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Institutional arrangements for financial sector supervision

Results of the 2006 FSI Survey

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Foreword

It is a pleasure for me to introduce the latest occasional paper published by the Financial Stability Institute. These papers are intended to promote an awareness of, and provide information on, topics of interest to financial sector supervisors, as well as to address issues currently driving change in financial markets.

The paper explores the topic of institutional arrangements for financial sector supervision, including recent trends, and the key players involved in financial sector supervision and monitoring of overall financial stability. The paper also addresses issues related to cross-sectoral and cross-border supervisory approaches. We believe the information contained in this paper is relevant to central bankers and financial sector supervisors globally, most especially those who are currently reviewing the structure of their supervisory arrangements.

I would like to take this opportunity to thank Mr William Tiernay of the Board of Governors of the Federal Reserve System and Ms Verónica Vallés, formerly of the Central Bank of Argentina, both of whom provided excellent assistance in the analysis of the survey results.

Josef Tošovský
Chairman
Financial Stability Institute
September 2007

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Executive summary

This paper reports the main findings of a survey of institutional arrangements for financial sector supervision recently undertaken by the Financial Stability Institute (FSI). The survey's goals included gaining a better understanding of the evolution and current state of institutional arrangements for financial sector supervision globally, and identifying the predominant features of supervisory structures at year-end 2006. The results of the survey highlight that there are a variety of approaches to structuring financial sector supervision and, therefore, national jurisdictions should determine what best suits the characteristics of their own financial systems.

The FSI survey confirms that the last 20 years, and especially the last decade, have been a period of change in institutional arrangements for financial sector supervision in many jurisdictions. About half of the 125 responding jurisdictions experienced a change in either the domicile of their banking supervision authority or the level of integration of supervisory functions across major sectors of the domestic financial system, or both.

Central banks have been, and continued to be at year-end 2006, the dominant domicile for banking supervision across the jurisdictions surveyed. Central banks are responsible for banking supervision in 83 of the 125 (66%) responding jurisdictions. Institutional changes over the last 20 years, particularly during the last decade, show a significant decline in the number of banking authorities domiciled within a department of the government (eg Ministry of Finance) and an increase in the number of banking authorities domiciled in a separate supervisory agency.

The survey results indicate that in some regions the direction of change is towards greater integration of financial sector supervisory authorities. This has been particularly true in Europe and Latin America. While there has been a meaningful movement towards more integrated supervisory structures, it should be noted that slightly more than half of the jurisdictions responding to the survey have supervisory structures that are neither partially nor fully integrated. Non-integrated authorities were the dominant category in 1987 and remained the dominant category in 2006.

The number of jurisdictions in which a partially or fully integrated financial sector supervisory authority is domiciled within the central bank has increased over the last 20 years. The survey results indicate, however, that the shift towards greater integration of financial sector supervision has often coincided with a decision to move the banking supervision authority outside the central bank. A related finding is that when supervisory authorities are domiciled outside the central bank there is a higher propensity to create a financial stability department within the central bank. Most central banks that have created a financial stability department did so during the last decade.

Ad hoc meetings were cited most frequently as a technique for dealing with both cross-sectoral and cross-border issues during both normal times and times of financial system stress. Supervisors also make use of memoranda of understanding (MOUs) and informal contacts to deal with cross-sectoral and cross-border issues.

As regards supervisory challenges, harmonising supervisory approaches across financial sectors (74% of respondents) and creating a consistent regulatory framework across financial sectors (69% of respondents) were identified as key among the challenges supervisors face.

Introduction

Financial stability, a situation where the financial system is both operating efficiently and able to withstand relatively large economic and financial shocks, is a prerequisite for sustained, non-inflationary economic growth. The maintenance of financial stability is, therefore, an important concern of central banks and financial sector supervision[1] authorities worldwide. It is also an ongoing challenge, in part because of the rapid innovation and continuous structural evolution that characterise financial systems. Relatively recent changes have included the development of a wide array of new financial instruments and growth in the number of new cross-sectoral financial participants, many of which have a global reach. These developments have resulted in an increased number of potential channels through which economic and financial shocks can be created and transmitted. Of further concern has been the untested nature of new risk management techniques and financial instruments that have not been subjected to an extended period of stress.

These developments have also raised the question of how best to structure financial sector supervision. A number of recent studies have focused on this subject.

With a view to gaining a better understanding of the current state of institutional arrangements in financial sector supervision globally, and in response to growing demand from various central banks and supervisory authorities for such information, the FSI undertook a survey at the end of 2006. The objectives of the survey were to identify: (a) the range of institutional arrangements for financial sector supervision; (b) key benefits and challenges of the current supervisory settings; and (c) cross-sectoral and cross-border supervisory

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[1] In this paper, the term "supervision" is generally meant to include both supervision and regulation.

arrangements. The survey was not designed to determine which supervisory structure best suits a given jurisdiction's or region's needs, but rather to help gain an understanding of the evolution of the structure of banking supervision over the last 20 years. In addition, the survey results[2] serve to highlight the predominant characteristics of supervisory structures at year-end 2006.

When reviewing the responses, a "bank-centric" approach[3] was used to analyse the nature of the major changes to global supervisory arrangements. The FSI categorised the dataset along two lines. The first categorisation was conducted by grouping jurisdictions according to the domicile of the primary banking supervision authority, where "domicile" is defined as the institution in which the authority is located. The domicile options are: in the central bank, in a government department,[4] in a separate supervisory agency,[5] and "other". The second categorisation divided the dataset into three levels of integration. The "non-integrated" category represents a situation where the authority responsible for banking supervision does not also have responsibility for the securities

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[2] It was agreed that the responses of individual jurisdictions would be kept confidential and only aggregated regional and global information would be made available.

[3] The survey was circulated to the banking supervision authority in each of the surveyed jurisdictions. While some of the questions were targeted more broadly at all three financial sectors, the dataset upon which the survey findings are based was sourced only from banking supervision authorities of participating jurisdictions. Consequently, the dataset does not necessarily reflect the views of the securities regulators and insurance supervisors.

[4] A government department is defined as the treasury/ministry of finance or any other department or ministry of the central government.

[5] A separate supervisory agency is defined as an instrument of the central government, separate and distinct from a specific branch of government.

or insurance sectors and is thus separate from them.[6] The "partially integrated" category represents a situation where the banking supervision authority also has responsibility for one of either the securities or insurance sectors, but not both. Finally, the "integrated" category represents the full integration of the banking, securities and insurance sectors under a single supervisory authority. In summary, the survey categorised the dataset as follows:

Domicile	**Level of Integration**
Central bank (A)	Non-integrated (NI)
Government department (B)	Partially integrated (PI)
Separate supervisory agency (C)	Integrated (I)
Other (D)	

Responses to the survey were received from 125 jurisdictions,[7] each of which is grouped into one of the following regions:

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[6] The non-integrated category is typically represented by three separate financial sector authorities, but might also include two separate authorities whereby banks fall under one supervisory authority and the securities and insurance sectors fall together under a second.

[7] The survey was sent to the banking supervision authority in 163 jurisdictions. Those that responded are listed both alphabetically and by region in the Appendix. It was decided at the start of the project not to request a response from the United States because of the complexity of that jurisdiction's financial sector supervision arrangements. For this reason, the FSI dataset generally excludes data on the United States. As Canada is the only respondent from North America, to preserve confidentiality in any analysis highlighting the results by region, Canada's responses are included only in the global totals. The data on 14 African jurisdictions are represented by the responses received from two supervisory authorities, WAMU and COBAC. The data on eight Caribbean jurisdictions are represented by the response received from the Eastern

Africa, Asia, the Caribbean, Europe, Latin America, the Middle East and North America.

The paper is organised as follows: Section I presents the key findings regarding the range of institutional arrangements on both a "point-in-time" and "chronological" basis. Section II describes the primary responsibilities of the banking supervision authority (prudential supervision, financial stability and/or consumer protection) and the key findings of the survey with regard to the existence of a financial stability department at the central bank. Section III presents the key findings on the cross-sectoral and cross-border datasets. These datasets provide findings on the preferred arrangements, as they were at year-end 2006, for managing risks across the financial sectors and across international jurisdictions during normal times and times of financial sector stress. Finally, Section IV contains the findings on accountability, professional background of staff, and the key benefits and challenges of existing institutional arrangements, as perceived by the survey respondents.

