





Evaluation of the Results of the Realignment

Composition and Dynamics of Project Teams at the IDB: Analysis of staff fragmentation

**Background Paper** 



**Inter-American Development Bank** May 2013



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#### **BIBLIOGRAPHY**

ANNEX ADDITIONAL DATA AND ANALYSIS

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#### I. INTRODUCTION

- 1.1 In 2006, the Board of Governors of the Inter-American Development Bank (IDB, or the Bank) authorized a major restructuring of the Bank (the "Realignment") to address the perceived loss of relevance and presence of the institution in Latin America and the Caribbean (LAC). The Realignment introduced a number of reforms, including a new organizational structure (the Matrix Structure), a revised process for project design and execution (the New Project Cycle), and the renewal of human resource skills and decentralization of personnel.
- 1.2 Some of these reforms attempted to "end the fragmentation between design and execution of programs and projects," which, according to the report outlining the Realignment, affected both project quality and transaction costs at the IDB. The report noted that "keeping the same expertise involved throughout the project cycle would give the Bank the opportunity to move from a static blueprint approach to risk management to a more adaptive approach." An increasing body of literature on general management supports this diagnosis, showing that team turnover negatively affects team learning and innovation, and that changing project managers leads to lower performance outcomes.
- 1.3 Paper assesses the main changes in the composition and dynamics of IDB project teams throughout the life of loan operations, with a special emphasis on staff fragmentation between design and execution. Since the Realignment did not define targets or benchmarks to be achieved, we test for a break in staff fragmentation in the period in which the Realignment was mostly implemented (2007), relying on human resources information contained in IDB's Personnel Roster and the Time and Labor System. Although before-and-after comparisons are rarely good approaches for assessing causal relationships, we consider them appropriate in this case because the Realignment pushed for a large deconcentration of personnel from headquarters (HQ) to country offices (COF), which in itself affected the dynamics of the project cycle.<sup>4</sup>
- 1.4 The results suggest that the Realignment increased the continuity of team members throughout the project cycle, mainly because employees located in country offices now participate more in the design of loan operations. The continuity of team leaders, and their level of involvement in the execution phase, also increased, as did the involvement of projects' main executors in project design. At the same time, the composition of project teams changed. Teams became larger after the Realignment, with team members contributing a smaller

GA-232, par. 6.6

<sup>&</sup>lt;sup>2</sup> GA-232, par. 5.4

To our knowledge, these studies focus mainly on private sector companies. For greater detail on this literature, we refer to Scott-Young and Samson 2008.

For further details, we refer to the Human Resources Annex of the Realignment Evaluation paper.

proportion to the final output; and staff in country offices participated much more in the design of operations, and their chances of being team leaders significantly increased after the Realignment. A recent study by the Strategy and Planning Department (SPD)<sup>5</sup> indicates that the increased leadership role of personnel in the field might have a positive effect on disbursement performance.

- 1.5 Overall, these changes affected the work profile of IDB's operational staff. In particular, the share of sector specialists who "specialized" in a particular stage of the project cycle (design or execution) decreased after the Realignment; today sector specialists are increasingly involved throughout the project cycle. However, the operational expertise acquired before the Realignment was not lost. Most of the staff who were project designers before the Realignment are either entirely or mostly project designers today; and most of the staff who were involved in execution (project executors /supervisors) before the Realignment are either entirely or mostly involved in execution today.
- 1.6 The paper is structured as follows. Section 2 presents the evaluation questions and the data used. Section 3 presents the main findings of the analysis and discusses trends since the Realignment. Finally, Section 4 presents the general conclusions of the analysis. An Annex provides additional data and analysis.

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See Alvarez, Bueso-Merriam, and Stucchi 2012. Note that this finding holds for projects approved after 2009.

