No
Oman	Yes	Yes	N/A	Yes	No	Yes	Yes	N/A	No	No	Yes	No

MEASURE IT, IMPROVE IT: BANK REGULATION AND SUPERVISION IN 180 COUNTRIES 1999 – 2011

table 12 continued

	Is there an explicit deposit insurance protection system for commercial banks?	Is participation in the deposit insurance system compulsory for the following banking entities?			Are the following types of deposits excluded from deposit insurance coverage?				The deposit insurance coverage type is:			
		Domestic banks	Foreign bank subsidiaries	Foreign bank branches	Foreign currency deposits	Interbank deposits	Deposits of the foreign branches of domestic banks	Deposits of the foreign subsidiaries of domestic banks	Per depositor account	Per depositor	Per depositor per institution	Other
Paraguay	Yes	Yes	Yes	Yes	No	No	No	No	No	No	Yes	No
Peru	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Philippines	Yes	Yes	Yes	Yes	No	No	No	Yes	No	No	Yes	No
Poland	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Portugal	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Puerto Rico	Yes	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes
Romania	Yes	Yes	No	No	No	Yes	No	Yes	No	No	Yes	No
Russia	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No	Yes	No
Serbia	Yes	Yes	No	No	No	Yes	Yes	Yes	No	No	Yes	No
Singapore	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No
Slovakia	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	No	No
Slovenia	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No	Yes	No
Spain	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	No	Yes	No
Sri Lanka	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	No
Swaziland	Yes	Yes	Yes	Yes	No	No	No	No	No	No	Yes	No
Switzerland	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Syria	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Taiwan	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Tajikistan	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	No
Tanzania	Yes	Yes	Yes	N/A	No	Yes	N/A	No	No	No	Yes	No
Thailand	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No
Tonga	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Trinidad and Tobago	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Tunisia	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	Yes	Yes
Turkey	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
Uganda	Yes	Yes	Yes	Yes	No	No	No	No	No	Yes	Yes	No
Ukraine	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	No
United Kingdom	Yes	Yes	Yes	No	No	No	No	Yes	No	No	Yes	No
United States	Yes	Yes	Yes	No	No	No	No	No	No	No	No	Yes
Uruguay	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	No
Venezuela	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No
Yemen	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes	No
Zimbabwe	Yes	Yes	Yes	N/A	No	Yes	N/A	Yes	No	No	Yes	No
TOTAL												
Yes	98	95	86	62	17	75	48	68	9	18	79	9
No	N/A*	0	7	29	77	19	43	24	84	76	15	86
N/A	N/A	3	5	7	4	4	7	6	5	4	4	3

* Notes: Countries that replied they had no explicit deposit scheme are Angola, Belize, Bhutan, Botswana, Burundi, Cayman Islands, China, Cook Islands, Costa Rica, Egypt, Ethiopia, Fiji, Gambia, Ghana, Guyana, Israel, Madagascar, Malawi, Maldives, Mauritius, Namibia, New Zealand, Pakistan, Panama, Qatar, Seychelles, Sierra Leone, South Africa, Suriname, Vanuatu and Virgin Islands, British. Countries that did not provide answers to any of the questions in the table are Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Kazakhstan, Kuwait, Mali, Nepal, Niger, Palestinian Territory, Samoa (Western), Senegal, Togo and United Arab Emirates.

We next examine how countries changed their deposit insurance regimes following the recent banking crisis, by comparing responses for Survey III and Survey IV. All these countries suffered a banking crisis, which makes it useful to determine whether any important changes were made in their deposit insurance schemes. Table 13 shows that four countries that reported having a formal coinsurance feature before the global financial crisis had eliminated this feature by 2011. In addition, two countries that had not based deposit insurance fees on some assessment of risk made a switch to risk-assessment after the crisis. One country did the reverse.

One additional observation involves the resolution of insolvent banks. For failed banks that are subsidiaries of holding companies, one issue that arises is whether the deposit insurance supervisory authority or other regulators are allowed to seize only the subsidiary or the parent holding company as well. In the United States, until the passage of the Dodd-Frank Act in 2010, regulators had only been allowed to seize the bank subsidiary while bankruptcy courts handled the parent companies. Information provided by Survey IV indicates that 73 countries have a similar insolvency framework for holding companies, while 59 have different ones.

TABLE
13

Changes in deposit insurance scheme before and after the global financial crisis

(Advanced economies that suffered the global financial crisis are highlighted.)

Country	Is there formal coinsurance, that is, are depositors explicitly insured for less than 100% of their deposits?		Do deposit insurance fees charged to banks vary based on some assessment of risk?	
	Survey III	Survey IV	Survey III	Survey IV
Algeria	Yes	N/A	Yes	N/A
Angola	N/A	No	N/A	No
Argentina	No	No	Yes	Yes
Armenia	No	No	Yes	No
Australia	N/A	No	N/A	No
Austria	No	No	No	No
Bahrain	Yes	Yes	No	No
Bangladesh	No	No	No	Yes
Belarus	No	No	No	No
Belgium	No	No	Yes	No
Bosnia and Herzegovina	No	No	No	No
Brazil	No	No	No	No
Bulgaria	No	No	No	No
Canada	No	No	Yes	Yes
Chile	Yes	Yes	N/A	N/A
Colombia	Yes	No	Yes	Yes
Croatia	No	No	No	No
Cyprus	No	No	No	No
Czech Republic	Yes	N/A	No	N/A
Denmark	No	No	No	No
Dominican Republic	N/A	No	N/A	No
Ecuador	N/A	No	N/A	Yes
El Salvador	No	No	No	Yes
Estonia	Yes	No	No	No
Ethiopia	N/A	No	N/A	No
Finland	No	No	Yes	Yes
France	No	No	Yes	Yes
Germany	Yes	No	No	Yes

table 13 continued

Country	Is there formal coinsurance, that is, are depositors explicitly insured for less than 100% of their deposits?		Do deposit insurance fees charged to banks vary based on some assessment of risk?	
	Survey III	Survey IV	Survey III	Survey IV
Gibraltar	Yes	Yes	No	No
Greece	No	No	No	Yes
Guatemala	Yes	No	No	No
Guernsey	N/A	No	N/A	No
Honduras	N/A	No	No	No
Hong Kong, China	No	No	Yes	Yes
Hungary	Yes	No	Yes	Yes
Iceland	Yes	No	No	No
India	No	No	No	No
Indonesia	Yes	No	No	No
Ireland	Yes	Yes	No	No
Isle of Man	N/A	No	N/A	No
Italy	No	No	Yes	Yes
Jamaica	No	No	No	No
Japan	N/A	N/A	No	N/A
Jersey	N/A	No	N/A	No
Jordan	N/A	No	No	No
Kazakhstan	No	N/A	Yes	N/A
Kenya	No	No	Yes	No
Korea, Rep.	N/A	No	No	No
Kosovo	N/A	N/A	N/A	Yes
Kyrgyz Republic	N/A	N/A	N/A	No
Latvia	No	Yes	No	Yes
Lebanon	Yes	No	No	No
Lesotho	N/A	Yes	N/A	Yes
Liechtenstein	N/A	No	No	No
Lithuania	yes	No	no	No
Luxembourg	No	No	No	No
Macao, China	N/A	No	N/A	N/A
Macedonia	No	N/A	No	N/A
Malaysia	No	No	Yes	Yes
Malta	Yes	No	N/A	No
Mexico	No	No	No	Yes
Moldova	No	No	No	No
Montenegro	No	No	No	No
Morocco	Yes	No	No	No
Mozambique	No	No	No	Yes
Myanmar	No	Yes	No	No
Namibia	No	No	No	No
Netherlands	No	No	No	No
Nicaragua	Yes	No	Yes	Yes
Nigeria	No	No	No	Yes
Norway	No	No	Yes	Yes
Oman	N/A	No	No	No
Paraguay	N/A	No	N/A	No
Peru	No	No	Yes	Yes
Philippines	No	No	Yes	No
Poland	Yes	No	No	No
Portugal	Yes	No	Yes	Yes
Puerto Rico	N/A	Yes	N/A	Yes

table 13 continued

Country	Is there formal coinsurance, that is, are depositors explicitly insured for less than 100% of their deposits?		Do deposit insurance fees charged to banks vary based on some assessment of risk?	
	Survey III	Survey IV	Survey III	Survey IV
Romania	No	No	Yes	No
Russia	Yes	No	No	No
Serbia	N/A	No	N/A	No
Sierra Leone	N/A	No	N/A	No
Singapore	Yes	No	Yes	Yes
Slovakia	Yes	No	No	No
Slovenia	No	No	No	No
Spain	No	No	No	No
Sri Lanka	N/A	No	N/A	Yes
Swaziland	N/A	No	N/A	N/A
Sweden	No	N/A	No	N/A
Switzerland	No	No	No	No
Taiwan	No	No	Yes	Yes
Tajikistan	Yes	Yes	Yes	No
Tanzania	No	N/A	No	No
Thailand	N/A	No	N/A	No
Trinidad and Tobago	No	No	No	No
Turkey	N/A	No	N/A	Yes
Uganda	Yes	No	Yes	Yes
Ukraine	N/A	No	N/A	No
United Kingdom	Yes	No	No	No
United States	N/A	No	N/A	Yes
Uruguay	Yes	No	No	Yes
Venezuela	No	No	No	No
Virgin Islands, British	N/A	No	N/A	No
Yemen	N/A	N/A	N/A	Yes
Zimbabwe	Yes	No	No	No

F. RESTRICTIONS ON ENTRY INTO BANKING

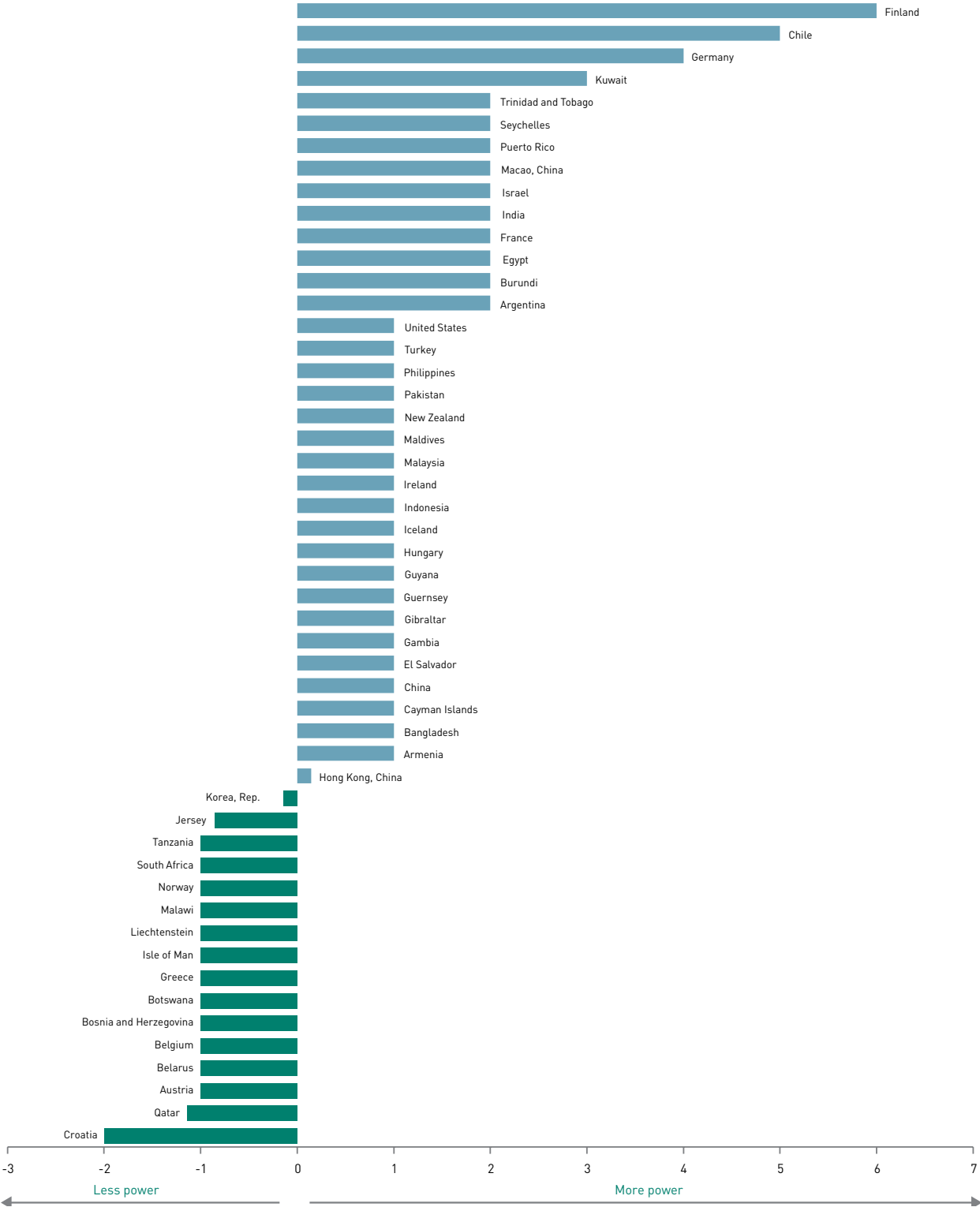
The degree of competition in banking depends importantly on the regulatory barriers to entry. Most countries do not allow just anyone to set up a bank. Instead, regulators screen applicants to better assure that they are “fit and proper” before granting them licenses. Such requirements can increase the overall quality of a country’s banks and enhance the financial system’s overall soundness.