I. Major changes in institutional arrangements for financial sector supervision

Survey responses confirmed the generally held view that the past 20 years have been a period of major change in institutional supervisory arrangements. However, it is important to note that the FSI survey results are based on a very specific definition of what constitutes a major change. For the purposes of the survey, a "major change in institutional arrangements" is defined to have taken place when either the

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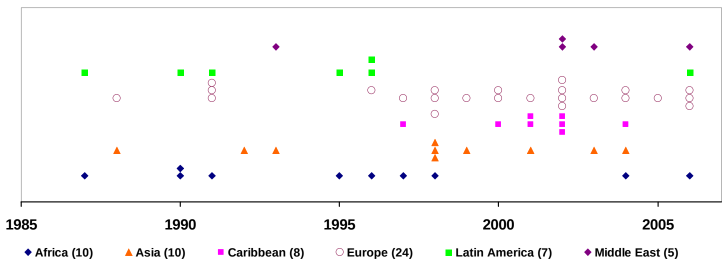
Caribbean Central Bank. These three regional supervisory structures are each treated as a single respondent for the purposes of this survey. The remainder of this paper uses the terms "jurisdictions" and "banking supervision authorities" interchangeably to refer to respondents.

domicile or the level of integration of a jurisdiction's banking supervision authority has changed over the last 20 years. Affirmative responses to the survey question on major changes as provided by banking supervision authorities exceeded the number of institutional changes identified using this bank-centric definition of a change. Indeed, in replying to this question, 72% of respondents identified a major change in institutional arrangements. Nevertheless, when considering the FSI's more narrow and bank-centric definition, approximately half of the respondents incurred a major change over the course of the past two decades.[8]

Chart 1

Timetable of changes to either domicile or level of integration, 1987–2006



Each point corresponds to one institutional change. Each jurisdiction appears only once in a given year but may appear more than once in multiple years. Numbers in parentheses are the absolute numbers.

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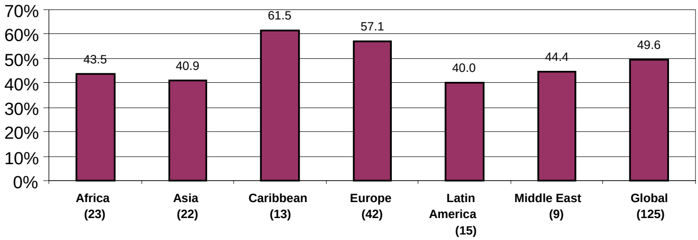
[8] Some authorities interpreted the term "major change" more broadly. For example, some reported the integration of the securities and insurance sectors under the same authority as a "major change". However, changes that were not consistent with the FSI's definition were not classified as a change for the purposes of this survey.

Chart 1 provides a chronological overview, by region, of major changes in institutional arrangements, according to the FSI definition, over the past 20 years. The chart reflects both changes to where the banking supervision authority is domiciled and changes in the level of integration. About 50% of survey respondents incurred a major change in institutional arrangements over the 1987–2006 period (Chart 2).

Chart 2

Percentage of jurisdictions with changes to either domicile or level of integration, 1987–2006



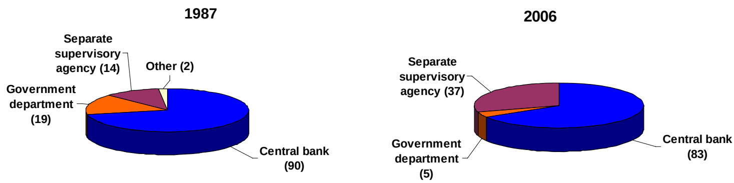
As highlighted in Chart 1, the majority of institutional changes to supervisory authorities occurred over the last decade (1997–2006). Relative to the number of jurisdictions in each region at year-end 2006, each of the regions exhibited a rate of change equal to or exceeding 40% (Chart 2). The Caribbean and Europe experienced the highest rates of change over the past 20 years, again with the preponderance of these changes having taken place in the last decade. The charts that follow will separately present the evolution of institutional arrangements over time, looking specifically at where the banking supervision authority is domiciled and the level of integration.

Domicile

Almost all jurisdictions that responded to the survey currently domicile banking supervision in either a central bank or a separate supervisory agency (Chart 3). In terms of aggregate numbers, the central bank category has been, and continued to be at year-end 2006, the dominant domicile globally for banking supervision authorities.

Chart 3

Number of banking supervision authorities by domicile



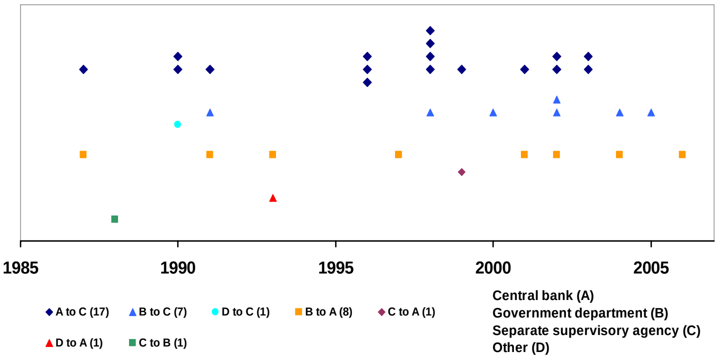
More specifically, the data disclose:

- a significant decline (from 19 to 5) in the number of banking supervision authorities domiciled within a department of the government;
- a significant increase (from 14 to 37) in the number of banking supervision authorities domiciled in a separate supervisory agency; and
- a small decline (from 90 to 83) in the number of banking supervision authorities domiciled within the central bank.

Chart 4 shows the changes that occurred between 1987 and 2006 with regard to where the banking supervision authority was domiciled. It can again be observed that over the last 20 years, particularly during the last decade, the preponderance of changes represented migration to both a separate supervisory agency and a central bank.

Chart 4

Timetable of changes in domicile, 1987–2006



Each point corresponds to one institutional change.

Of a global total of 36 changes in the domicile of banking supervision authorities, 25 represented a move to a separate supervisory agency (Chart 4 and Table A.1 in Appendix). While each domicile experienced entries and exits in terms of numbers, the separate supervisory agency category experienced the largest increase, with a net gain of 23 banking supervision authorities. Conversely, government departments experienced the largest net exit over the past two decades (14 banking supervision authorities). Approximately half of these migrated to a central bank and half to a separate supervisory agency. Central banks were the most stable domicile, experiencing only a minor net loss of seven banking supervision authorities over the same period.

For the same 20-year period, Table A.1 in the Appendix also shows migration between domiciles in terms of GDP.[9] The

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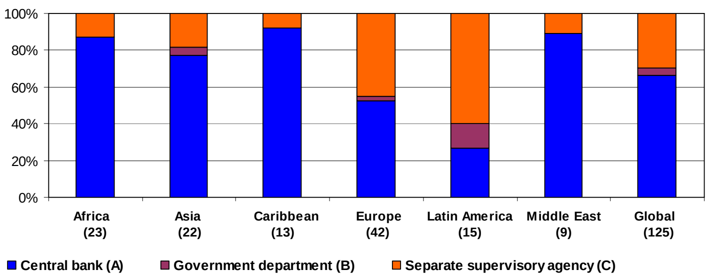
9 GDP Source: World Bank WDI database. 2005 GDP for 108 jurisdictions, between 2001 and 2004 GDP for eight jurisdictions, and no data for eight jurisdictions (Netherlands Antilles, Bermuda, British Virgin Islands, Cayman Islands, Montserrat, Gibraltar, Jersey, Liechtenstein).

aggregate GDP of all jurisdictions that experienced changes in the domicile of banking supervision authorities represents 27% of the total survey GDP. The majority (24% of aggregate survey GDP) represents jurisdictions where the banking authorities moved to a separate supervisory agency.[10] A more comprehensive migration analysis to and from each of the three categories, in relative terms, can be viewed in Tables A.3 and A.4 in the Appendix.