## II. EVALUATIVE QUESTIONS AND DATA

- 2.1 This paper addresses the extent to which the Realignment affected the composition and dynamics of project teams, with a special emphasis on changes in staff fragmentation throughout the project cycle. The main evaluation questions are the following:
  - To what extent has the Realignment affected the composition of project teams?
  - To what extent has the Realignment changed the staff fragmentation between the design and execution stages of the project cycle?
  - To what extent has the Realignment affected the work profile of team members?
- 2.2 We define *staff fragmentation* in terms of continuity: if a team member continues working on a project after its approval, her/his expertise is not fragmented between design and execution.
- 2.3 To answer the evaluation questions we use two datasets on IDB's human resources. One data set, the roster of the Bank's staff since 2002, contains information on employees—department, grade, title, and location. The second dataset, based on IDB's Time and Labor System, contains the hours that each staff member reported on different Bank products each month. From this database, we reconstructed the composition of teams during the design and execution stages of all sovereign- and non-sovereign-guaranteed loan operations in the period under analysis. The rationale for using Time and Labor data was threefold. First, the Bank lacks historical records of team membership throughout the project cycle before the Realignment (i.e., it only has records of *current* team members or, for closed operations, records at the time of closure). Second, Time and Labor data allowed us to control for the fact that preparation times tended to be longer before the Realignment (and, thus, the likelihood of team turnover during the preparation stage was higher). Finally, it permitted the identification of key contributors and thus the segmentation of the analysis by degrees of contribution. We acknowledge that using Time and Labor System data also has drawbacks, including the fact that information is limited to staff and that the reported information might not be as accurate as desired. However, we performed robustness checks for the reported time across time and for loan operations, and measurement errors are probably similar before and after the Realignment.
- 2.4 Using these datasets, we constructed a final dataset with two thresholds.
  - First, we defined a "42-month time boundary" around the approval date—basically, we restricted our analysis to the composition of project teams during 1.5 years before and 2 years after the approval date. This time boundary takes in almost 80% of the total time allocated to a loan

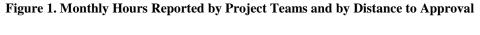
operation in an eight-year window (Figure 1).<sup>6</sup> We applied this time boundary to the universe of loans approved between 2003 and 2004 for the pre-Realignment period, and between July 2009 and July 2010 for the post-Realignment period. We selected these years and cutoffs to try to isolate the confounding effects on staff rotation and turnover that occurred during the transition period (2007 to early 2008).<sup>7</sup>

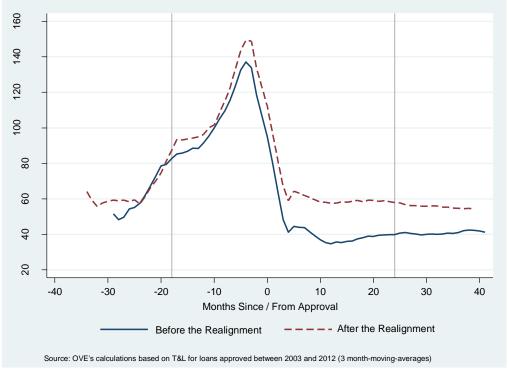
• Second, for an employee to be considered part of the project team, she must have contributed 10% or more of the total time that the team allocated to either the design or the execution stage, within the 42-month time limit. As an illustration, suppose that a team allocated a total of 100 hours during the 1.5 years before approval (design) and 50 hours during the 2 years after approval (execution). A person who devoted 10 hours to the design and none to execution would be included in the dataset because she contributed (at least) 10% of the time allocated to (at least) one of the stages. In contrast, a person who devoted 5 hours to design and none to execution would be excluded from the dataset. This "10% threshold" allowed us to distinguish marginal contributors from *actual* team members. Administrative, officer, and legal employees were not included in the analysis.

The 18 months before approval cover 91% of the total hours allocated to design during the four years before approval, while the 24 months after approval cover 60% of the hours allocated to execution during the four years after approval.

The bulk of the costs for staff reallocation occurred between 2007 and mid-2008.

E.g., employees who only participated in the project's Quality and Risk Review.





2.5 After applying these thresholds, we obtained a dataset of 226<sup>9</sup> and 329 operational staff for the pre- and post-Realignment years, respectively, distributed among 169 and 202 loan projects in those periods. On average, each team member worked simultaneously on four<sup>10</sup> loan operations during the 42-month time limit, both before and after the Realignment (Box 1). Finally, we identified the project team leader as the team member who contributed the most to the design stage (i.e., she or he reported the greatest number of hours to the project during the 1.5 years before approval), and the main executor as the team member who contributed the most to the execution stage (i.e., she or he reported the greatest number of hours to the project during the 2 years after approval).