We construct an index to measure each country’s entry requirements and trace its evolution from 1999 to 2011. In particular, this index is based on whether or not the following information is required of applicants for a banking license: (1) Draft bylaws; (2) Intended organizational chart; (3) Financial projections for first three years; (4) Financial information on main potential shareholders; (5) Background and experience of likely directors; (6) Background and experience of managers; (7) Sources of funds for bank capital; and (8) Market differentiation intended for the new bank. The values of the index of entry into banking range from 0 to 8, with higher values indicating greater stringency.

Figure 14 identifies the change in the index of entry into banking from Survey I to IV. Among the 136 countries that provided data in both surveys, 35 tightened their entry requirements, 16 relaxed them, and 85 countries made no change. On average, entry requirements increased slightly, from 7.5 in 1999 to 7.8 in 2011.

FIGURE
14

Change in the index of entry into banking requirements: Surveys I to IV



G. ADDITIONAL INFORMATION

The volume of answers in all four surveys is far too large to allow a thorough discussion in this paper. Indeed, it took over 100 pages in our book (Barth, Caprio, and Levine, 2006, Chapter 3) to just describe the data in Survey I. Our online dataset, however, provides details on each question in each survey, the formulas for constructing each of the indexes, and all of the information on several other indexes of bank regulation and supervision. In short, this paper provides an introduction to a very rich online resource of information.

To provide additional insight on Survey IV, however, appendix tables 4 and 5 and table 14 offer different cuts of the data. The minimum and maximum values in appendix table 4 are useful because they indicate whether an item is measured as an index, in days, as a percentage, or as a pure number. This table shows that there is substantial variation in the values of the different items across the various countries, with the number of countries providing information also indicated. Appendix table 5 provides the average values for the same items included in appendix table 4 with the countries grouped into different categories based on income level, development status and whether or not an offshore center. Table 14 further advertises the lack of uniformity in various regulations and supervisory practices in countries around the world.

TABLE
14

Information for selected other questions included in Surveys I-IV

World Bank Surveys I-IV questions	Survey IV answers		
	Number of countries providing information	Number answering yes	Number answering no
Are the sources of funds to be used as capital verified by the regulatory/supervisory authorities?	140	132	8
Which of the following are legally required to be submitted before issuance of the banking license? i. Source of funds to be used as capital	143	139	4
What were the primary reasons for denial of the applications for bank licenses? a. Capital amount or quality	90	32	58
What were the primary reasons for denial of the applications for bank licenses? b. Banking skills	89	29	69
What were the primary reasons for denial of the applications for bank licenses? c. Reputation	89	29	60
What were the primary reasons for denial of the applications for bank licenses? d. Incomplete application	90	33	57
Can related parties own capital in a bank?	140	135	5
Which risks are covered by the current regulatory minimum capital requirements in your jurisdiction? a. Credit risk	139	138	1
Which of the following items are allowed as part of Tier 1 capital? c. Subordinated debt	133	18	115
Which of the following items are allowed as part of Tier 2 capital? d. Subordinated debt	133	131	2
Is an audit by a professional external auditor required for all commercial banks in your jurisdiction?	142	142	0
If yes, does the external auditor have to ...: a. Obtain a professional certification or pass a specific exam to qualify as such	137	131	6
Are specific requirements for the extent or nature of the audit spelled out?	141	121	20
Do supervisors receive a copy of the following...: a. The auditor's report on the financial statements	143	143	0
Does the deposit insurance agency/fund administrator have the following powers as part of its mandate? c. Bank intervention authority	99	27	72

table 14 continued

World Bank Surveys I-IV questions	Survey IV answers		
	Number of countries providing information	Number answering yes	Number answering no
Does the deposit insurance authority by itself have the legal power to cancel or revoke deposit insurance for any participating bank?	98	24	74
Has the deposit insurance agency/fund ever taken legal action for violations against laws, regulations, and bylaws (of the deposit insurance agency) against bank directors or other bank officials?	94	15	79
The deposit insurance coverage type is: b. Per depositor	97	17	80
Were insured depositors wholly compensated (to the extent of legal protection) the last time a bank failed?	67	50	17
Which criteria are taken into account to classify loans and advances as nonperforming ...? a. Significant financial difficulty of the borrower and deterioration in its creditworthiness	137	121	16
Which criteria are taken into account to classify loans and advances as nonperforming ...? b. Breach of contract (e.g. default or delinquency in interest or principal payments)	136	127	9
Which criteria are taken into account to classify loans and advances as nonperforming ...? c. Restructuring (i.e. concession granted, for economic or legal reasons relating to the borrower's financial difficulty, that the lender would not otherwise consider)	139	124	15
Which criteria are taken into account to classify loans and advances as nonperforming ...? d. Borrower bankruptcy or other financial reorganization	136	126	10
Which criteria are taken into account to classify loans and advances as nonperforming ...? e. Days past due status (please specify number of days)	134	127	7
Which criteria are taken into account to classify loans and advances as nonperforming ...? f. Existence of collateral, guarantees and/or other credit mitigants	134	89	45
If a customer has multiple loans and advances and one of them is classified as nonperforming, are all the other exposures automatically classified as nonperforming as well?	135	76	59
Do you require banks to write off nonperforming loans after a specific time period?	140	53	87
Does accrued, though unpaid, interest/principal enter the income statement while the loan is still performing?	142	129	13
Does accrued, though unpaid, interest/principal enter the income statement while the loan is nonperforming?	141	38	103
Are all banks operating in your country (including foreign bank branches) required to make available to the public their annual financial statements...? b. On a consolidated basis (if applicable)	138	124	14
Do banks disclose to the public ...? b. Off-balance-sheet items	143	113	30
Do banks disclose to the public ...? c. Governance and risk management framework	142	106	36
Are bank directors legally liable if information disclosed is erroneous or misleading?	137	131	6
Are commercial banks required by supervisors to have external credit ratings?	140	19	121
Please indicate whether the following enforcement powers are available to the supervisory agency: j. Require banks to reduce or suspend dividends to shareholders	140	131	9
Please indicate whether the following enforcement powers are available to the supervisory agency: k. Require banks to reduce or suspend bonuses and other remuneration to bank directors and managers	138	99	39
Can the supervisory authority force a bank to change its internal organizational structure?	142	128	14

H. SOME NEW INFORMATION IN SURVEY IV

Survey IV contains all the questions in the three earlier surveys that were used to construct the original indexes in Barth, Caprio, and Levine (2006). In addition, however, it includes new and important questions that were asked in response to the global financial crisis. In particular, it includes new questions about what countries are doing to better assess systemic risk. Of 133 countries, 90 of them indicate that they have a specialized department dealing with financial stability and systemic supervision, while the remaining 43

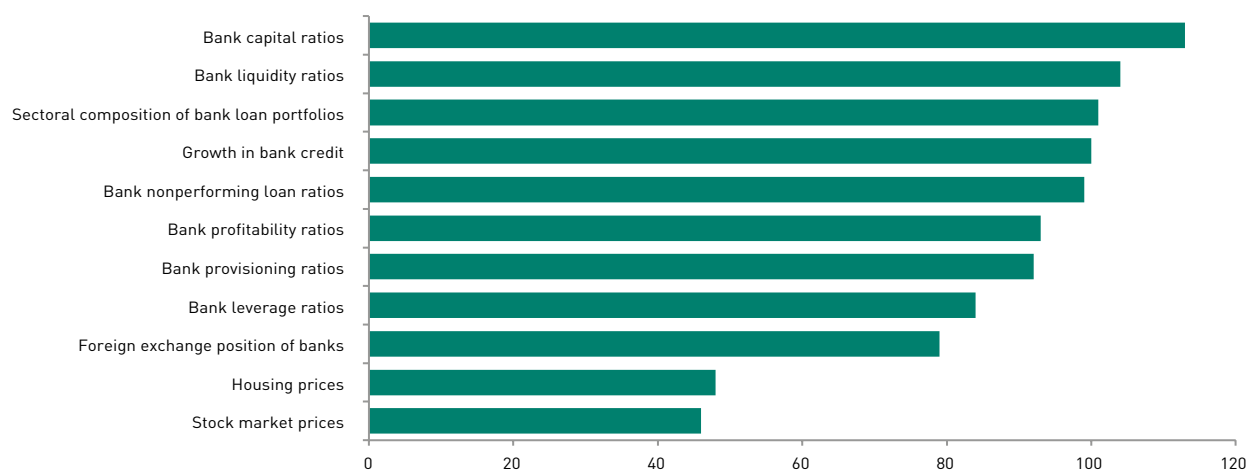
reported they do not. Countries in which these departments exist include Austria, Belgium, France, Greece, Ireland, the Netherlands, Spain, and the United Kingdom. Denmark, Switzerland and the United States were among those reporting that they did not have a specialized department.

Figure 15 shows the factors that countries consider in assessing systemic risk within the banking sector. Regulators in almost every country (113) consider bank capital ratios a key factor. The least-mentioned factor is stock market prices (46). Countries that reported considering all of the potential factors include Austria, Iceland, the Netherlands, Portugal, the United Kingdom and the United States. These are advanced countries that suffered a banking crisis, though some advanced economies indicated they didn't consider any of the factors listed in figure 15. Those countries include France, Germany and Ireland.

Figure 15 shows other new questions in Survey IV, as well as the number of countries that answered them. These questions focus on external auditors, executive compensation, insolvency frameworks, stress tests, counter-cyclical regulations, and the supervision of systemically important institutions versus smaller ones. Once again, there is a substantial divergence in the answers. Focusing on just the advanced countries listed in table 12, Austria, Germany, and Switzerland report that supervisors delegate part of their supervisory tasks to external auditors, while France, Spain, the United Kingdom, and the United States do not. All but one of these advanced countries report that remuneration or compensation is evaluated in the supervisory process as part of an effort reduce excessive risk-taking. The one exception is Belgium, which does not evaluate compensation for boards of directors. The same countries all report that they conduct stress tests at the bank level. Six of the 16 countries extend the tests to the system-wide level. Survey IV also asked whether countries impose any restrictions or limits on the size of banks. Of the 63 countries providing information, only 11 – including Iceland and Ireland – said they have such restrictions.

FIGURE
15

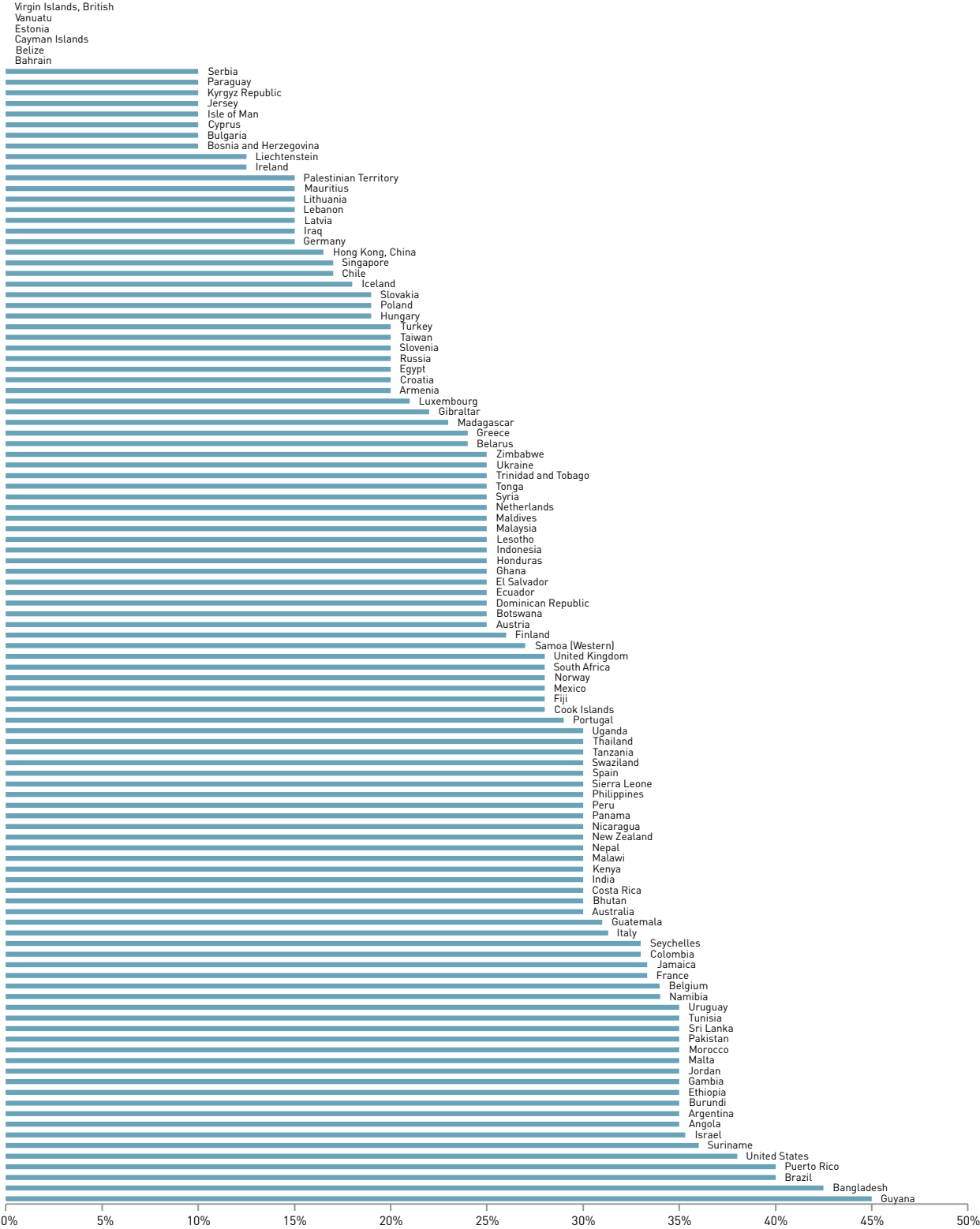
Bank supervisory criteria for assessing systemic risk
(Number of countries reporting yes for each factor)



One last new piece of information in Survey IV concerns the statutory corporate tax rate on domestic bank income. Figure 16 shows a substantial variance among rates, which range from 0 to 45 percent. Guyana reports the highest tax rate, and six countries report that they impose no tax at all on domestic bank income. The United States reported the fifth-highest tax rate at 38 percent.