Chart 5 shows the regional distribution of banking supervision authorities at year-end 2006. As discussed above, central banks remain the predominant domicile. This was especially true for the Africa, Caribbean and Middle East regions, whereas the separate supervisory agency domicile is more prevalent in Europe and Latin America. Banking authorities domiciled within a government department are minimal regionally, with only Latin America showing any meaningful data in percentage terms.

Chart 5

Percentage of banking supervision authorities by region and domicile, 2006



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[10] Table A.1 in the Appendix reports the migrating GDP in relation to the sum of the survey GDP plus the GDP of the United States, where the banking supervision authorities remain domiciled in multiple supervisory organisations. When calculated in this manner, 17 percent of GDP migrated to separate supervisory agencies.

Level of integration

The level of integration of financial sector supervisors was divided into non-integrated, partially integrated and integrated. Non-integrated authorities were the dominant category in 1987 and remained the dominant category in 2006 (Chart 6). Between 1987 and 2006, however, the number of non-integrated authorities declined significantly from 98 to 66. This decline in the non-integrated category is contrasted with gains in the partially integrated and integrated categories (from 27 to 59).

Chart 6

Number of banking supervision authorities by level of integration

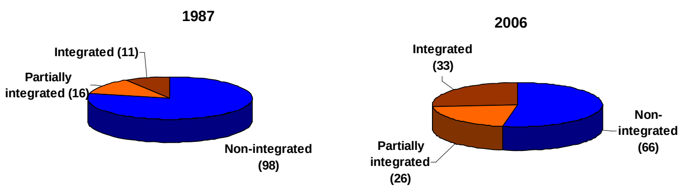
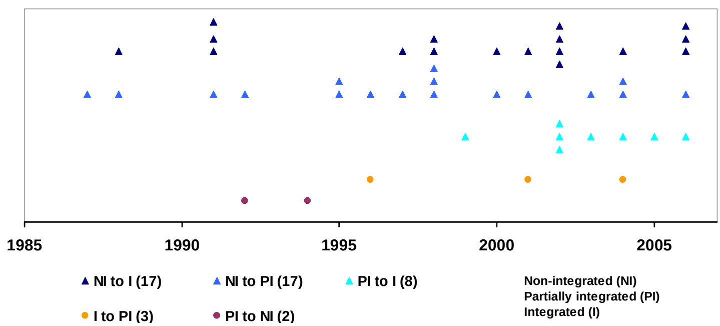


Chart 7

Timetable of changes by level of integration, 1987–2006



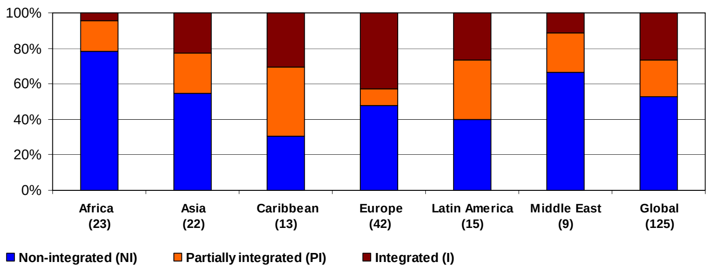
Each point corresponds to one institutional change.

From a migration perspective, Chart 7 shows that, over the last 20 years, most changes to the level of integration represented movement towards a more integrated supervisory structure. Indeed, of 47 changes to the level of integration, 42 represented a move to greater integration (Table A.2 in Appendix). This led to the situation in 2006 where non-integrated banking supervision authorities accounted for less than half of the total number in Europe, the Caribbean and Latin America (Chart 8). However, the non-integrated structure remains predominant in Africa and the Middle East.

From a GDP perspective,[11] the total migration over the 1987–2006 period represented 41% of the survey GDP, virtually all of which represented migration towards integration (40% of the survey GDP[12]).

Chart 8

Percentage of banking supervision authorities by region and level of integration, 2006



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[11] See footnote 9.

[12] If US GDP is included in the survey (where there were no changes to supervisory integration levels), the total migration change declined to 29%. The vast majority of this (28% of survey GDP + US) represented jurisdictions where the banking supervision authorities moved to a higher level of integration. In relative terms, there was significant migration from less integrated to more integrated categories in both number and GDP terms (see Tables A.5 and A.6 in the Appendix for a migration analysis).

Cross-category analysis

Considering the domicile of the banking supervision authority and the level of integration together, the survey results indicate that the majority of authorities domiciled within a central bank in 1987 had no responsibility for the securities or insurance sectors – only 16 central banks housed authorities that were either partially or fully integrated, with oversight responsibility for securities and/or insurance in addition to banking. By 2006, this number had increased to 28 following the movement towards integration.

Banking supervision authorities domiciled within a separate supervisory agency experienced an even higher integration rate. Three banking supervision authorities domiciled in a separate supervisory agency in 1987 had authority over securities and/or insurance; by 2006, this number had increased to 27.

See Table A.7 in the Appendix for a more detailed analysis of cross-category issues.

In conclusion, the central bank category has been, and continued to be at year-end 2006, the dominant and most stable domicile globally for banking supervision authorities. Furthermore, non-integrated authorities were the dominant category in 1987 and remained the dominant category in 2006. Having said that, institutional changes over the last 20 years, particularly during the last decade, show (i) a significant decline in the number of banking supervision authorities domiciled within a department of the government; (ii) an increase in the number of banking supervision authorities domiciled in a separate supervisory agency; and, (iii) a movement towards more integrated supervisory structures.

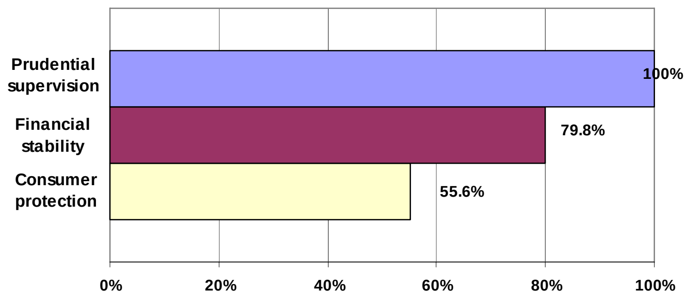
II. Responsibilities of banking supervision authorities and financial stability departments

Primary responsibilities of banking supervision authorities

The survey sought to identify the extent to which the roles of financial stability, prudential supervision and consumer protection[13] were the responsibility of banking supervision authorities according to the laws in each jurisdiction.

Chart 9

Responsibilities of banking supervision authorities, 2006[1]



[1] The survey provided four response options: Financial Stability, Prudential Supervision, Consumer Protection, and Other. More than one response was allowed by each respondent. In the "Other" category, jurisdictions were permitted to provide a description of the nature of banking supervision. Descriptive language under this category generally only corroborated the responses given in the first three options.

[13] The FSI did not define these terms in the survey. Consequently, respondents may have interpreted them differently.

Chart 9 shows, not surprisingly, that prudential supervision was a primary responsibility of all banking supervision authorities surveyed. This statistic transcends all regions, domiciles and levels of integration.

Financial stability was also frequently identified as a legislated responsibility. Globally, 80% of respondents reported having such a responsibility. Regionally, Europe showed the lowest percentage of jurisdictions with financial stability as a primary responsibility (see Chart A.1 in Appendix). Consumer protection was identified least often as being a primary responsibility of the banking supervision authority, reported by 56% of the 125 survey respondents. Regionally, consumer protection was more often identified as a responsibility in the Asia, Latin America and Middle East regions.

For banking supervision authorities domiciled within the central bank, the financial stability objective was more pronounced than for authorities domiciled outside the central bank. Conversely, consumer protection as a primary responsibility was more prevalent in banking supervision authorities domiciled outside the central bank (Chart A.2 in Appendix). There is little difference in the responsibilities of banking supervision authorities based on their level of integration (Chart A.3 in Appendix).

Creation of a financial stability department within the central bank

The survey also attempted to identify, on both a global and a regional basis, if and when the central bank had created a financial stability department.

As can be observed in Chart 10, most central banks that created a financial stability department did so during the last decade. Globally, approximately 52% of 125 jurisdictions responded affirmatively regarding the existence of a financial stability department within the central bank (Table A.8 in Appendix). The European region represented a large part of these, with 29 of the 65 affirmative responses.

Chart 10

Timetable on the creation of financial stability departments within central banks

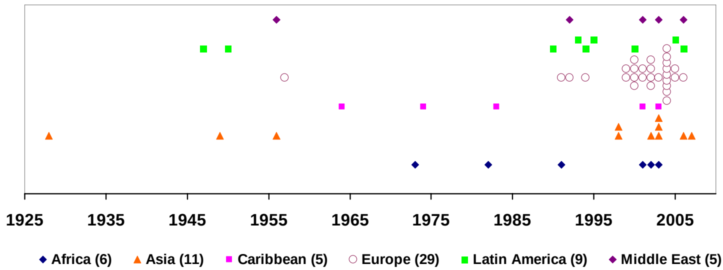
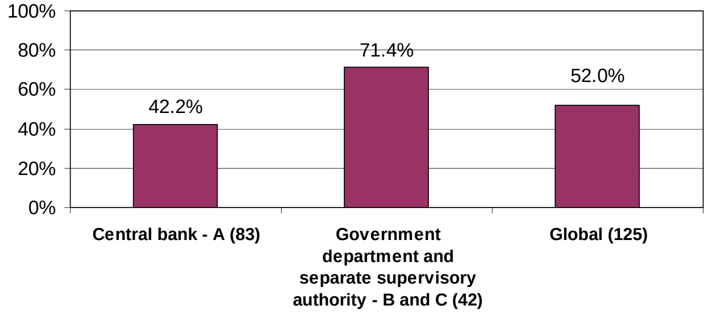


Chart 11 shows that, on a relative basis, jurisdictions in which the banking supervision authority is domiciled outside the central bank have a higher percentage (71% of jurisdictions) of financial stability departments within the central bank. This is in contrast to jurisdictions where the banking supervision authority is domiciled in the central bank, of which only 42% had financial stability departments within the central bank. It would appear that when banking supervision authorities are domiciled outside the central bank, there is a higher propensity to create a financial stability department within the central bank.

Chart 11

Financial stability department in the central bank by domicile, 2006



III. Cross-sectoral and cross-border supervisory arrangements

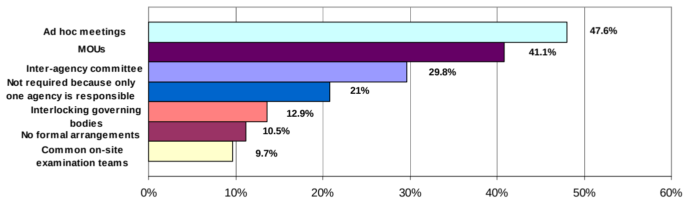
The survey attempted to identify cross-sectoral and cross-border supervisory arrangements in both normal times and in times of major stress in the financial system. Survey participants were asked about the nature and extent of coordination amongst the different agencies responsible for maintaining the soundness of the financial system in their jurisdiction.

Arrangements in normal times

The predominant channels for supervisory communication across financial sectors within a given jurisdiction were ad hoc meetings and memoranda of understanding (MOUs), with 48% and 41% response rates, respectively (Chart 12). Least utilised were interlocking management/directorates (ie governing bodies composed of members of other supervisory agencies and the central bank) and common on-site examination teams. That said, in some regions, response rates varied somewhat from the global experience (Chart A.5 in Appendix). For example, the Caribbean region identified a greater percentage of jurisdictions with interlocking governing bodies. In Asia, a variance from the global profile was noted in that jurisdictions in the region more often identified the use of inter-agency committees as a communication channel.

Chart 12

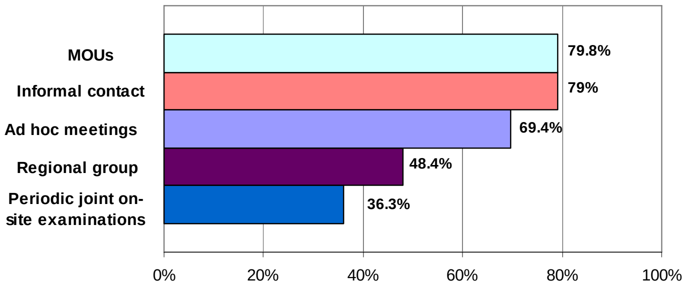
Cross-sectoral arrangements in normal times, 2006



Considering cross-border arrangements in normal times, the global data reveal that cross-border issues are coordinated with foreign counterparts predominantly through MOUs, informal contacts and ad hoc meetings (Chart 13). MOUs and informal contacts were each identified by approximately 80% of global respondents and ad hoc meetings by 70%. The significant use of MOUs, informal contacts and ad hoc meetings as cross-border arrangements transcended all domicile and level of integration categories (Chart A.9 and A.10 in Appendix). From a regional perspective, the results were mostly consistent with the global findings (Chart A.8 in Appendix). However, relative to the global findings, in Africa and the Caribbean the use of regional groups is more pronounced.

Chart 13

Cross-border arrangements in normal times, 2006



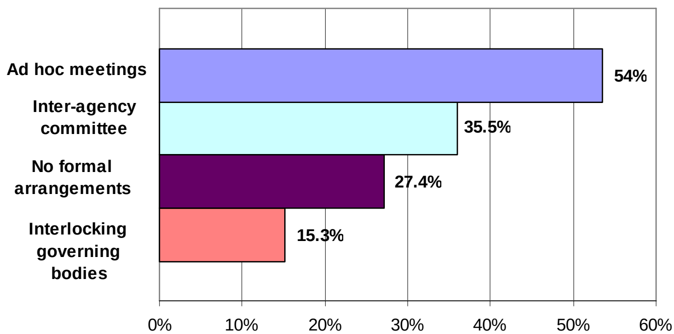
In summary, cross-sectoral and cross-border supervisory issues in normal times tend to be coordinated among relevant authorities through a range of formal and informal arrangements, most notably informal contacts, ad hoc meetings and MOUs.

Arrangements in times of financial stress

For cross-sectoral arrangements in the event of a major financial problem, ad hoc meetings were the most commonly used method, with 54% of global respondents using this option (Chart 14). Inter-agency committees were also used by many supervisory authorities, especially those in Asia, the Caribbean and Europe (Chart A.11 in Appendix).

Chart 14

Cross-sectoral arrangements in times of financial stress, 2006

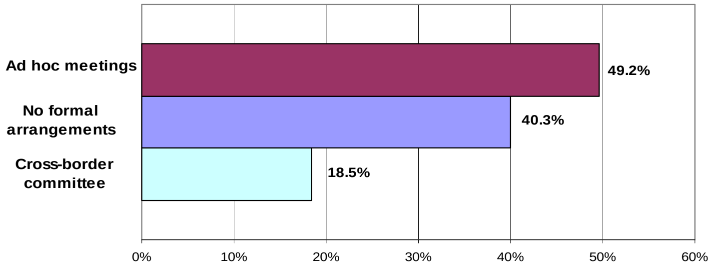


In terms of the level of integration, banking supervision authorities with partially integrated and integrated structures rely mostly on ad hoc meetings and inter-agency committees for cross-sectoral coordination in times of stress. In contrast, non-integrated authorities rely more heavily on ad hoc meetings; indeed, many indicated that no formal arrangements are in place (Chart A.13 in Appendix).

On a global basis, ad hoc meetings were again the preferred arrangement for cross-border coordination during times of financial stress, with 49% of global respondents using this option (Chart 15).

Chart 15

Cross-border arrangements in times of financial stress, 2006



All jurisdictions reported ad hoc meetings as the primary arrangement, but this tends to be slightly more pronounced where the banking supervisor is domiciled outside the central bank (Chart A.15 in Appendix).

The general conclusion is that, in times of financial stress, banking supervision authorities seem prepared to address cross-sectoral and cross-border coordination primarily through informal channels such as ad hoc meetings.

IV. Accountability, professional background of staff, key benefits/challenges of institutional arrangements

This section presents general findings on accountability, the professional background of banking supervision staff, and the key benefits and challenges of existing institutional arrangements as perceived by the banking supervision authorities.

The survey inquired generally about accountability by asking to what organisation the banking supervision authority was formally accountable. Parliament represented the largest global response rate, at roughly 38% of survey respondents; however, regional responses to the accountability question varied widely (Chart A.18 in Appendix). Accountability to parliament was strongly represented by the European region, the largest, with 67% of all jurisdictions reporting accountability to parliament coming from this region. In Asia and Latin America, there was an even split between accountability to parliament and to the ministry of finance. In contrast, the banking supervision authorities in the Caribbean region were primarily accountable to the ministry of finance.