FIGURE
16

Statutory corporate tax rate on domestic bank income



I. CONVERGENCE

Since Survey I in 1999, national regulatory authorities around the world have met regularly to compare practices and develop common standards. We attempt to assess whether regulatory practices have in fact converged and offer some indicators of convergence in table 15.

We provide information on (i) overall restrictions on bank activities, (ii) entry into banking requirements, (iii) bank capital regulations, (iv) official supervisory powers, (v) private monitoring, and (vi) external governance. For each index, we only include countries for which we have data for Survey I and IV. We provide two measures of convergence. First, we provide the normalized standard deviation in Survey I and Survey IV for each index. Second, we assess the number of countries that are x percent different from the median value, where x equals 10 percent, 25 percent, 30 percent, and 50 percent.

TABLE
15

Was there a convergence or divergence in regulation and supervision over time?

(Number of countries with index values different from the median by at least 10, 25, 30 or 50 percent)

	Total number of countries	Range	Median		Normalized standard deviation		10%		25%		30%		50%	
			Survey I	Survey IV	Survey I	Survey IV	Survey I	Survey IV	Survey I	Survey IV	Survey I	Survey IV	Survey I	Survey IV
Overall restrictions on bank activities	105	3–12	7	7	0.3029	0.2851	84	90	53	51	34	25	13	7
Entry into banking requirements	135	0–8	8	8	0.1305	0.0591	37	20	4	1	4	1	2	0
Bank capital regulations	108	0–10	6	7	0.3051	0.2346	90	81	51	41	43	13	2	3
Official supervisory powers	132	0–14	11	11	0.2235	0.22	65	58	36	28	7	16	4	1
Private monitoring	92	0–12	8	8	0.1824	0.1843	68	63	4	8	4	7	1	0
External governance	33	0–19	12	15	0.1716	0.1073	11	11	3	0	3	0	0	0

Although the data show substantial convergence for a few of the indexes, table 16 does not suggest broad-based convergence. The indexes that measure entry requirements, capital requirements, and external governance show notable convergence, but most other indexes of regulatory policy remain widely dispersed. Overall, as of 2011, there is greater cross-country divergence in bank regulation and supervision.

TABLE
16 *Some new information in Survey IV*

World Bank survey questions		Number of countries providing information	Number answering yes	Number answering no
5.13	Do supervisors delegate part of their supervisory tasks to external auditors?	104	19	85
6.5	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? a. Board directors	137	84	53
6.5	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? b. Senior bank management	139	85	54
6.5	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? c. Other bank staff (e.g. traders)	136	76	60
6.5.1	If so, does the supervisory agency have the authority to take regulatory action when it considers that the remuneration or compensation is excessive?	102	78	24
11.4.1	Is the insolvency framework the same for bank holding companies and banks?	132	73	59
12.25	Do you conduct stress tests as part of the process of assessing systemic stability?	136	113	33
12.26	If you conduct stress tests, at what level are they performed....? a. at the bank level	136	101	35
12.26	If you conduct stress tests, at what level are they performed....? b. at the system-wide level	136	62	74
12.27	Do you have any counter-cyclical regulations or tools to dampen boom/bust cycles in credit flows? a. Counter-cyclical capital requirements	127	11	116
12.27	Do you have any counter-cyclical regulations or tools to dampen boom/bust cycles in credit flows? b. Counter-cyclical loan-to-value ratios	123	8	115
12.27	Do you have any counter-cyclical regulations or tools to dampen boom/bust cycles in credit flows? c. Granular capital requirements based on loan-to-value ratios	124	14	110
12.27	Do you have any counter-cyclical regulations or tools to dampen boom/bust cycles in credit flows? d. Counter-cyclical provisioning requirements	126	22	104
12.27	Do you have any counter-cyclical regulations or tools to dampen boom/bust cycles in credit flows? e. Temporary restrictions on dividend and bonuses distribution	124	31	93
12.28	Do you supervise systemic institutions in a different way than non-systemic ones?	137	70	67
12.29	If yes, do you have any tools to oversee more closely and/or limit the activities of large/interconnected institutions? a. Additional capital requirements	66	32	34
12.29	If yes, do you have any tools to oversee more closely and/or limit the activities of large/interconnected institutions? b. Additional liquidity requirements	66	26	40

table 16 continued

World Bank survey questions	Number of countries providing information	Number answering yes	Number answering no
12.29 If yes, do you have any tools to oversee more closely and/or limit the activities of large/interconnected institutions? c. Asset/risk diversification requirements	66	27	41
12.29 If yes, do you have any tools to oversee more closely and/or limit the activities of large/interconnected institutions? d. Restrictions/limits on activities	65	31	34
12.29 If yes, do you have any tools to oversee more closely and/or limit the activities of large/interconnected institutions? e. Restrictions/limits on size of institution	63	11	52
12.29 If yes, do you have any tools to oversee more closely and/or limit the activities of large/interconnected institutions? f. Additional corporate taxes for large institutions	64	2	62
12.29 If yes, do you have any tools to oversee more closely and/or limit the activities of large/interconnected institutions? g. Closer or more frequent supervision	68	62	6
12.29 If yes, do you have any tools to oversee more closely and/or limit the activities of large/interconnected institutions? h. Restrictions on the group's legal structure	56	14	42

CONCLUSION

In this paper and the associated online database, we provide a new database on bank regulatory and supervisory policies in 180 countries that covers the period from 1999 through 2011. This database builds directly on four World Bank surveys of bank regulation around the world. The database differs from the underlying survey data in two key respects: we resolve many inconsistencies and missing observations in the core survey responses, and we construct a range of indexes to allow comparisons of key banking policies and to changes in policies over time. The surveys include hundreds of questions, making it difficult to form impressions by examining the individual answers one by one. Thus, we aggregate the individual answers into summary indexes that measure key features of the regulatory regimes.

Not surprisingly, there is still substantial heterogeneity in bank supervisory policies across countries. Although there has been some convergence over the last dozen years, bank supervision remains impressively diverse in 2011. This diversity provides enormous opportunity for research into both the causes of policy differences and the consequences of different policies on bank performance, financial stability, and the real economy.

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APPENDIXES

APPENDIX TABLE 1: GUIDE TO DATABASE ON BANK REGULATION AND SUPERVISION

PART 1: ENTRY INTO BANKING

- 1.1**What body/agency grants commercial banking licenses? Please include the name of licensing agency. If more than one, please describe their respective licensing roles.
- 1.2**Do you have the authority to take legal action against those entities that undertake banking activities without a given license?
- 1.3**Is more than one license required (e.g. one for each banking activity, such as deposit-taking, consumer lending etc.)?
- 1.3.1**If more than one license is needed, please indicate the maximum number required.
- 1.4**What is the minimum capital entry requirement for commercial bank operations of the following types? Enter amount (in thousands of local currency) as of end of 2010 for each option below (please state currency).
- a . Domestic bank
 - b . For a subsidiary of a foreign bank
 - c . For a branch of a foreign bank
- 1.4.1**Does the minimum capital entry requirement vary depending on the nature of the banking businesses that are licensed?
- 1.4.1.1**If yes, please explain:
- 1.4.2**Are the sources of funds to be used as capital verified by the regulatory/supervisory authorities?
- 1.4.3**Can the initial disbursement or subsequent injections of capital be done with assets other than cash or government securities?
- 1.5**Can initial capital contributions by prospective shareholders be in the form of borrowed funds?
- 1.6**Which of the following are legally required to be submitted before issuance of the banking license?
- a . Draft bylaws
 - b . Intended organizational chart
 - c . Structure of board (composition, committees, functions)
 - d . Market / business strategy
 - e . Financial projections for first three years
 - f . Financial information on main potential shareholders
 - g . Background/experience of future board directors
 - h . Background/experience of future senior managers
 - i . Source of funds to be used as capital
- 1.7**In the past five years (2006-2010), how many applications for commercial banking licenses from domestic entities (i.e. those 50 percent or more domestically owned) have been: (Enter number of applications for each option below.)
- a . Received
 - b . Denied
 - c . Withdrawn
 - d . Accepted

- 1.8**.....Are foreign entities prohibited from entering through the following?
- a . Acquisition
 - b . Subsidiary
 - c . Branch
 - d . Joint venture
- 1.9**.....If acquisitions of domestic banks by foreign banks are not prohibited, what is the maximum percentage of foreign ownership that is legally allowed?
- 1.10**.....In the past 5 years (2006-2010), how many applications from foreign banks to enter through the acquisition of a domestic bank were: (Enter number of applications for each option below)
- a . Received
 - b . Denied
 - c . Withdrawn
 - d . Accepted
- 1.11**.....In the past five years (2006-2010) how many applications from foreign banks to enter through a new subsidiary were: (Enter number of applications for each option below)
- a . Received
 - b . Denied
 - c . Withdrawn
 - d . Accepted
- 1.12**.....In the past 5 years (2006-2010) how many applications from foreign banks to enter by opening a branch were: (Enter number of applications for each option below)
- a . Received
 - b . Denied
 - c . Withdrawn
 - d . Accepted
- 1.13**.....What were the primary reasons for denial of the applications in questions 1.7, 1.10, 1.11 and 1.12?
- a . Capital amount or quality
 - b . Banking skills
 - c . Reputation
 - d . Incomplete application
 - e . Other (please explain)
- 1.14**.....In general, how long (in number of months) has it taken for a new banking license to be issued, from receipt of the application to final disposition?

PART 2: OWNERSHIP

- 2.1**.....Please state the bank ownership level thresholds as of end of 2010 (if they exist) that would trigger evaluation and approval requirements by the supervisor (e.g. requirements to obtain regulatory approval once the share of bank ownership by an individual, family, or group reaches a certain percentage)

-
- 2.2**What are the requirements for evaluation / approval of significant bank shareholders?
- a . Minimum level of education
 - b . Minimum level of financial and/or banking-related experience
 - c . Financial capacity to support bank capital
 - d . No criminal record
 - e . No bankruptcy record
 - f . Lack of conflict of interest
 - g . Other (please explain)
- 2.3**Is there a maximum percentage of a bank's equity that can be owned by a single owner?
- 2.3.1** If yes, what is the percentage as of end of 2010?
- 2.3.2**..... Please specify any differences that exist for domestic versus foreign owners.
- 2.4**Does the regulator have the legal authority to oppose the ultimate (beneficial) owner when assessing bank ownership?
- 2.5**Do laws or regulations require the ultimate (beneficial) owner and controller of a bank to be publicly disclosed?
- 2.5.1** Can related parties own capital in a bank?
- 2.5.2**..... If yes, what are the maximum percentages associated with the total ownership by a related party group (e.g. family, business associates, etc.)
- 2.6**Can non-financial firms own voting shares in commercial banks? Please see options provided and select option that best characterizes your banking sector
- a . Non-financial firm may own 100 percent of the equity in a commercial bank.
 - b . Non-financial firm may own 100 percent of the equity in a commercial bank, but prior authorization or approval is required.
 - c . Limits are placed on ownership of banks by non-financial firms, such as maximum percentage of a commercial bank's capital or shares.
 - d . Non-financial firms cannot own any equity investment in a commercial bank
- 2.6.1**What fraction of capital in the largest 10 banks (in terms of their domestic assets) is owned by commercial/industrial and/or financial conglomerates? If there are fewer than 10 banks, use that number in your answer. Your response should reflect the situation as of end of 2010.
- 2.7**Can non-bank financial firms (e.g. insurance companies, finance companies, etc.) own voting shares in commercial banks? Please see options provided and select option that best characterizes your banking sector.
- a . Non-bank financial firm may own 100 percent of the equity in a commercial bank.
 - b . Non-bank financial firm may own 100 percent of the equity in a commercial bank, but prior authorization or approval is required.
 - c . Limits are placed on ownership of banks by non-bank financial firms, such as maximum percentage of a commercial bank's capital or shares.
 - d . Non-bank financial firms cannot own any equity investment in a commercial bank.
-

PART 3: CAPITAL

Overview of regulatory capital adequacy regime

- 3.1**Which regulatory capital adequacy regimes did you use as of end of 2010 and for which banks does each regime apply to (if using more than one regime)? Mark the appropriate response below and specify for which types of banks each regime applies.
- a . Basel I
 - b . Basel II
 - c . Leverage ratio
 - d . Other (please explain)
- 3.2**Which risks are covered by the current regulatory minimum capital requirements in your jurisdiction? Please specify all applicable risks.
- a . Credit risk
 - b . Market risk
 - c . Operational risk
 - d . Other risks (please explain)
- 3.3.1**What was the minimum required risk-based regulatory capital ratio as of end of...?
- 2008
 - 2009
 - 2010
- 3.3.2**What was the minimum required non-risk-based regulatory capital ratio as of end of...?
- 2008
 - 2009
 - 2010
- 3.4.1**What was the actual risk-based capital ratio of the banking system as of end of...?
- 2008
 - 2009
 - 2010
- 3.4.2**What was the actual non-risk-based capital ratio of the banking system as of end of...?
- 2008
 - 2009
 - 2010
- 3.5**What was the actual Tier 1 capital ratio of the banking system as of end of...?
- 2008
 - 2009
 - 2010
- 3.6**The regulatory minimum capital requirements are applied...
- a . On a solo basis at the individual bank level.
 - b . On a consolidated basis at every banking group or subgroup level.
 - c . On a consolidated basis for the nonbank holding company (if it exists) that is the parent entity of a bank.
 - d . On a solo basis at the holding company level.