The survey also inquired about staffing levels across various educational backgrounds. Not surprisingly, on average across all respondents, 50% of the staff of a banking supervision authority have banking and finance backgrounds (Chart A.19 in Appendix). From a regional perspective (Chart A.20 in Appendix), on average across all respondents within a region, this ratio ranges between 40 and 70% for any given region. In addition, staff with a legal background make up a larger percentage, on average, of the total staff of authorities domiciled outside the central bank as well as authorities with some level of integration (Charts A.21 and A.22 in Appendix).

Finally, the survey inquired about the key benefits and challenges with regard to each respondent's existing institutional arrangements as of year-end 2006. From a key benefits perspective, not surprisingly roughly 93% of respondents (116 of 125) considered their own existing institutional arrangements to be more efficient than other arrangements for supervision across financial sectors (Chart A.23 in Appendix). The only other benefit identified by a majority of respondents as being a key benefit of their existing institutional arrangements was enhanced communication and cooperation, which approximately 65% of respondents (81 of 125) selected as a benefit. From a regional perspective, the results were mostly consistent with the global findings (Chart A.24 in Appendix). The only minor diversion from the global findings was the more pronounced number of jurisdictions in the Asia and Latin America regions that identified the benefit of effective monitoring of large complex financial institutions.

As regards supervisory challenges, harmonising supervisory approaches across financial sectors (74% of respondents) and creating a consistent regulatory framework across financial sectors (69% of respondents) were identified as key among the challenges supervisors face (Chart A.27 in Appendix). From a regional perspective, the results are mostly consistent with the global findings (Chart A.28 in Appendix). The only minor diversion from the global findings was the higher number of jurisdictions in the Africa, Asia and Caribbean regions that identified the challenge of dealing with staff turnover and training.

Appendix

List of jurisdictions that responded to the survey

	Jurisdiction	Region
1	Algeria	Africa
2	Angola	Africa
3	Botswana	Africa
4	COBAC	Africa
5	The Gambia	Africa
6	Ghana	Africa
7	Kenya	Africa
8	Lesotho	Africa
9	Madagascar	Africa
10	Malawi	Africa
11	Mauritius	Africa
12	Morocco	Africa
13	Namibia	Africa
14	Rwanda	Africa
15	Seychelles	Africa
16	South Africa	Africa
17	Swaziland	Africa
18	Tanzania	Africa
19	Tunisia	Africa
20	Uganda	Africa
21	West African Monetary Union	Africa
22	Zambia	Africa
23	Zimbabwe	Africa
24	Australia	Asia
25	China	Asia
26	Fiji	Asia
27	Hong Kong SAR	Asia
28	India	Asia
29	Indonesia	Asia
30	Japan	Asia
31	Korea	Asia
32	Macao	Asia
33	Malaysia	Asia
34	Maldives	Asia
35	Nepal	Asia
36	New Zealand	Asia
37	Pakistan	Asia
38	Papua New Guinea	Asia
39	Philippines	Asia
40	Singapore	Asia
41	Sri Lanka	Asia
42	Taiwan, China	Asia
43	Thailand	Asia
44	Vanuatu	Asia
45	Vietnam	Asia
46	Aruba	Caribbean
47	Bahamas	Caribbean
48	Barbados	Caribbean
49	Bermuda	Caribbean
50	British Virgin Islands	Caribbean
51	Cayman Islands	Caribbean
52	Eastern Caribbean	Caribbean
53	Guyana	Caribbean
54	Jamaica	Caribbean
55	Montserrat	Caribbean
56	Netherlands Antilles	Caribbean
57	Suriname	Caribbean
58	Trinidad and Tobago	Caribbean
59	Albania	Europe
60	Armenia	Europe
61	Austria	Europe
62	Belarus	Europe
63	Belgium	Europe
64	Bosnia and Herzegovina	Europe
65	Bulgaria	Europe
66	Croatia	Europe
67	Cyprus	Europe
68	Czech Republic	Europe
69	Denmark	Europe
70	Estonia	Europe
71	France	Europe
72	Germany	Europe
73	Gibraltar	Europe
74	Greece	Europe
75	Hungary	Europe
76	Iceland	Europe
77	Ireland	Europe
78	Isle of Man	Europe
79	Italy	Europe
80	Jersey	Europe
81	Kyrgyz Republic	Europe
82	Latvi	Europe
83	Liechtenstein	Europe
84	Lithuania	Europe
85	Luxembourg	Europe
86	Macedonia	Europe
87	Malta	Europe
88	Moldova	Europe
89	Netherlands	Europe
90	Poland	Europe
91	Portugal	Europe
92	Romania	Europe
93	Russia	Europe
94	Slovakia	Europe
95	Slovenia	Europe
96	Spain	Europe
97	Sweden	Europe
98	Switzerland	Europe
99	Turkey	Europe
100	United Kingdom	Europe
101	Argentina	Latin America
102	Bolivia	Latin America
103	Brazil	Latin America
104	Chile	Latin America
105	Colombia	Latin America
106	Dominican Republic	Latin America
107	El Salvador	Latin America
108	Honduras	Latin America
109	Mexico	Latin America
110	Nicaragua	Latin America
111	Panama	Latin America
112	Paraguay	Latin America
113	Peru	Latin America
114	Puerto Rico	Latin America
115	Uruguay	Latin America
116	Bahrain	Middle East
117	Israel	Middle East
118	Jordan	Middle East
119	Lebanon	Middle East
120	Oman	Middle East
121	Qatar	Middle East
122	Saudi Arabia	Middle East
123	Syria	Middle East
124	United Arab Emirates	Middle East
125	Canada	North America

Tables and charts

Table A.1

Changes in domicile by number and GDP,[1, 2] 1987–2006

Change	Number of countries	GDP (USD billions)	GDP/ survey GDP	GDP/ survey GDP + US
A to C	17	6,282.6	20.8%	14.7%
B to C	7	1,013.8	3.4%	2.4%
D to C	1	44.8	0.1%	0.1%
B to A	8	505.4	1.7%	1.2%
C to A	1	0.3	0.001%	0.001%
D to A	1	28.5	0.1%	0.1%
C to B	1	254.4	0.8%	0.6%
Total	**36**	**8,129.8**	**26.9%**	**19%**
	Survey GDP	30,189.9		
	Survey GDP + US	42,606.4		

[1] GDP Source: World Bank WDI database. 2005 GDP for 108 jurisdictions, between 2001 and 2004 GDP for eight jurisdictions, and no data for eight jurisdictions (Netherlands Antilles, Bermuda, British Virgin Islands, Cayman Islands, Montserrat, Gibraltar, Jersey, Liechtenstein). [2] As discussed in footnote 7, the FSI dataset generally excludes data on the United States. When US data are included in a particular analysis, this is indicated.

Table A.2

Changes in domicile by number and GDP,[1, 2] 1987–2006

Change	Number of countries	GDP (USD billions)	GDP/ survey GDP	GDP/ survey GDP + US
NI to I	17	7,412.9	24.6%	17.4%
NI to PI	17	4,069.8	13.5%	9.6%
PI to I	8	643.8	2.1%	1.5%
I to PI	3	20.8	0.1%	0.05%
PI to NI	2	176.6	0.6%	0.4%
Total	**47**	**12,324.0**	**41%**	**28.9%**
	Survey GDP	30,189.9		
	Survey GDP + US	42,606.4		

[1] GDP Source: World Bank WDI database. 2005 GDP for 108 jurisdictions, between 2001 and 2004 GDP for eight jurisdictions, and no data for eight jurisdictions (Netherlands Antilles, Bermuda, British Virgin Islands, Cayman Islands, Montserrat, Gibraltar, Jersey, Liechtenstein). [2] As discussed in footnote 7, the FSI dataset generally excludes data on the United States. When US data are included in a particular analysis, this is indicated.

Table A.3

Transition matrix of domicile by number, 1987 and 2006

		2006			
		A	**B**	**C**	**Previous No**
1987	A	81%		19%	90
	B	42%	21%	37%	19
	C	7%	7%	86%	14
	D	50%		50%	2
	Current No	83	5	37	125

Table A.4

Transition matrix of domicile by GDP, 1987 and 2006

		2006			
		A	**B**	**C**	**Previous distribution of GDP (USD billons)**
1987	A	64%		36%	17,525.2
	B	6%	81%	13%	8,024.0
	C	0.007%	6%	94%	4,567.5
	D	39%		61%	73.3
	Current distr. of GDP (USD billions)	11,776.8	6,759.2	11,653.9	30,189.9

Table A.5

Transition matrix of level of integration by number, 1987 and 2006

		2006			
		NI	**PI**	**I**	**Previous No**
1987	NI	66%	15%	18%	98
	PI	6%	50%	44%	16
	I		27%	73%	11
	Current No	66	26	33	125

Table A.6

Transition matrix of level of integration by GDP, 1987 and 2006

		2006			
		NI	**PI**	**I**	**Previous distribution of GDP (USD billons)**
1987	NI	53%	17%	30%	24,533.7
	PI	18%	16%	66%	981.3
	I		0.4%	99.6%	4,674.9
	Current distr. of GDP (USD billions)	13,227.5	4,251.5	12,710.9	30,189.9

Table A.7

A view of the changes to the number of jurisdictions from a cross-category perspective

Structure and scope of supervisory authorities for banks in 1987			Transition status of supervisory structures			Structure and scope of supervisory authorities for banks in 2006		
A	NI	74	Remain A	NI	49	A	NI	55
	PI	10		PI	14		PI	17
	I	6		I	10		I	11
	Total	**90**		**Total**	**73**		**Total**	**83**
			B to A	NI	4			
				PI	3			
				I	1			
				Total	**8**			
			C to A	NI	1			
			D to A	NI	1			
B	NI	11	Remain B	NI	1	B	NI	1
	PI	3		PI	2		PI	2
	I	5		I	1		I	2
	Total	**19**		**Total**	**4**		**Total**	**5**
			C to B	I	1			
C	NI	11	Remain C	NI	3	C	NI	10
	PI	3		PI	4		PI	7
	I	0		I	5		I	20
	Total	**14**		**Total**	**12**		**Total**	**37**
			A to C	NI	5			
				PI	3			
				I	9			
				Total	**17**			
			B to C	NI	1			
				I	6			
				Total	**7**			
			D to C	NI	1			
D	NI	2						

Table A.8

Financial stability department by region, 2006

Region	Number of countries	Countries with FSD	Countries with FSD (%)
Africa	23	6	26%
Asia	22	11	50%
Caribbean	13	5	38%
Europe	42	29	69%
Latin America	15	9	60%
Middle East	9	5	56%
Total	**124**	**65**	**52%**

Chart A.1

Regional responsibilities of banking supervision authorities, 2006

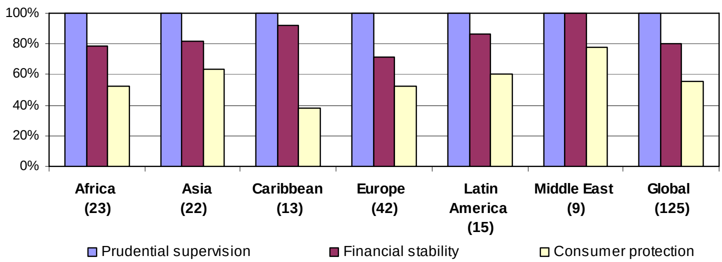


Chart A.2

Responsibilities of banking supervision authorities by domicile, 2006

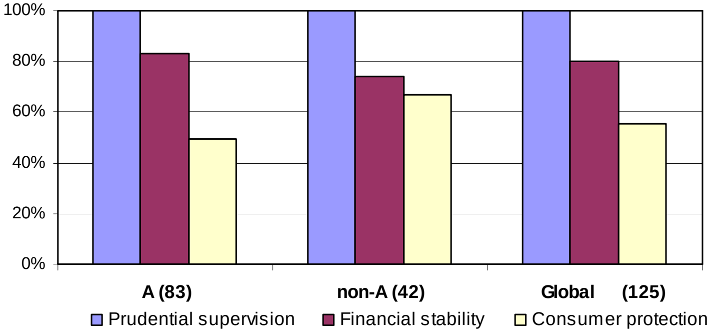


Chart A.3

Responsibilities of banking supervision authorities by level of integration, 2006