- 3.6.1**.....Do you require banks to perform an internal assessment of their capital adequacy against their economic capital?
- 3.6.2**.....If so, do you review internal assessments performed by banks?
- 3.7**.....Does your agency have the legal authority to require additional capital that is over and above the minimum required capital for individual banks if deemed necessary?

Basel I regime (please complete if applicable)

- 3.8**.....Do you apply different risk weights than those in the Basel Committee's original Basel I framework for any material exposures (e.g. corporate lending, mortgage loans, consumer loans, loans to government, etc.)?
- 3.8.1**.....If so, please describe these differences along with the specific risk weights that are being applied.
- 3.9**.....In case you plan to move to the Basel II framework, what is the target calendar year of adoption?

Basel II regime (please complete if applicable)

- 3.10**.....What variants are offered to banks in calculating capital requirements for credit risk?
- a . Simplified standardized approach (SSA)
 - b . Standardized approach (SA)
 - c . Foundation internal ratings-based approach (F-IRB)
 - d . Advanced internal ratings-based approach (A-IRB)
- 3.11**.....What was the impact of moving to Basel II on the overall regulatory capital level of the banking system? Please select the option that best characterizes the situation in your jurisdiction.
- a . Increased substantially.
 - b . Increased slightly.
 - c . Neutral / little change.
 - d . Decreased slightly.
 - e . Decreased substantially.

Regulatory leverage ratio (please complete if applicable)

- 3.12**.....What is the regulatory leverage ratio that you are using based on...?
- a . Minimum capital to asset multiples.
 - b . Maximum assets to capital multiples.
 - c . Other (please explain).
- 3.13**.....The leverage ratio is applied ...
- a . On a solo basis at the individual bank level.
 - b . On a consolidated basis at every banking group or subgroup levels.
 - c . On a consolidated basis for the nonbank holding company (if it exists) that is the parent entity of a bank.
- 3.14**.....Which concept of capital is used in calculating the leverage ratio?
- a . Total equity capital.
 - b . Total regulatory capital.
 - c . Only Tier 1 capital.
 - d . Other (please explain).
- 3.15**.....Are off-balance-sheet items included (either in notional amounts or risk-weighted) in assets when calculating the leverage ratio?

3.16.....What was the actual leverage ratio for the banking system as of end of...?

2008

2009

2010

Definition of capital

3.17.....Which of the following are legally allowed in regulatory capital and what are the minimum (or maximum) percentages? Enter Yes or No and include corresponding minimum (or maximum) percentages for each option below:

a . Common equity

minimum

maximum

b . Tier 1

minimum

maximum

c . Tier 2

minimum

maximum

d . Tier 3

minimum

maximum

e . Other (please explain)

minimum

maximum

If other, please explain.

3.18.....Which of the following items are allowed as part of Tier 1 capital and in what percentages? Enter Yes or No and include corresponding percentages for each option below

a . Hybrid debt capital instruments.

b . Asset revaluation gains (or revaluation reserves).

c . Subordinated debt.

3.18.1.....Which of the following items are allowed as part of Tier 2 capital and in what percentages? Enter Yes or No and include corresponding percentages for each option below

a . Hybrid debt capital instruments.

b . General provisions.

c . Asset revaluation gains (or revaluation reserves).

d . Subordinated debt.

3.18.2.....What fraction of revaluation gains is allowed as part of capital?

3.18.3Are the following items deducted from regulatory capital? Enter Yes or No for each option. If the response is no, please explain their treatment.”

a . Goodwill

Please explain

b . Deferred tax assets

Please explain

c . Intangibles

Please explain

d . Unrealized losses in fair valued exposures

Please explain

e . Investment in the capital of certain banking, financial, and insurance entities which are outside the scope of consolidation

Please explain

PART 4: ACTIVITIES

4.1What are the conditions under which banks can engage in securities activities?

a . A full range of these activities can be conducted directly in banks.

b . A full range of these activities are offered but all or some of these activities must be conducted in subsidiaries, or in another part of a common holding company or parent.

c . Less than the full range of activities can be conducted in banks, or subsidiaries, or in another part of a common holding company or parent.

d . None of these activities can be done in either banks or subsidiaries, or in another part of a common holding company or parent.

4.2What are the conditions under which banks can engage in insurance activities?

a . A full range of these activities can be conducted directly in banks.

b . A full range of these activities are offered but all or some of these activities must be conducted in subsidiaries, or in another part of a common holding company or parent.

c . Less than the full range of activities can be conducted in banks, or subsidiaries, or in another part of a common holding company or parent.

d . None of these activities can be done in either banks or subsidiaries, or in another part of a common holding company or parent.

4.3What are the conditions under which banks can engage in real estate activities?

a . A full range of these activities can be conducted directly in banks.

b . A full range of these activities are offered but all or some of these activities must be conducted in subsidiaries, or in another part of a common holding company or parent.

c . Less than the full range of activities can be conducted in banks, or subsidiaries, or in another part of a common holding company or parent.

d . None of these activities can be done in either banks or subsidiaries, or in another part of a common holding company or parent.

- 4.4**What are the conditions under which banks can engage in non-financial businesses except those businesses that are auxiliary to banking business (e.g. IT company, debt collection company, etc.)?
- a . Non-financial activities can be conducted directly in banks.
 - b . Non-financial activities must be conducted in subsidiaries, or in another part of a common holding company or parent.
 - c . Non-financial activities may be conducted in subsidiaries, or in another part of a common holding company or parent, but subject to regulatory limit or approval.
 - d . None of these activities can be done in either banks or subsidiaries, or in another part of a common holding company or parent.
- 4.4.1**Can banks own voting shares in non-financial firms? Please mark the option that best characterizes the situation in your jurisdiction.
- a . A bank may own 100 percent of the equity in any non-financial firm.
 - b . A bank may own 100 percent of the equity in a non-financial firm but ownership is limited based upon a bank's equity capital.
 - c . A bank can only acquire less than 100 percent.
- If so, please mention the maximum percentage which can be owned.
- d . A bank may not have any equity investment in a non-financial firm whatsoever.
- 4.5**In your jurisdiction, what type of financial conglomerate structures involving banks are allowed?
- a . Conglomerates whose parent is a bank.
 - b . Conglomerates whose parent is a non-bank financial institution (e.g. insurance company or securities firm).
 - c . Conglomerates whose parent is a non-financial institution (e.g. non-operating financial holding company).

PART 5: EXTERNAL AUDITING REQUIREMENTS

Appointment and dismissal of auditors

- 5.1**Is an audit by a professional external auditor required for all commercial banks in your jurisdiction?
- 5.1.1**If yes, does the external auditor have to...?
- a . Obtain a professional certification or pass a specific exam to qualify as such.
 - b . Register with an appropriate public and/or professional body.
 - c . Have a minimum required bank auditing experience.
 - d . Be approved or reviewed by the supervisor (e.g. by having a pre-defined list of approved auditors or by providing written approval).
- 5.1.2**Are specific requirements for the extent or nature of the audit spelled out?
- 5.2**Are there mandatory rotation requirements (i.e. limits on the number of consecutive years audited) in place for the...
- a . Lead auditor (engagement/concurring partner)
 - b . Auditing firm
- 5.3**Are banks required to promptly report to the banking supervisor any change of external auditor and the reasons for the change?
- 5.3.1**Are banks required to nominate more than one external auditor?

Auditing standards - scope of work

- 5.4..... Do laws or regulations require auditors to conduct their audits in accordance with International Standards on Auditing (ISA)?
- 5.5..... Do regulations explicitly prohibit auditing firms from providing nonaudit services to the banks whose financial accounts they audit?

Audit findings and reports

- 5.6..... Is the audit report on the financial statements of a bank required to be publicly disclosed together with these financial statements?
- 5.7..... Do supervisors receive a copy of the following....
- a . The auditor's report on the financial statements.
 - b . The auditor's letter to bank management.
 - c . Other communication to the audit committee.
- 5.8..... Are auditors required to promptly inform banking supervisors when they intend to issue qualified opinions on the accounts?
- 5.8.1..... Are auditors required to promptly inform banking supervisors when they identify information that could affect the safety and soundness of a bank?
- 5.9..... Are auditors required to communicate directly to the supervisory agency any presumed involvement of bank directors or senior managers in illicit activities, fraud, or insider abuse?

Relationship between the banking supervisor and external auditor

- 5.10..... Does the banking supervisor have the right to meet with the external auditors and discuss their report without the approval of the bank?
- a . No.
 - b . Yes, it happens on a regular basis.
 - c . Yes, it happens on an exceptional basis.
- 5.11 Are external auditors subject to independent oversight by...?
- a . Ministry of Finance or other government department.
 - b . Specialized public entity (e.g. independent audit regulator).
 - c . Banking supervisory agency.
 - d . Other (please explain).
- 5.12..... In cases where the supervisor identifies that the bank has received an inadequate audit, does the supervisor have the powers to take actions against ...?
- a . The bank.
 - b . The external auditor.
- 5.12.1..... How many actions have been taken by the supervisor in the past 5 years (2006-2010) against...?
- a . The bank.
 - b . The external auditor.
- 5.13..... Do supervisors delegate part of their supervisory tasks to external auditors?
- a . No.
 - b . Yes, as part of the regular supervisory process.
 - c . Yes, on an exceptional basis.
- 5.14..... Among the 10 biggest banks in your country, how many are audited by one of the 'big four' accounting firms (PwC, KPMG, E&Y, Deloitte)?

PART 6: BANK GOVERNANCE

Use text field below for additional notes if questions in this section are not specific enough. Please remember to include number of questions to which you refer in your notes.

- 6.1**Have you issued specific guidelines or requirements that explicitly address the following areas in the governance of commercial banks?
- a . Establishment of audit committee.
 - b . Establishment of compensation committee.
 - c . Requirement for a majority of independent directors on board.
 - d . Requirement for a majority of independent directors on audit and compensation committees.
 - e . Structure of remuneration packages for board directors and senior management.
 - f . Public disclosure of remuneration packages for board directors and senior management.
 - g . Board directors' responsibility for accurate and truthful financial and regulatory reporting, including public disclosure.
 - h . Separation of the roles of CEO and board chairperson.
 - i . Provisions covering related-party transactions.
 - j . Fit and proper requirements for board and senior management.
 - k . Existence of independent-risk management function within the bank.
- 6.2**Do the above guidelines or requirements apply uniformly to all banks (e.g. including state-owned and foreign banks)?
- 6.3**How many enforcement actions have you taken over the past five years (2006-2010) based on a breach of any of the above bank governance requirements?
- 6.4**Does the supervisor exercise approval authority with respect to the appointment of...?
- a . Board directors.
 - b . Senior bank management.
- 6.5**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?
- a . Board of directors.
 - b . Senior bank management.
 - c . Other bank staff (e.g. traders).
- 6.5.1**If so, does the supervisory agency have the authority to take regulatory action when it considers that the remuneration or compensation is excessive?
- 6.6**Does the regulatory definition of related parties include the following...?
- a . Significant/controlling shareholders.
 - b . Board directors.
 - c . Relatives of significant/controlling shareholders and board directors.
 - d . Business interests of significant/controlling shareholders, board directors, and their relatives.
- 6.7**Is there a regulatory limit on related-party exposures?
- 6.7.1**If so, what is the limit as a percentage of a bank's regulatory capital?

- 6.8**Have you introduced changes to the bank governance framework in your country as a result of the global financial crisis? Mark the appropriate response below and explain where appropriate.
- a . New requirements on executive compensation.
 - b . Independence of the board.
 - c . Chief risk officer direct reporting line to the board or board committee.
 - d . Existence of a board risk committee.
 - e . Other (please explain).

PART 7: LIQUIDITY & DIVERSIFICATION REQUIREMENTS

Risk concentrations

- 7.1**Are banks limited in their lending to a single borrower or a group of inter-related borrowers?
- 7.1.1**If yes, what is the limit as a percentage of a bank's regulatory capital?
- 7.1.2**Are there any exempted items (e.g. cash-secured lending, government or government-guaranteed lending etc.) in applying the limits?
- 7.2**Are there any regulatory rules or supervisory guidelines regarding asset diversification?
If yes, please explain.
- 7.2.2**Are banks prohibited from making loans abroad?

Regulatory liquidity requirements

- 7.3**Are there regulatory rules or supervisory guidelines regarding the following aspects of banks' liquidity management?
- a . Diversification of funding sources.
 - b . Contingency funding plans, including stress testing.
- 7.3.1**If so, do they also apply for foreign branches?
- a . Diversification of funding sources.
 - b . Contingency funding plans, including stress testing.
- 7.4**Are the following requirements in place in your jurisdiction?
- a . Banks' liquidity management of foreign currencies.
 - b . Central Bank reserve and/or deposit requirements.
 - c . Regulatory minimum ratio on liquid assets (e.g. as a percentage of total balance sheet or deposit base).
 - d . Maturity mismatches/ "gap" limits.
- 7.4.1**Are banks required to hold reserves in foreign currencies or other foreign-denominated instruments in order to fulfill the requirements listed above?