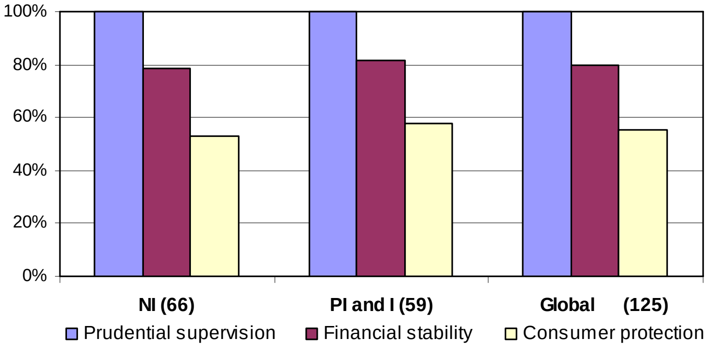


Chart A.4

Financial stability department by level of integration, 2006

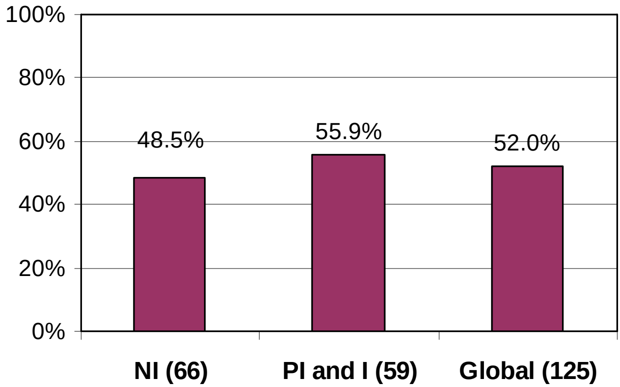


Chart A.5

Regional cross-sectoral arrangements in normal times, 2006

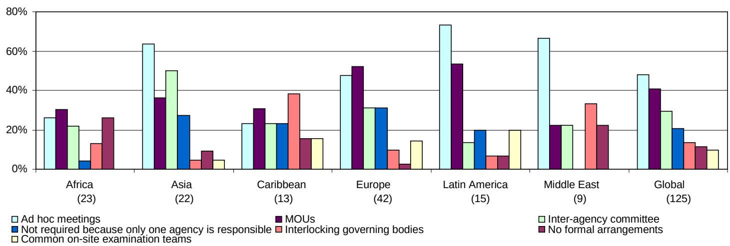


Chart A.6

Cross-sectoral arrangements in normal times by domicile, 2006

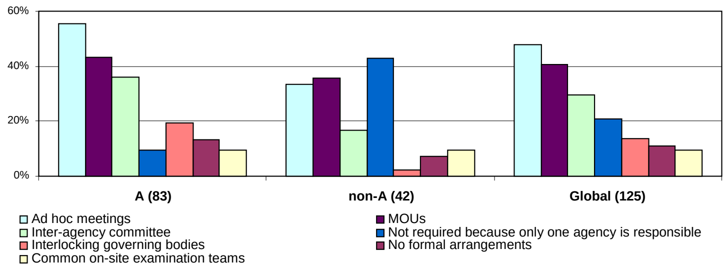


Chart A.7

Cross-sectoral arrangements in normal times by level of integration, 2006

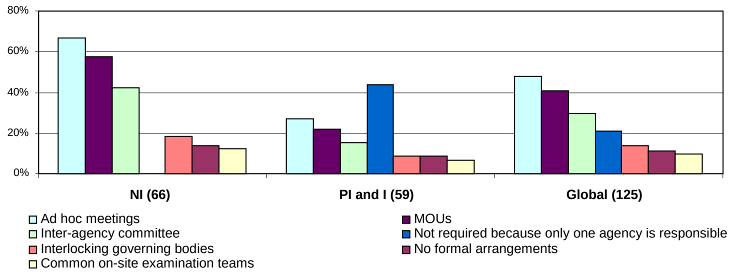


Chart A.8

Regional cross-border arrangements in normal times, 2006

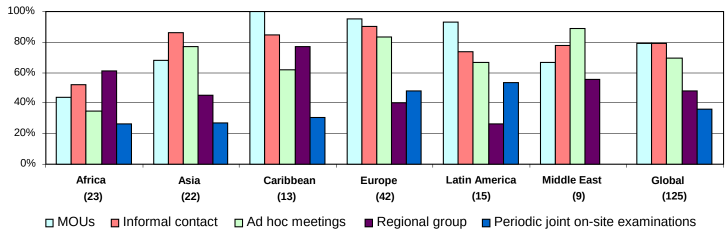


Chart A.9

Cross-border arrangements in normal times by domicile, 2006

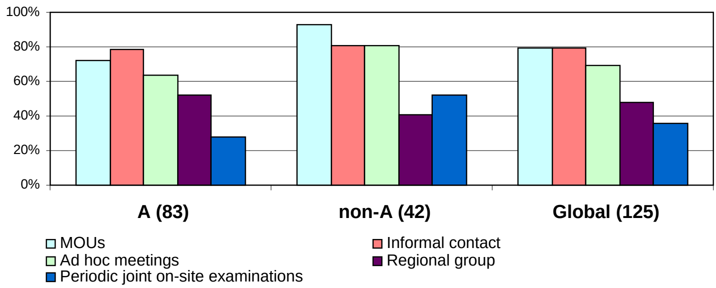


Chart A.10

Cross-border arrangements in normal times by level of integration, 2006

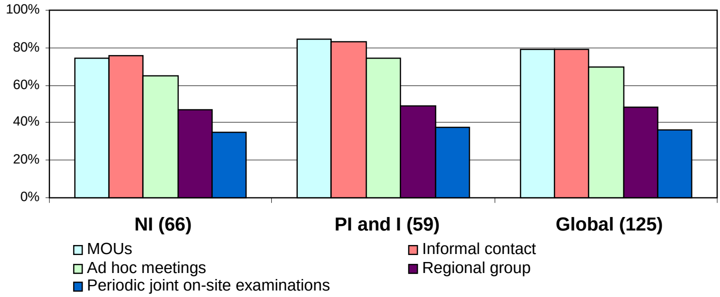


Chart A.11

Regional cross-sectoral arrangements in times of financial stress, 2006

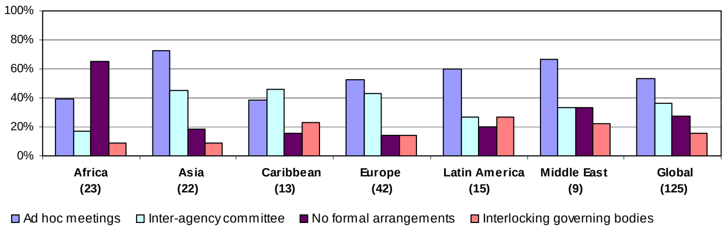


Chart A.12

Cross-sectoral arrangements in times of financial stress by domicile, 2006

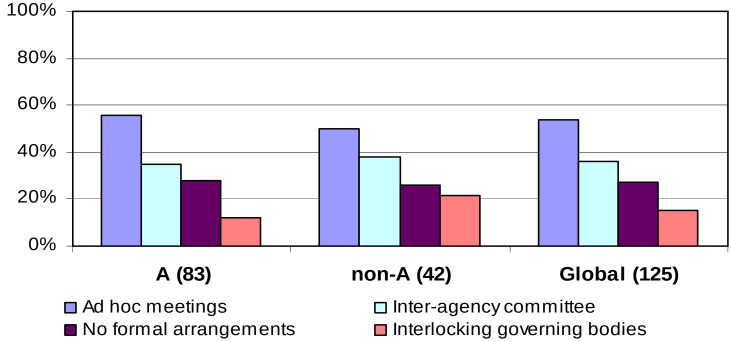


Chart A.13

Cross-sectoral arrangements in times of financial stress by level of integration, 2006

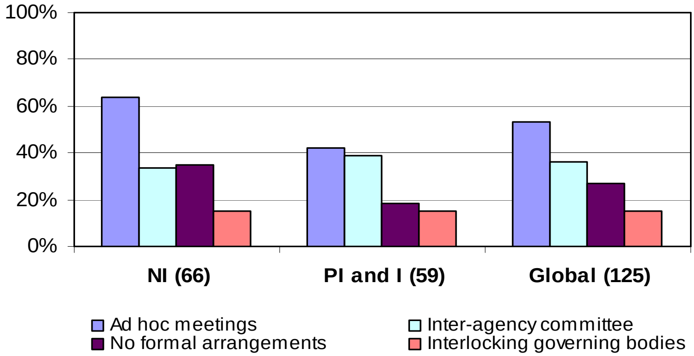


Chart A.14

Regional cross-border arrangements in times of financial stress, 2006

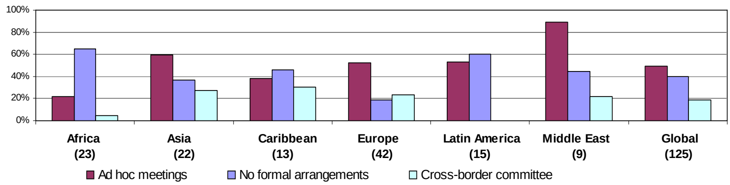


Chart A.15

Cross-border arrangements in times of financial stress by domicile, 2006

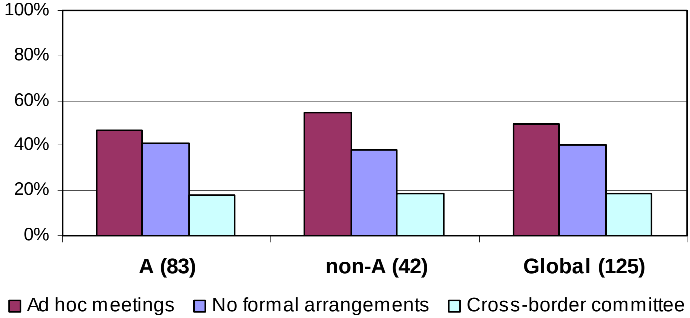


Chart A.16

Cross-border arrangements in times of financial stress by level of integration, 2006

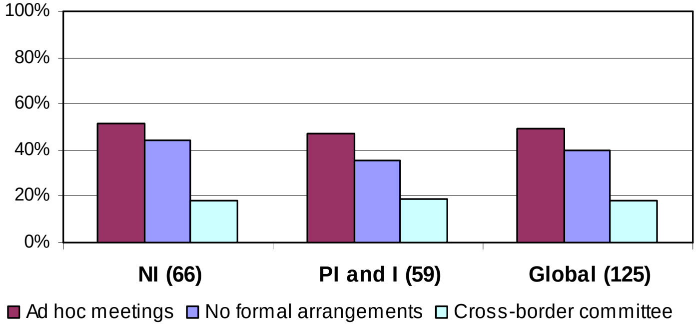
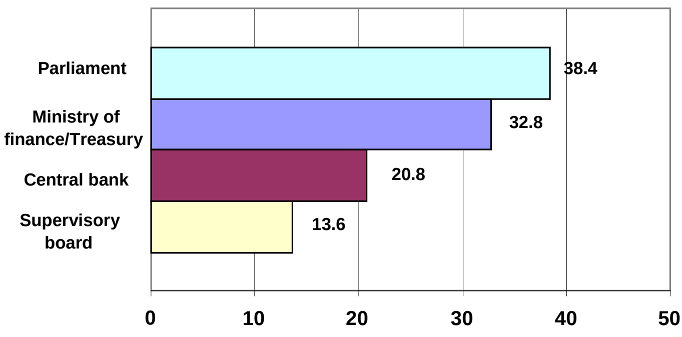


Chart A.17

Percentage of jurisdictions by accountability, 2006[1]



[1] There are jurisdictions formally accountable to more than one institution. Percentages sum to more than 100.

Chart A.18

Percentage of jurisdictions by accountability and region, 2006

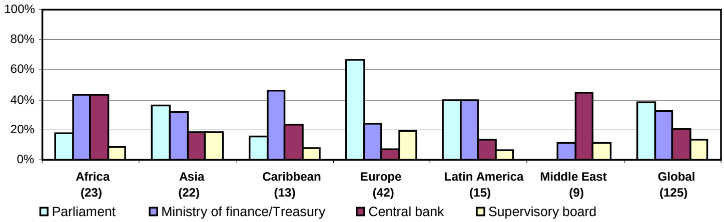


Chart A.19

Average percentage of professional backgrounds, 2006

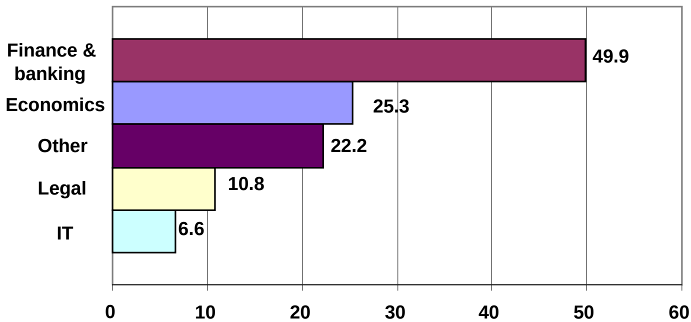


Chart A.20

Regional average percentage of professional backgrounds, 2006

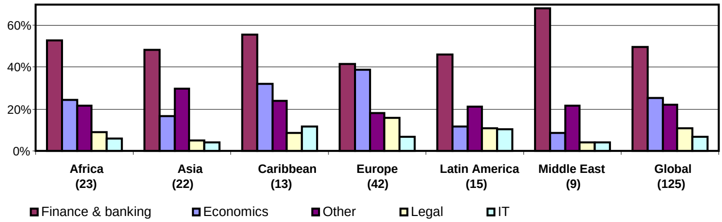


Chart A.21

Average percentage of professional backgrounds by domicile, 2006

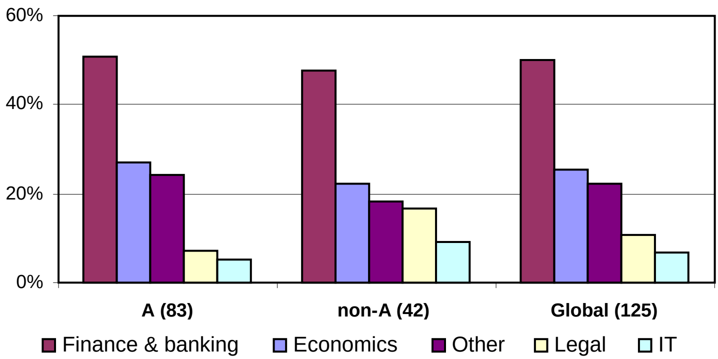


Chart A.22

Average percentage of professional backgrounds by level of integration, 2006

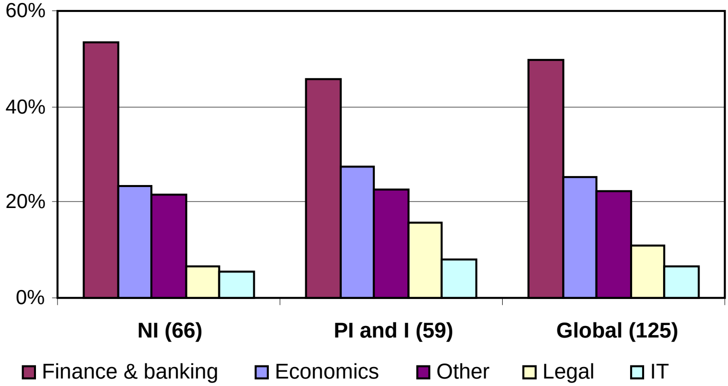


Chart A.23

Benefits of current institutional arrangements, 2006

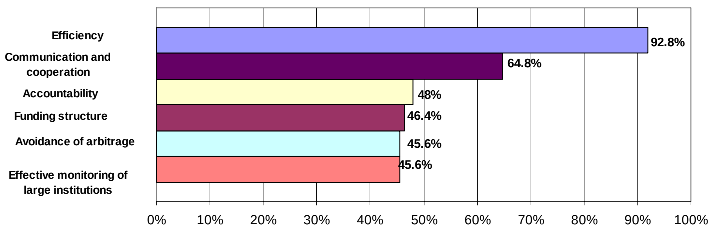


Chart A.24

Benefits of current institutional arrangements by region, 2006

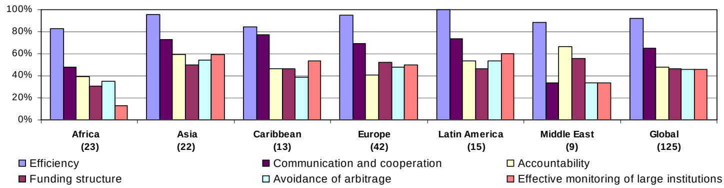


Chart A.25

Benefits of current institutional arrangements by domicile, 2006

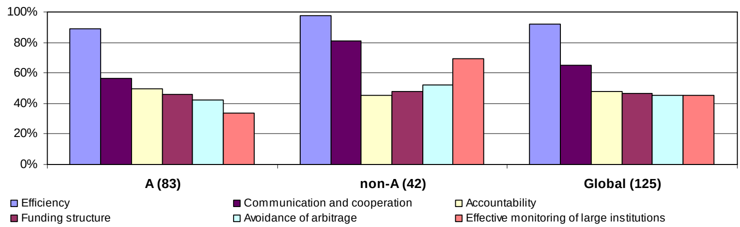


Chart A.26

Benefits of current institutional arrangements by level of integration, 2006

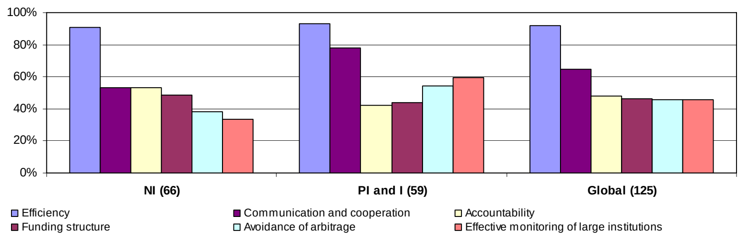


Chart A.27

Challenges of current institutional arrangements, 2006

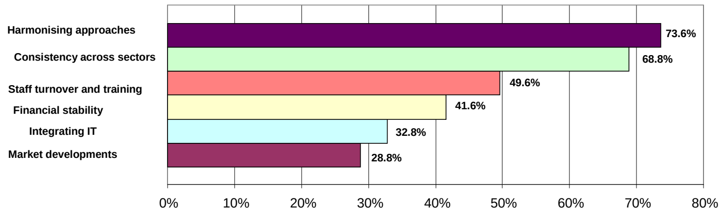


Chart A.28

Challenges of current institutional arrangements by region, 2006

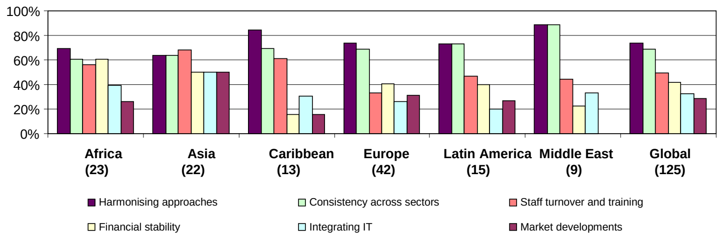


Chart A.29

Challenges of current institutional arrangements by domicile, 2006

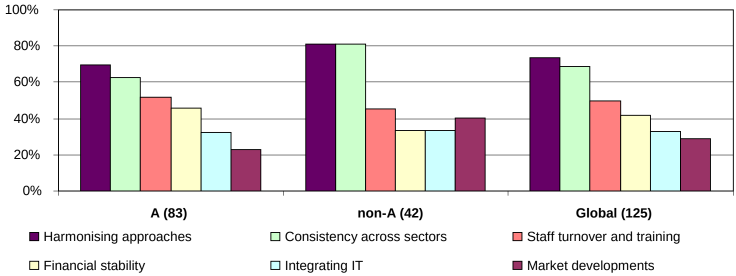


Chart A.30

Challenges of current institutional arrangements by level of integration, 2006