PART 8: DEPOSITOR (SAVINGS) PROTECTION SCHEMES

Organizational arrangements

- 8.1**Is there an explicit deposit insurance protection system for commercial banks?
- 8.2**Is there a legally separate deposit insurance agency?
- a . Yes.
 - b . No - within central bank.
 - c . No - within banking supervision agency.
 - d . No - within ministry of finance.
 - e . Other (please explain).
- 8.2.1**The insurance fund is managed by...:
- a . the private sector alone.
 - b . jointly by private/public officials.
 - c . the public sector alone.
- 8.3**Is the deposit insurance fund used for purposes other than depositor protection (e.g. liquidity provision to banks)?
- 8.4**Does the deposit insurance agency/fund administrator have the following powers as part of its mandate?
- a . Bank examination authority.
 - b . Authority to access information collected by banking supervisors.
 - c . Bank intervention authority.
 - d . Method of failure resolution authority.
 - e . Paybox authority.
- 8.4.1**Does the deposit insurance authority by itself have the legal power to cancel or revoke deposit insurance for any participating bank?
- 8.4.2**Can the deposit insurance agency/fund take legal action for violations of laws, regulations, and bylaws (of the deposit insurance agency) against bank directors or other bank officials?
- 8.4.3**Has the deposit insurance agency/fund ever taken legal action for violations of laws, regulations, and bylaws (of the deposit insurance agency) against bank directors or other bank officials?

Membership and coverage

- 8.5**Is participation in the deposit insurance system compulsory for the following banking entities?
- a . Domestic banks.
 - b . Foreign bank subsidiaries.
 - c . Foreign bank branches.
- 8.6**Are the following types of deposits excluded from deposit insurance coverage?
- a . Foreign currency deposits.
 - b . Interbank deposits.
 - c . Deposits of the foreign branches of domestic banks.
 - d . Deposits of the foreign subsidiaries of domestic banks.

- 8.7**The deposit insurance coverage type is:
- a . Per depositor account.
 - b . Per depositor.
 - c . Per depositor per institution.
 - d . Other (please explain).
- 8.8**What is the basic deposit insurance limit per category of insured deposits as of end of 2010? Please enter amount in thousands of local currency.
- 8.9**Is the coverage amount indexed to prices?
- 8.10**Is there formal coinsurance, i.e. are ALL depositors explicitly insured for less than 100 percent of their deposits?
- 8.11**What percentage of the total deposits of participating commercial banks was actually covered by the scheme as of end of...?
- 2008
 - 2009
 - 2010
- 8.11.1**As a share of total assets, what is the value of large denominated debt liabilities of banks (e.g. subordinated debt, bonds, etc.) that are definitely not covered by any explicit or implicit savings protection scheme?

Funding

- 8.12**Is there an ex ante fund/reserve to cover deposit insurance claims in the event of the failure of a member bank?
- 8.13**Funding is provided by...:
- a . Government.
 - b . Banks.
 - c . Combination/ other (please explain).
- 8.13.1**If prefunded, what is the ratio of accumulated funds to total bank assets as of end of 2010?
- 8.14**Do deposit insurance fees/premiums charged to banks vary based on some assessment of risk?
- 8.15**Is the premium assessed on a participating bank's....?
- a . Insured deposits.
 - b . Total deposits.
 - c . Total assets.
 - d . Other (please explain).

Depositor reimbursement

- 8.16**What event triggers a claim for payment by the deposit insurance system?
- a . Court-declared bank bankruptcy.
 - b . Banking supervisor decision.
 - c . Deposit insurance agency/fund administrator decision.
 - d . Other (please explain).
- 8.17**From the time of the event's trigger, within how many days is the deposit insurance scheme legally obligated to fully reimburse insured depositors?

Other relevant information:

- 8.17.1**In general, how long (in days) does it take in practice to pay depositors in full?
- 8.17.2**Were insured depositors wholly compensated (to the extent of legal protection) the last time a bank failed?
- 8.17.3**Were any deposits not explicitly covered by the deposit insurance scheme at the time of failure compensated the last time a bank failed (excluding funds later paid out in liquidation procedures)?
- 8.18**What happens when the deposit insurance fund is insufficiently large to be able to fully refund depositors?
- a . Call on banks for the shortfall.
 - b . Call on the ministry of finance for the shortfall.
 - c . Borrow money.
 - d . Limit payouts.
 - e . Other (please explain).
- 8.18.1**Has such a situation occurred in the last five years (2006-2010)?
- 8.19**Have you introduced changes to your deposit protection system as a result of the global financial crisis? Mark the appropriate response below and explain where appropriate.
- a . Expansion of coverage (types of exposures, nature of depositors etc.).
 - b . Increase in amount covered.
 - c . Temporary inclusion of guarantees on bank debt.
 - d . Government guarantee of deposits and bank debts.
 - e . Other (please explain).

PART 9: ASSET CLASSIFICATION, PROVISIONING, AND WRITE-OFFS

Asset classification

- 9.1**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?
- 9.1.1**If so, please provide the type and number of different asset classification categories (e.g. 1-5, AAA-CCC, etc.) that you are using in this system
- 9.1.2**Please specify whether it:
- a . Applies to all commercial banks
 - b . Covers all types of borrowers (e.g. including government)
 - c . Covers all loans and advances to a borrower
 - d . Imposes a uniform classification requirement for specific borrowers (e.g. government- and/or state-owned enterprises can only be graded at or above a certain category)
- 9.1.3**After how many days is a loan in arrears classified as ...?: Provide numbers for each of the three loan categories listed.
- a . Substandard?
 - b . Doubtful?
 - c . Loss?

- 9.2**.....Which criteria are taken into account to classify loans and advances as nonperforming ...?:
- a . Significant financial difficulty of the borrower and deterioration in its creditworthiness.
 - b . Breach of contract (e.g. default or delinquency in interest or principal payments).
 - c . Restructuring (i.e. concession granted, for economic or legal reasons relating to the borrower's financial difficulty, that the lender would not otherwise consider).
 - d . Borrower bankruptcy or other financial reorganization.
 - e . Days past due status (please specify number of days).
 - f . Existence of collateral, guarantees and/or other credit mitigants.
 - g . Other (please explain).
- 9.3**.....Does accrued, though unpaid, interest/principal enter the bank's income statement while the loan is classified as nonperforming?
- 9.4**.....Are banks allowed to upgrade the classification of a loan or advance immediately after it has been restructured?
- 9.5**.....If a customer has multiple loans and advances and one of them is classified as nonperforming, are all the other exposures automatically classified as nonperforming as well?

Provisioning of classified loans

- 9.6**.....Are there minimum levels of specific provisions for loans and advances that are set by the regulator?
- 9.6.1**.....If so, are these linked to the regulatory asset classification system mentioned in question 9.1 above?
- 9.6.2**.....Please specify whether these minimum specific provisioning rules...:
- a . Allow for the value of the collateral to be deducted from the amount of a loan or advance before provisioning is applied.
 - b . Apply to all commercial banks.
 - c . Cover all types of borrowers (e.g. including government).
 - d . Cover all loans and advances to a borrower.
 - e . Impose uniform provisioning requirements for specific borrowers (e.g. loans to government and/or state-owned enterprises do not require provisions).
- 9.6.3**.....What is the minimum provisioning required as loans become...
- a . Substandard?
 - b . Doubtful?
 - c . Loss?
- 9.7**.....Is there a regulatory requirement for general provisions on loans and advances?
- 9.7.1**.....If so, what are general provisions based on?
- a . Percentage of gross loans.
 - b . Statistical/countercyclical system of provisioning.
 - c . Other (please explain).

Write-offs

- 9.8**.....Do you require banks to write off nonperforming loans after a specific time period?
- 9.8.1**.....If so, what is the maximum time (in months) that a loan or advance can be nonperforming before it has to be written off?

Other

- 9.9Up to what level (if any) are the following types of provisions tax deductible?
- a . Specific provisions.
 - b . General provisions.

PART 10: ACCOUNTING/INFORMATION DISCLOSURE

Scope of accounting consolidation

- 10.1Are banks required to prepare consolidated accounts for accounting purposes?

Accounting standards

- 10.2.1Are applicable accounting standards for banks in your country prepared in accordance with U.S. Generally Accepted Accounting Principles (GAAP)?
- a . At individual bank level.
 - b . At consolidated level.
- 10.2.2Are applicable accounting standards for banks in your country prepared in accordance with IFRS?
- a . At individual bank level.
 - b . At consolidated level.
- 10.2.3If response to 10.2.1 and 10.2.2 is no, please explain each case under options a and b:
- a . Any major deviations between local and international accounting standards.
 - b . Which authority in your country sets the accounting standards for banks (e.g. banking supervisor, accounting board, etc.).
- 10.2.4Does accrued, though unpaid, interest/principal enter the income statement while the loan is still performing?
- 10.2.5Does accrued, though unpaid, interest/principal enter the income statement while the loan is nonperforming?

Public disclosure standards

- 10.3Are all banks operating in your country (including foreign bank branches) required to make available to the public their annual financial statements?
- a . On an individual basis.
 - b . On a consolidated basis (if applicable).
- 10.4Are banks required to submit their financial statements to the banking supervisor prior to public disclosure?
- 10.4.1If yes, respond yes or no to each option provided below:
- a . Is the supervisor required to review them?
 - b . Can the supervisor require changes to them before they are published?

-
- 10.5**Do banks disclose to the supervisors...?
- a . Full audited financial statements.
 - b . Off-balance-sheet items.
 - c . Governance and risk-management framework.
 - d . Regulatory capital and capital adequacy ratio.
 - e . Transactions with related parties.
 - f . Any other material information (i.e. information which omission or misstatement could change or influence the assessment or decision of a user relying on that information for making decisions).
 - g . Scope of consolidation (including reasons for not including certain entities, where appropriate).
- 10.5.1**Do banks disclose to the public ...?
- a . Full audited financial statements.
 - b . Off-balance-sheet items.
 - c . Governance and risk-management framework.
 - d . Regulatory capital and capital adequacy ratio.
 - e . Transactions with related parties.
 - f . Any other material information (i.e. information which omission or misstatement could change or influence the assessment or decision of a user relying on that information for making decisions).
 - g . Scope of consolidation (including reasons for not including certain entities, where appropriate).
- 10.5.2**.....Are bank directors legally liable if information disclosed is erroneous or misleading?
- 10.6**Do supervisors require banks to publicly disclose...
- a . All fines and settlements resulting from non-compliance with regulations.
 - b . Other information not required by financial reporting standards (e.g. prudential reports). If so, please explain.
- 10.7**Are commercial banks required by supervisors to have external credit ratings?
- 10.8**How many of the top 10 banks (in terms of total domestic assets) are rated by international credit rating agencies (e.g. Moody's, Standard and Poor)?
- 10.9**How many of the top 10 banks (in terms of total domestic assets) are rated by domestic credit rating agencies?

PART 11: DISCIPLINE/ PROBLEM INSTITUTIONS/ EXIT

Enforcement

- 11.1** Please indicate whether the following enforcement powers are available to the supervisory agency.
- a . Cease-and-desist-type orders for imprudent bank practices.
 - b . Forbearance (i.e. to waive regulatory and supervisory requirements).
 - c . Require banks to meet supervisory requirements (e.g. capital, liquidity etc.) that are stricter than the legal or regulatory minimum.
 - d . Require banks to enhance governance, internal controls, and risk management systems.
 - e . Require banks to apply specific provisioning and/or write-off policies.
 - f . Require banks to constitute provisions to cover actual or potential losses.
 - g . Restrict or place conditions on the types of business conducted by bank.
 - h . Withdraw the bank’s license.
 - i . Require banks to reduce/restructure their operations (e.g. via asset sales and branch closures) and adjust their risk profile.
 - j . Require banks to reduce or suspend dividends to shareholders.
 - k . Require banks to reduce or suspend bonuses and other remuneration to bank directors and managers.
 - l . Suspend or remove bank directors.
 - m . Suspend or remove managers.
 - n . Require commitment/action from controlling shareholder(s) to support the bank with new equity (e.g. capital restoration plan).
- 11.1.1** Are bank regulators/supervisors required to make public formal enforcement actions, which include cease and desist orders and written agreements between a bank regulatory/supervisory body and a banking organization?
- 11.2** Please indicate how many times any of the above enforcement actions in the last five years (2006-2010):
- a . Have been contested in court.
 - b . Have been overturned by the court.
- 11.3** Does the supervisory agency operate an early intervention framework (e.g. prompt corrective action) that forces automatic action when certain regulatory triggers/thresholds are breached?
- 11.3.1** If so, what triggers/thresholds are used for initiating automatic actions?
- a . Breach of minimum regulatory capital adequacy ratio.
 - b . Breach of other regulatory requirements (e.g. liquidity ratio, fit and proper criteria).
 - c . Evaluation of likely non-viability given trends and risk factors.
 - d . Other (please specify).

Resolution

- 11.4** Is there a separate bank insolvency framework that is distinct from that of non-financial firms?
- 11.4.1** Is the insolvency framework the same for bank holding companies and banks? If not please explain the differences.

11.5.....Which authority has the powers to perform the following problem bank resolution activities?

Enter the initials of the corresponding authority from the following list of options: BS = Bank Supervisor, C = Court, DIA = Deposit Insurance Agency, BR/AMC = Bank Restructuring or Asset Management Agency, OTH = Other - please specify)."

a . Declare insolvency

Other - (please specify)

b . Supersede shareholders' rights

Other - (please specify)

c . Remove and replace bank senior management and directors

Other - (please specify)

d . Undertake bank resolution mechanisms

Other - (please specify)

e . Appoint and oversee a bank liquidator/receiver

Other - (please specify)

11.6.....Is court approval required for the following bank resolution activities?

a . Declare insolvency

b . Supersede shareholders' rights

c . Remove and replace bank senior management and directors

d . Undertake bank resolution mechanisms

e . Appoint and oversee a bank liquidator/receiver

11.7.....Can the bank shareholders appeal to the court against a resolution decision of the banking supervisor?

11.7.1If yes, how many appeals were made in the past five years (2006-2010)?

11.7.1.1 ...Of which, how many were successful?

11.8.....Can a resolution action against a bank continue if a court action is filed, or does the court appeal lead to the suspension of such action until a ruling is made?

11.9.....Which mechanisms are provided in existing legislation to resolve a problem bank prior to its closure and liquidation?

a . Open bank assistance

b . Purchase and assumption transaction (with or without government support)

c . Government intervention (e.g. via conservatorship or nationalization)

d . Bridge bank

e . Other (please specify)

11.10.1 ...How many banks were resolved in...?

2008

2009

2010

11.10.2 ...How many banks were liquidated in...?

2008

2009

2010

11.11.1What proportion of banking system assets were resolved in...?

- 2008
- 2009
- 2010

11.11.2What proportion of banking system assets were liquidated in...?

- 2008
- 2009
- 2010

11.12Have you introduced significant changes to the bank resolution framework in your country as a result of the global financial crisis?

- a . Introduce a separate bank insolvency framework
- b . Implement coordination arrangements among domestic authorities
- c . Other, please explain

PART 12: SUPERVISION

Institutional structure and mandate

12.1What body/agency supervises commercial banks for prudential purposes?

- a . The central bank.
- b . A single bank supervisory agency / superintendency.
- c . Multiple bank supervisory agencies / superintendencies including the central bank
- d . Multiple bank supervisory agencies / superintendencies excluding the central bank
- e . Other (please explain)

12.1.1Are there any banks that are not under the jurisdiction of this agency?

If yes, please explain.

12.2Is the body/agency in charge of supervising banks also responsible for the supervision of the following financial sectors?

- a . Insurance
- b . Securities
- c . Pension funds
- d . Other (please explain)

12.3Does the body/agency have a specific mandate set out in written form?

12.3.1If so, which of the following financial system responsibilities does the mandate also include?

- a . Systemic/financial stability
- b . Market conduct
- c . Consumer protection
- d . Prevention of financial crime (money laundering / financing of terrorism)
- e . Competition/antitrust policy
- f . Financial market access/development
- g . Deposit insurance
- h . Bank restructuring/resolution
- i . Other (please explain)

-
- 12.3.2**.....Can the supervisory authority force a bank to change its internal organizational structure?
- 12.4**.....To whom is the supervisory agency legally responsible or accountable?
- a . The head of government (e.g. president, prime minister)
 - b . The finance minister or other Cabinet-level official
 - c . A legislative body, such as Parliament or Congress
 - d . Other (please explain)
- 12.5**.....How is the head of the supervisory agency appointed?
- a . Decision of the head of government (e.g. president, prime minister)
 - b . Decision of the finance minister or other Cabinet-level authority
 - c . Decision of a legislative body, such as Parliament or Congress
 - d . Other (please explain)
- 12.5.1**.....Is the appointment based on a recommendation by an external expert or panel of experts?
- 12.6**.....Does the head of the supervisory agency have a fixed term?
- 12.6.1**.....If yes, how long (in years) is the term?
- 12.6.2**.....Is there a maximum number of terms?
- 12.6.3**.....If yes, please respond how many terms are permitted.
- 12.7**.....Can the head of the supervisory agency be removed by...?
- a . Decision of the head of government (e.g. president, prime minister)
 - b . Decision of the finance minister or other Cabinet-level authority
 - c . Decision of a legislative body, such as Parliament or Congress
 - d . Other (please explain)
- 12.8**.....Does the supervisory agency need to obtain approval from the government in order to...?
- a . Issue binding secondary regulations for the banking sector
 - b . Determine its budget
 - c . Obtain funding
 - d . Hire and fire senior staff
 - e . Define salaries and benefits structure of staff
 - f . Define its organizational structure
- 12.9**.....Can individual supervisory staff be held personally liable for damages to a bank caused by their actions or omissions committed in the good faith exercise of their duties?
- 12.9.1**.....If so, has individual supervisory staff been held personally liable in the last five years (2006-2010)?
- 12.10**.....Can the supervisory agency be held legally liable for damages to a bank caused by its actions?
- 12.10.1**.....If so, has the supervisory agency been held legally liable in the last five years (2006-2010)?
- 12.11**.....Is a formal consultation process with the industry and the public required prior to the introduction of new regulations?
- 12.12**.....If an infraction of any prudential regulation is found in the course of supervision, must it be reported?
- 12.12.1**.....Are there mandatory actions that the supervisor must take in these cases?
- 12.12.2**.....Who authorizes exceptions to such actions?
- 12.12.3**.....How many exceptions were granted during the last five years (2006-2010)?
-

Supervisory Approach

- 12.13** Please rank from 1-3 (1 being the most important) the relative importance placed on the following activities in banking supervision. Place ranking next to each option
- a . Analysis and monitoring of compliance and trends observed from reported prudential returns
 - b . Review of the accuracy of reports and of regulatory compliance
 - c . Assessment of the risk profile, strategic direction, financial condition, internal governance and controls, and risk management
- 12.14** The internal organization of banking supervision can be best characterized as...:
- a . Integrated on-site and off-site activities for each entity under a senior/managing supervisor
 - b . Resident supervisory teams in large systemic complex banks and groups
 - c . Existence of specialized examiners (e.g. treasury, IT, risk management) that can be used across different banks
- 12.15** Which of the following best describes the bank risk rating methodology used by your agency?
- a . A rating system using only ratios and indicators built with reported information
 - b . A rating system combining quantitative information with qualitative assessments of management and controls
 - c . 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
 - d . Other (please explain)
- 12.16** Is the intensity and frequency of supervisory activities explicitly linked to the bank's risk rating?
- 12.17** Is the risk rating disclosed to the bank's board?
- 12.18** Do you undertake on-site inspections for material foreign operations (whether in the form of branches or subsidiaries) of your banks or do you only rely on host country supervisors?
- 12.19** How many on-site examinations per bank were performed in the last 5 years (2006-2010)?
- 12.20** How frequently are on-site inspections conducted in large and medium size banks?

Consolidated Supervision

- 12.21** If you do not have an integrated financial supervisory agency covering all significant financial institutions, how is a financial group with significant banking activities supervised?
- a . The banking supervisory agency/body is legally empowered to act as the "lead/supplemental supervisor" and supervises on a consolidated basis
 - b . The banking supervisory agency/body is nominated as the "lead/supplemental supervisor" under informal arrangements between the relevant parties and supervises on a consolidated basis
 - c . There is no "lead/supplemental supervisor" but there is coordination between financial supervisors formalized in memoranda of understanding
 - d . Other (please explain)

Systemic Supervision

12.22Is there a specialized department in your agency dealing with financial stability and systemic supervision?

12.22.1 ..Which of the following factors do you consider in assessing systemic risk?

- a . Bank capital ratios
- b . Bank leverage ratios
- c . Bank profitability ratios
- d . Bank liquidity ratios
- f . Growth in bank credit
- g . Sectorial composition of bank loan portfolios
- h . Foreign exchange position of banks
- i . Bank nonperforming loan ratios
- j . Bank provisioning ratios
- k . Stock market prices
- l . Housing prices
- m. Other (please specify)

12.23Is your agency responsible for publishing a financial stability report?

12.24If your agency is not directly responsible for publishing a financial stability report, do you provide input to the responsible agency for such a report?

12.25Do you conduct stress tests as part of the process of assessing systemic stability?

12.26If you conduct stress tests, at what level are they performed...?

- a . At the bank level
- b . At the system-wide level
- c . Other (please explain)

12.27.....Do you have any countercyclical regulations or tools to dampen boom/bust cycles in credit flows? Enter Yes or No and enter date (in format: MM/DD/YYYY) when they came or will come into effect

- a . Counter cyclical capital requirements

Date:

- b . Countercyclical loan to value ratios

Date:

- c . Granular capital requirements based on loan-to-value ratios

Date:

- d . Countercyclical provisioning requirements

Date:

- e . Temporary restrictions on dividend and bonuses distribution

Date:

12.28Do you supervise systemic institutions in a different way than non-systemic ones?

- 12.29**If yes, do you have any tools to oversee more closely and/or limit the activities of large/ interconnected institutions? Enter Yes or No and enter date (in format: MM/DD/YYYY) when they came or will come into effect.
- a . Additional capital requirements.
Date:
 - b . Additional liquidity requirements.
Date:
 - c . Asset/risk diversification requirements.
Date:
 - d . Restrictions/limits on activities.
Date:
 - e . Restrictions/limits on size of institution.
Date:
 - f . Additional corporate taxes for large institutions.
Date:
 - g . Closer or more frequent supervision.
Date:
 - h . Restrictions on the group's legal structure.
Date:
 - i . Other.
Date:
- If Other, please explain.

Supervisory staff

- 12.30**How many professional bank supervisors are there in total (excluding all support functions and management)?
- 12.31**Of those, how many are specialized in specific bank functions (e.g. IT, treasury) or risks (e.g. credit / market / operational risk)?
- 12.32**What percentage of the supervisors has graduated from a four-year college/university?
- 12.33**What percentage of the supervisors has post-graduate degrees such as MBAs, CPAs or CFAs?
- 12.34**How many hours of training (at the supervisory agency or elsewhere) on average have supervisors had in the last year?
- 12.35**What is the annual average salary of a senior supervisor (someone with 10 or more years of experience in bank supervision)? (In thousands of local currency)
- 12.36**What was the annual total budget for banking supervision during 2010? (In thousands of local currency)
- 12.37**What was the source of this funding?
- a . Allocation from government budget
 - b . Fees and assessments paid by regulated banks
 - c . Other (please explain)
- 12.38**How many of the bank supervisors have more than 10 years' experience in bank supervision?
- 12.39**What is the average tenure of banking supervisors (i.e. what is the average number of years that staffs have been supervisors)?

PART 13: BANKING SECTOR CHARACTERISTICS

Size

13.1How many commercial banks were there at the end of...?

2008

2009

2010

13.1.1Of all deposit taking institutions in your country, what fraction of their assets is held by just commercial banks at the end of...?

2008

2009

2010

13.2What were the total assets of all commercial banks at the end of...? (In thousands of local currency)

2008

2009

2010

13.3What was the total equity of all commercial banks at the end of...? (In thousands of local currency)

2008

2009

2010

13.4What were the total deposits of all commercial banks at the end of...? (In thousands of local currency)

2008

2009

2010

13.5What were the total loans of all commercial banks at the end of...? (In thousands of local currency)

2008

2009

2010

Structure of the banking sector

13.6Of commercial banks in your country, what percent of total assets was held by the five largest banks at the end of...?

2008

2009

2010

13.6.1Of commercial banks in your country, what percent of total deposits was held by the five largest banks at the end of...?

2008

2009

2010

13.7.1What percent of the banking system's assets was in banks that were government-controlled (e.g. where government owned 50 percent or more equity) at the end of...?

2008

2009

2010

13.7.2What percent of the banking system's assets was in banks that were foreign-controlled (e.g. where foreigners owned 50 percent or more equity) at the end of...?

2008

2009

2010

13.8What percent of the total foreign-owned bank assets in your domestic banking system was held in branches as opposed to other juridical forms (e.g. subsidiaries) at the end of...?

2008

2009

2010

Performance

13.9What was the after-tax return on equity for the commercial banking system at the end of...?

2008

2009

2010

13.10What was the aggregate net interest margin for the commercial banking system at the end of...? (In thousands of local currency)

2008

2009

2010

13.11What percent of the commercial banking system's total gross income was in the form of non-interest income in at the end of...?

2008

2009

2010

13.12What was the aggregate operating-costs-to-assets ratio for the commercial banking system at the end of...?

2008

2009

2010

13.13What was the ratio of nonperforming loans (gross of provisions) to total gross loans at the end of ...?

2008

2009

2010

13.14What was the ratio of specific provisions to gross nonperforming loans at the end of...?

2008

2009

2010

13.15What was the ratio of general provisions to total gross loans at the end of...?

2008

2009

2010

Asset and liabilities composition

13.16What percent of the commercial banking system's assets was foreign-currency denominated at the end of...?

2008

2009

2010

13.17What percent of the commercial banking system's liabilities was foreign-currency denominated at the end of...?

2008

2009

2010

13.18What percent of the commercial banking system's assets was in public sector claims at the end of...?

2008

2009

2010

13.19What percent of the commercial banking system's assets is funded with deposits at the end of...?

2008

2009

2010

13.20What percentage of total bank assets were residential real estate loans at the end of...?

2008

2009

2010

13.21What percentage of total bank assets were commercial real estate loans at the end of...?

2008

2009

2010

13.22What percentage of residential real estate loans were securitized at the end of...?

2008

2009

2010

Other

13.23.....What is the statutory corporate tax rate on domestic bank income as of end of 2010?

13.24.....What was the effective tax rate on the aggregate commercial banking system's pre-tax income at the end of 2010?

PART 14: CONSUMER PROTECTION

14.1.....Does your agency have the responsibility to implement, oversee, and/or enforce any aspect of financial consumer protection laws and regulations that apply to banks?

- a . Yes
- b . No, financial consumer protection laws and regulations are implemented, overseen, and enforced by other government agencies.
- c . Other (please describe)

14.2.....If your agency has the responsibility to implement, oversee and/or enforce any aspect of financial consumer protection laws, is there a separate unit or team designated to work on consumer protection in your agency?

- a . Yes
- b . No
- c . Does not apply

14.3.....What actions can your agency take to enforce consumer protection laws and regulations?

- a . Issue warnings to financial institutions
- b . Require providers to refund excess charges.
- c . Require providers to withdraw misleading advertisements.
- d . Impose fines and penalties.
- e . Issue public notice of violations.
- f . Withdraw the offending provider's license to operate.
- g . Other (please specify).

14.4.....Please indicate the number of times the actions stated above in 14.3 were taken in the past five years (2006-2010)

- a . Issue warnings to financial institutions.
- b . Require providers to refund excess charges.
- c . Require providers to withdraw misleading advertisements.
- d . Impose fines and penalties.
- e . Issue public notice of violations.
- f . Withdraw the offending provider's license to operate.
- g . Other (please specify).

14.5.....By law or regulations, are banks required to notify consumers in writing of pricing, terms, and conditions of financial products prior to signing an agreement?

-
- 14.6**By law or regulation, which of the following are part of the disclosure requirements mentioned in 14.5 that banks need to comply with upon signing any financial product contract:
- a . Plain language requirement (Clear and simple language that can be readily understood by any customer).
 - b . Local language requirement.
 - c . Prescribed standardized disclosure format (e.g. one-page “Key Facts” document).
 - d . Clearly spell out recourse rights and processes.
- 14.7**By law or regulation, which of the following are part of the disclosure requirements mentioned in 14.5 that banks need to comply with upon signing a deposit contract:
- a . Annual percentage yield and interest rate.
 - b . Method of compounding.
 - c . Minimum balance requirements.
 - d . Fees and penalties.
 - e . Early withdrawal penalties.
- 14.8**By law or regulation, which of the following are part of the disclosure requirements mentioned in 14.5 that banks need to comply with upon signing a credit contract:
- a . Annual percentage rate using a standard formula.
 - b . Fees.
 - c . Computation method (average balance, interest).
 - d . Required insurance.
- 14.9**By law or regulation, are banks required to provide their customers with a periodic statement of their accounts?
- a . Yes, periodic statement must be provided free of charge with the following frequency:
 - i. Monthly
 - ii. Quarterly
 - iii. Annually
 - iv. Other
 - b . No, but a statement can be provided free of charge upon customer request.
 - c . No, but customer can purchase this additional service.
 - d . Regulations do not specify.
- 14.10**By law or regulation, which of the following are parts of the disclosure requirements for periodic statements for deposit products?
- a . Annual percentage yield calculated using a standard formula.
 - b . Amount of interest earned.
 - c . Fees imposed.
 - d . Account balance.

- 14.11**.....By law or regulation, which of the following are parts of the disclosure requirements for periodic statements for credit products?
- a . All transactions concerning the account for the period covered by the statement
 - b . Annual percentage rate (applied during the period)
 - c . Interest charged for the period
 - d . Fees charged for the period
 - e . Minimum amount due
 - f . Date due
 - g . Outstanding balance
- 14.12**.....Are there specific provisions in the existing laws or regulations that restrict:
- a . Deceptive advertising
 - b . Unfair or high-pressure selling practices
 - c . Abusive collection practices
 - d . Unauthorized use of client data or breach of client confidentiality
- 14.13**.....Does any law or regulation set standards for complaints resolution and handling by financial institutions, including:
- a . Requirement for financial institutions to implement procedures and processes for resolving customer complaints
 - b . Timeliness of response by financial institution
 - c . Accessibility (i.e. can a complaint be filed with a local branch, by phone, etc.)
- 14.14**.....Is there a system in place that allows a customer of a financial institution to seek affordable and efficient recourse with a third party (a financial ombudsman or equivalent institution) in the event that the customer's complaint is not resolved to the customer's satisfaction under internal procedures of the relevant financial institution?
- a . Yes, financial ombudsman
 - b . Yes, general ombudsman
 - c . Yes, a mediation service
 - d . No, dispute has to be resolved in court

APPENDIX TABLE 2: COUNTRIES PARTICIPATING IN WORLD BANK SURVEYS

Country	Survey I	Survey II	Survey III	Survey IV	All four surveys
Albania	X	X			
Algeria		X	X		
Angola			X	X	
Anguilla		X	X		
Antigua and Barbuda		X	X		
Argentina	X	X	X	X	X
Armenia	X	X	X	X	X
Aruba	X	X			
Australia	X	X	X	X	X
Austria	X	X	X	X	X
Azerbaijan	X	X			
Bahrain	X	X	X	X	X
Bangladesh	X		X	X	
Belarus	X	X	X	X	X
Belgium	X	X	X	X	X
Belize		X	X	X	
Benin		X	X	X	
Bhutan	X	X	X	X	X
Bolivia	X	X	X		
Bosnia and Herzegovina	X	X	X	X	X
Botswana	X	X	X	X	X
Brazil	X	X	X	X	X
Bulgaria	X	X	X	X	X
Burkina Faso		X	X	X	
Burundi	X	X	X	X	X
Cambodia	X	X			
Cameroon		X	X		
Canada	X	X	X	X	X
Cayman Islands	X		X	X	
Central African Republic		X	X		
Chad		X	X		
Chile	X	X	X	X	X
China	X		X	X	
Colombia		X	X	X	
Congo, Rep.		X	X		
Cook Islands			X	X	
Costa Rica		X	X	X	
Côte d'Ivoire		X	X	X	
Croatia	X	X	X	X	X
Cyprus	X	X	X	X	X
Czech Republic	X	X	X		
Denmark	X	X	X	X	X
Dominica		X	X		
Dominican Republic			X	X	
Ecuador		X		X	

MEASURE IT, IMPROVE IT: BANK REGULATION AND SUPERVISION IN 180 COUNTRIES 1999 – 2011

appendix table 2 continued

Country	Survey I	Survey II	Survey III	Survey IV	All four surveys
Egypt	X	X	X	X	X
El Salvador	X	X	X	X	X
Equatorial Guinea		X	X		
Estonia	X	X	X	X	X
Ethiopia			X	X	
Fiji		X	X	X	
Finland	X	X	X	X	X
France	X	X	X	X	X
Gabon		X	X		
Gambia	X	X		X	
Georgia	X				
Germany	X	X	X	X	X
Ghana	X	X	X	X	X
Gibraltar	X	X	X	X	X
Greece	X	X	X	X	X
Grenada		X	X		
Guatemala	X	X	X	X	X
Guernsey	X	X	X	X	X
Guinea		X			
Guinea-Bissau		X	X	X	
Guyana	X	X	X	X	X
Honduras	X	X	X	X	X
Hong Kong, China		X	X	X	
Hungary	X	X	X	X	X
Iceland	X	X	X	X	X
India	X	X	X	X	X
Indonesia	X		X	X	
Iraq				X	
Ireland	X	X	X	X	X
Isle of Man		X	X	X	
Israel	X	X	X	X	X
Italy	X	X	X	X	X
Jamaica	X		X	X	
Japan	X	X	X		
Jersey		X	X	X	
Jordan	X	X	X	X	X
Kazakhstan	X	X	X	X	X
Kenya	X	X	X	X	X
Korea, Rep.	X	X	X	X	X
Kosovo			X	X	
Kuwait	X	X	X	X	X
Kyrgyz Republic	X	X	X	X	X
Latvia	X	X	X	X	X
Lebanon	X	X	X	X	X
Lesotho	X	X	X	X	X
Liechtenstein	X	X	X	X	X
Lithuania	X	X	X	X	X

appendix table 2 continued

Country	Survey I	Survey II	Survey III	Survey IV	All four surveys
Luxembourg	X	X	X	X	X
Macao, China	X	X	X	X	X
Macedonia	X	X	X		
Madagascar		X		X	
Malawi	X		X	X	
Malaysia	X	X	X	X	X
Maldives	X		X	X	
Mali		X	X	X	
Malta	X	X	X	X	X
Mauritius	X	X	X	X	X
Mexico	X	X	X	X	X
Moldova	X	X	X	X	X
Montenegro				X	
Montserrat		X	X		
Morocco	X	X	X	X	X
Mozambique			X	X	
Myanmar				X	
Namibia	X	X		X	
Nepal	X			X	
Netherlands	X	X	X	X	X
New Zealand	X	X	X	X	X
Nicaragua		X	X	X	
Niger		X	X	X	
Nigeria	X	X	X	X	X
Norway		X	X	X	
Oman	X	X	X	X	X
Pakistan		X	X	X	
Palestinian Territory				X	
Panama	X	X	X	X	X
Papua New Guinea		X	X		
Paraguay		X		X	
Peru	X	X	X	X	X
Philippines	X	X	X	X	X
Poland	X	X	X	X	X
Portugal	X	X	X	X	X
Puerto Rico	X	X		X	
Qatar	X	X		X	
Romania	X	X	X	X	X
Russia	X	X	X	X	X
Rwanda	X	X			
Saint Kitts and Nevis	X	X	X		
Saint Lucia		X	X		
Saint Vincent and the Grenadines		X	X		
Samoa (Western)	X	X		X	
Saudi Arabia	X	X	X		
Senegal		X	X	X	
Serbia				X	

MEASURE IT, IMPROVE IT: BANK REGULATION AND SUPERVISION IN 180 COUNTRIES 1999 – 2011

appendix table 2 continued

Country	Survey I	Survey II	Survey III	Survey IV	All four surveys
Serbia and Montenegro		X			
Seychelles	X	X	X	X	X
Sierra Leone				X	
Singapore	X	X	X	X	X
Slovakia	X	X	X	X	X
Slovenia	X	X	X	X	X
Solomon Islands	X				
South Africa	X	X	X	X	X
Spain	X	X	X	X	X
Sri Lanka	X	X	X	X	X
Sudan		X			
Suriname		X	X	X	
Swaziland		X		X	
Sweden	X	X	X		
Switzerland	X	X	X	X	X
Syria			X	X	
Taiwan	X	X	X	X	X
Tajikistan	X	X	X	X	X
Tanzania			X	X	
Thailand	X	X	X	X	X
Togo		X	X	X	
Tonga	X	X		X	
Trinidad and Tobago	X	X	X	X	X
Tunisia		X		X	
Turkey	X	X		X	
Turkmenistan	X	X			
Turks and Caicos Islands	X	X			
Uganda			X	X	
Ukraine		X		X	
United Arab Emirates		X		X	
United Kingdom	X	X	X	X	X
United States	X	X	X	X	X
Uruguay		X	X	X	
Vanuatu	X	X	X	X	X
Venezuela	X	X	X	X	X
Vietnam	X				
Virgin Islands, British	X	X	X	X	X
Yugoslavia	X				
Yemen				X	
Zambia	X				
Zimbabwe		X	X	X	
Total number of countries	118	151	143	143	84
Total number of questions	180	275	300	270	

APPENDIX TABLE 3: WORLD BANK SURVEY IV - COUNTRIES CLASSIFIED BY INCOME AND REGION (TOTAL 136 COUNTRIES)*

	High income (43)	Upper middle income (38)	Lower middle income (33)	Lower income (22)
Americas (26 countries)	Canada Cayman Islands Puerto Rico Trinidad and Tobago United States	Argentina Brazil Chile Colombia Costa Rica Dominican Republic Ecuador Jamaica Mexico Panama Peru Suriname Uruguay Venezuela	Belize El Salvador Guatemala Guyana Honduras Nicaragua Paraguay	
Asia Pacific (21 countries)	Australia Korea, Rep. New Zealand Singapore	China Malaysia Maldives Thailand Samoa (Western)	Bhutan Fiji India Indonesia Pakistan Philippines Sri Lanka Tonga Vanuatu	Bangladesh Myanmar Nepal
Europe and Central Asia (44 countries)	Austria Belgium Croatia Cyprus Denmark Estonia Finland France Germany Gibraltar Greece Hungary Iceland Ireland Isle of Man Italy Liechtenstein Luxembourg Netherlands Norway Poland Portugal Slovakia Slovenia Spain Switzerland United Kingdom	Belarus Bosnia and Herzegovina Bulgaria Kazakhstan Latvia Lithuania Montenegro Romania Russia Serbia Turkey	Armenia Kosovo Moldova Ukraine	Kyrgyz Republic Tajikistan
Middle East and North Africa (15 countries)	Bahrain Israel Kuwait Malta Oman Qatar United Arab Emirates	Jordan Lebanon Tunisia	Egypt Iraq Morocco Syria Yemen	

appendix table 3 continued

	High income (43)	Upper middle income (38)	Lower middle income (33)	Lower income (22)
Sub-Saharan Africa (30 countries)		Botswana Mauritius Namibia Seychelles South Africa	Angola Côte d'Ivoire Ghana Lesotho Mauritania Nigeria Senegal Swaziland	Benin Burkina Faso Burundi Ethiopia Gambia Guinea-Bissau Kenya Madagascar Malawi Mali Mozambique Niger Sierra Leone Tanzania Togo Uganda Zimbabwe

Note: * denotes that 7 regions including Cook Islands, Guernsey, Hong Kong China, Macao China, Palestinian Territory, Taiwan, and Virgin Islands, British provided responses to Survey IV, but are not in the World Bank country list.

APPENDIX TABLE 4: INFORMATION ON BANK STRUCTURAL, REGULATORY, SUPERVISORY, AND DEPOSIT INSURANCE VARIABLES

Variable	Number of countries providing information	Mean	Median	Standard deviation	Minimum value	Maximum value
1. Bank activity regulatory variables						
(a) Securities activities	137	1.80	2.00	0.92	1.00	4.00
(b) Insurance activities	138	2.53	2.00	0.82	1.00	4.00
(c) Real estate activities	137	2.87	3.00	1.08	1.00	4.00
2. Mixing banking / commerce regulatory variables						
(a) Bank ownership of non-financial firms	137	2.94	3.00	1.00	1.00	4.00
(b) Non-financial firm ownership of banks	131	2.22	2.00	0.67	1.00	4.00
3. Competition regulatory variables						
(a) Limitations on foreign bank ownership of domestic banks	140	0.97	1.00	0.17	0.00	1.00
(b) Limitations on foreign bank entry	135	2.70	3.00	0.63	0.00	3.00
(c) Entry into banking requirements	143	7.82	8.00	0.46	5.00	8.00
4. Capital regulatory variables						
(a) Overall capital stringency	140	5.04	5.00	1.53	2.00	7.00
(b) Initial capital stringency	142	2.29	2.00	0.76	0.00	3.00
(c) Capital regulatory index	140	7.36	8.00	1.72	2.00	10.00
(d) Maximum capital percentage by single owner	50	46.58	22.50	40.44	0.00	100.00
5. Official supervisory action variables						

appendix table 4 continued

Variable	Number of countries providing information	Mean	Median	Standard deviation	Minimum value	Maximum value
(a) Official supervisory power	142	10.74	11.00	2.44	5.00	14.00
(1) Prompt corrective action	138	4.48	6.00	2.11	0.00	6.00
(2) Restructuring power	133	2.11	2.00	1.09	0.00	3.00
(3) Declaring insolvency power	129	1.00	1.00	0.81	0.00	2.00
(b) Supervisory forbearance discretion	143	1.14	1.00	0.92	0.00	4.00
(c) Loan classification stringency	83	554.75	630.00	189.98	153.00	1260.00
(d) Provisioning stringency	85	162.82	170.00	44.30	0.00	300.00
(e) Liquidity / diversification index	141	1.40	1.00	0.64	0.00	2.00
6. Official supervisory resource variables						
(a) Supervisors per bank	111	3.93	2.67	4.05	0.10	25.26
(b) Bank supervisor years per bank	99	42.15	19.50	57.32	0.41	328.42
(c) Supervisor tenure	110	8.55	8.00	3.95	1.00	21.00
(d) On-site examination frequency	119	4.06	4.00	2.90	0.00	18.00
(e) Independence of supervisory authority	132	1.92	2.00	0.81	0.00	3.00
7. Private monitoring variables						
(a) Certified audit required	137	0.96	1.00	0.21	0.00	1.00
(b) Percent of 10 biggest banks rated by international rating agencies	115	57.35	70.00	40.07	0.00	100.00
(c) Accounting disclosure insurance scheme	142	3.56	4.00	0.57	1.33	4.00
(d) No explicit deposit insurance scheme	129	0.34	0.00	0.48	0.00	1.00
(e) Private monitoring index	122	7.79	8.00	1.40	4.00	11.00
8. Deposit insurance scheme variables						
(a) Deposit insurer power	100	1.10	1.00	1.26	0.00	4.00
(b) Extra deposit insurance coverage	102	0.72	1.00	0.45	0.00	1.00
(c) Deposit insurance payout delay	41	101.71	30.00	189.58	1.00	1095.00
(d) Deposit insurance funds to total bank assets	52	0.07	0.01	0.19	-0.060	0.81
(e) Moral hazard index	89	1.11	1.00	0.82	0.00	3.00
9. Market structure indicators						
(a) Bank concentration	122	71.89	75.14	19.97	14.00	100.00
(b) Foreign bank ownership	117	49.34	48.60	33.66	0.00	100.00
(c) Government-owned banks	118	15.31	8.85	18.06	0.00	73.70
(d) Number of new banks	128	11.71	5.00	34.06	0.00	371.00
(1) New domestic banks	127	4.36	1.00	17.95	0.00	192.00
(2) New foreign banks	123	7.68	3.00	17.80	0.00	179.00
(e) No entry application	126	0.90	1.00	0.29	0.00	1.00
(1) No domestic applications	125	0.63	1.00	0.48	0.00	1.00
(2) No foreign applications	123	0.85	1.00	0.36	0.00	1.00
(f) Fraction of entry applications denied	108	0.12	0.00	0.23	0.00	1.00
(1) Foreign denials	108	0.09	0.00	0.21	0.00	1.00
(2) Domestic denials	124	0.11	0.00	0.28	0.00	1.00

APPENDIX TABLE 5: INFORMATION ON BANK STRUCTURAL, REGULATORY, SUPERVISORY, AND DEPOSIT INSURANCE VARIABLES: AVERAGES BY INCOME LEVEL

Variable	High income	Upper middle income	Lower middle income	Lower income	Developed countries	Developing or emerging markets	Offshore centers
1. Bank activity regulatory variables							
(a) Securities activities	1.36	1.92	2.16	2.05	1.37	1.97	1.71
(b) Insurance activities	2.48	2.54	2.77	2.52	2.33	2.63	2.50
(c) Real estate activities	2.60	2.91	3.22	3.05	2.50	3.02	3.00
2. Mixing banking / commerce regulatory variables							
(a) Bank ownership of non-financial firms	2.67	2.83	3.29	3.14	2.63	3.06	2.50
(b) Non-financial firm ownership of banks	2.20	2.00	2.29	2.60	2.23	2.25	2.00
3. Competition regulatory variables							
(a) Limitations on foreign bank ownership of domestic banks	0.98	1.00	0.97	0.90	1.00	0.96	1.00
(b) Limitations on foreign bank entry	2.88	2.70	2.67	2.30	3.00	2.56	3.00
(c) Entry into banking requirements	7.67	7.87	7.97	7.86	7.74	7.86	7.71
4. Capital regulatory variables							
(a) Overall capital stringency	5.26	4.95	5.22	4.64	5.13	5.03	4.86
(b) Initial capital stringency	1.81	2.49	2.55	2.64	1.65	2.53	2.21
(c) Capital regulatory index	7.07	7.46	7.84	7.36	6.77	7.61	7.07
(d) Maximum capital percentage by single owner	47.64	65.81	39.49	24.36	47.00	45.90	41.67
5. Official supervisory action variables							
(a) Official supervisory power	10.80	10.95	10.63	10.49	10.67	10.75	11.11
(1) Prompt corrective action	4.21	4.13	4.97	5.00	4.00	4.63	4.54
(2) Restructuring power	2.18	2.40	1.92	1.86	2.09	2.10	2.50
(3) Declaring insolvency power	0.82	1.31	0.82	1.05	0.78	1.06	0.90
(b) Supervisory forbearance discretion	1.37	1.10	0.96	0.74	1.49	0.98	1.55
(c) Loan classification stringency	523.60	491.48	567.59	654.73	537.63	559.62	524.00
(d) Provisioning stringency	130.69	166.88	169.23	182.50	104.50	170.03	185.00
(e) Liquidity / diversification index	1.60	1.33	1.18	1.36	1.61	1.31	1.50
6. Official supervisory resource variables							
(a) Supervisors per bank	2.30	5.39	5.36	2.20	2.32	4.95	0.86
(b) Bank supervisor years per bank	19.51	52.66	42.02	17.77	20.44	43.42	5.83
(c) Supervisor tenure	8.49	9.76	7.83	8.08	8.83	8.78	6.81
(d) On-site examination frequency	3.82	4.14	4.40	4.62	4.19	4.20	2.64
(e) Independence of supervisory authority	2.08	1.94	1.87	1.82	2.11	1.92	1.67
7. Private monitoring variables							
(a) Certified audit required	0.98	0.92	0.97	1.00	0.97	0.96	0.93
(b) Percent of 10 biggest banks rated by international rating agencies	70.24	59.52	48.42	15.00	75.33	50.92	54.40
(c) Accounting disclosure insurance scheme	3.60	3.49	3.61	3.41	3.63	3.53	3.57
(d) No explicit deposit insurance scheme	0.22	0.42	0.42	0.40	0.19	0.40	0.50
(e) Private monitoring index	8.35	7.66	7.46	7.43	8.44	7.63	7.43

appendix table 5 continued

Variable	High income	Upper middle income	Lower middle income	Lower income	Developed countries	Developing or emerging markets	Offshore centers
8. Deposit insurance scheme variables							
(a) Deposit insurer power	1.08	0.93	1.12	1.64	1.23	1.10	0.11
(b) Extra deposit insurance coverage	0.68	0.73	0.80	0.73	0.72	0.77	0.11
(c) Deposit insurance payout delay	90.83	45.79	225.67	180.00	67.50	124.20	90.00
(d) Deposit insurance funds to total bank assets	0.005	0.11	0.18	0.01	0.002	0.11	
(e) Moral hazard index	1.25	1.04	0.81	1.38	1.32	1.02	0.75
9. Market structure indicators							
(a) Bank concentration	70.42	74.81	72.47	71.93	68.66	73.53	68.52
(b) Foreign bank ownership	46.32	49.39	49.95	44.16	40.46	48.76	82.37
(c) Government-owned banks	10.03	19.95	17.05	18.04	9.96	18.51	6.88
(d) Number of new banks	16.44	15.68	6.27	6.12	20.33	10.74	5.79
(1) New domestic banks	4.82	6.59	3.03	2.27	6.58	4.23	0.86
(2) New foreign banks	11.63	9.08	3.23	3.86	13.75	6.51	4.93
(e) No entry application	0.97	0.95	0.77	1.00	0.96	0.91	0.86
(1) No domestic applications	0.73	0.64	0.63	0.60	0.76	0.64	0.31
(2) No foreign applications	0.97	0.84	0.73	0.93	0.96	0.83	0.86
(f) Fraction of entry applications denied	0.06	0.15	0.16	0.19	0.03	0.16	0.02
(1) Foreign denials	0.04	0.09	0.14	0.20	0.02	0.12	0.02
(2) Domestic denials	0.07	0.19	0.17	0.00	0.02	0.16	0.00

APPENDIX TABLE 6: GROUPINGS OF COUNTRIES BY DEVELOPMENT STATUS

Developed countries (31)	Developing countries (101)			Offshore centers (14)
Australia	Angola	India	Paraguay	
Austria	Argentina	Indonesia	Peru	
Belgium	Armenia	Iraq	Philippines	
Canada	Bahrain	Jamaica	Poland	
Cyprus	Bangladesh	Jordan	Qatar	
Denmark	Belarus	Kazakhstan	Romania	
Estonia	Belize	Kenya	Russia	
Finland	Benin	Kosovo	Samoa (Western)	
France	Bhutan	Kuwait	Senegal	
Germany	Bosnia and Herzegovina	Kyrgyz Republic	Serbia	Bahrain
Greece	Botswana	Latvia	Seychelles	Belize
Hong Kong, China	Brazil	Lebanon	Sierra Leone	Cayman Islands
Iceland	Bulgaria	Lesotho	South Africa	Gibraltar
Ireland	Burkina Faso	Lithuania	Sri Lanka	Guernsey
Israel	Burundi	Madagascar	Suriname	Isle of Man
Italy	Chile	Malawi	Swaziland	Jersey
Korea, Rep.	China	Malaysia	Syria	Lebanon
Luxembourg	Colombia	Maldives	Tajikistan	Liechtenstein
Malta	Costa Rica	Mali	Tanzania	Macao, China
Netherlands	Côte d'Ivoire	Mauritius	Thailand	Mauritius
New Zealand	Croatia	Mexico	Togo	Panama
Norway	Dominican Republic	Moldova	Tonga	Vanuatu
Portugal	Ecuador	Montenegro	Trinidad and Tobago	Virgin Islands, British
Singapore	Egypt	Morocco	Tunisia	
Slovak Republic	El Salvador	Mozambique	Turkey	
Slovenia	Ethiopia	Myanmar	Uganda	
Spain	Fiji	Namibia	Ukraine	
Sweden	Gambia	Nepal	United Arab Emirates	
Switzerland	Ghana	Nicaragua	Uruguay	
Taiwan	Guatemala	Niger	Vanuatu	
United Kingdom	Guinea-Bissau	Nigeria	Venezuela	
United States	Guyana	Oman	Yemen	
	Honduras	Pakistan	Zimbabwe	
	Hungary	Panama		

APPENDIX TABLE 7: ARE APPLICABLE ACCOUNTING STANDARDS FOR BANKS IN YOUR COUNTRY PREPARED IN ACCORDANCE WITH IFRS OR U.S. GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (GAAP)?

IFRS					GAAP
Armenia	Denmark	Italy	Maldives	Singapore	
Australia	Egypt	Jamaica	Malta	Slovakia	
Austria	Estonia	Jersey	Mauritius	Slovenia	
Bahrain	Ethiopia	Jordan	Montenegro	South Africa	
Bangladesh	Fiji	Kenya	Morocco	Spain	
Belarus	France	Korea, Rep.	Namibia	Sri Lanka	
Belgium	Germany	Kosovo	Netherlands	Swaziland	Angola
Belize	Ghana	Kuwait	New Zealand	Syria	Ecuador
Bhutan	Gibraltar	Kyrgyz Republic	Nicaragua	Tajikistan	Nigeria
Bosnia and Herzegovina	Greece	Latvia	Norway	Tanzania	Puerto Rico
Botswana	Guatemala	Lebanon	Pakistan	Tonga	Tunisia
Brazil	Guyana	Lesotho	Palestinian Territory	Trinidad and Tobago	United States
Bulgaria	Honduras	Liechtenstein	Philippines	Turkey	
Burundi	Hong Kong	Lithuania	Poland	Uganda	
Canada	Iceland	Luxembourg	Portugal	Ukraine	
Chile	Indonesia	Macao, China	Qatar	United Arab Emirates	
China	Iraq	Madagascar	Romania	United Kingdom	
Croatia	Ireland	Malawi	Serbia	Uruguay	
Cyprus	Isle of Man	Malaysia	Seychelles	Zimbabwe	

Note: Countries whose accounting standards for banks are in accordance with BOTH IRS AND GAAP are Cayman Islands, Cook Islands, Guernsey, Israel, Mozambique, Myanmar, Oman, Panama, Samoa (Western), Switzerland, Vanuatu, Venezuela, Virgin Islands (British), and Yemen.

Countries whose accounting standards for banks are in accordance with NEITHER IRS NOR GAAP are Argentina, Benin, Burkina Faso, Colombia, Costa Rica, Côte d'Ivoire, Dominican Republic, El Salvador, Finland, Gambia, Guinea-Bissau, Hungary, India, Mali, Mexico, Moldova, Niger, Paraguay, Peru, Russia, Senegal, Sierra Leone, Suriname, Taiwan, Thailand, and Togo.

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