Note that 65% (or 146) of these 226 employees also appear in the post-Realignment dataset. Section III.C exploits this fact by tracking changes in the working profile of IDB staff employees over time, based on panel data at the employee level.

Note that this average was estimated for team members that fit in the thresholds described above: the average of two loans refers to operations to which the staff member contributes 10% or more of the total time, in at least one stage of the cycle.

#### III. RESULTS

## A. Composition of Project Teams

- 3.1 After the Realignment, design and execution teams became larger, with design still mainly handled in headquarters and execution in the field. However, team members located in country offices became much more involved in the design of projects, and their chances of performing as team leaders increased significantly.
- 3.2 The average number of operational staff involved in the design and execution of each project increased from three to four after the Realignment. The bulk of the design work was still done at headquarters, but with increasing participation by country office staff. Before the Realignment, all team members were typically located at headquarters, but since 2007, at least one of the four members has been located in the field. In fact, 40% of the projects approved between 2009 and 2010 had two or more team members located in the field during the preparation stage, in comparison to 4% between 2003 and 2004 (see Annex, Table A1). In addition, the level of involvement of country office staff in design more than doubled after the Realignment: before 2007, the few field-based people that participated in design reported an average of 62 hours per capita in the 1.5 years before approval, compared to 148 hours after the Realignment (Table 1).

Table 1. Hours Allocated to Design and Execution of Loans, per capita

(1.5 years of design and 2 years of execution)

	Design	Execution	Total	Design	
Pre-R	238	243	481	62	
Post-R	191	232	423	148	

COFS					
Execution	Total				
358	420				
331	479				
	Execution 358				

HQs					
Design	Execution	Total			
354	171	525			
237	141	378			

3.3 The greater involvement of country office staff in project preparation is related to an increased likelihood that staff located in the field will be team leaders. Whereas between 2003 and 2004 less than 1 in 10 projects had a team leader in the country office, the share increased to 4 in 10 between 2009 and 2010. From the team members' perspective, this means that after the Realignment, the chance of country office staff being the team leader increased by 16 percentage points (Table 2, Model 2). Moreover, team members in a country office after 2007 are 24 points more likely to be leaders than members at headquarters before 2007 (Table 2, Model 4). These differences are statistically significant at a 1% level. As expected, whereas before the Realignment the (few) team leaders in country offices belonged to regional departments, after 2007 they are mostly specialists

Note that staff in a country office could work for a project in a *different* country. This exercise does not distinguish between decentralized personnel working on operations in the country where they are located and those contributing to other countries' portfolios.

- from the Vice-Presidency for Sectors—mainly employees of Institutions for Development (IFD), followed by Infrastructure and Environment (INE), and Social (SCL) (see Annex, Table A2).
- 3.4 Execution is handled predominantly in the country office; the main execution supervisor is typically a sector specialist in the country office both before (42%) and after the Realignment (60%), followed by operational analysts (OAs)<sup>12</sup> and fiduciary personnel (see Annex, Table A3). Since the Realignment, INE has the largest share of projects executed by OAs and SCL the smallest.

Table 2. Team Leadership, Main Executor, and Location<sup>13</sup>

		Design Sta	ıge		<b>Execution Stage</b>			
	1	1 2		3 4	1	2	3	4
	Team Leader if COF	Team Leader if COF	Team Leader	Team Leader	Max. Executor if COF	Max. Executor if COF	Max. Executor	Max. Executor
Realignment	0.0757 (1.34)	0.158** (3.20)	-0.173*** (-4.66)	-0.0577 (-1.48)	-0.141** (-3.08)	-0.0766 (-1.66)	-0.0313 (-0.96)	0.0141 (0.42)
Team Size Design		-0.121*** (-5.44)		-0.139*** (-11.76)				
Per Capita Projects		-0.00222 (-0.13)		-0.00541 (-0.81)		-0.0573*** (-4.15)		-0.0297*** (-4.26)
Location			-0.308*** (-5.72)	-0.284*** (-6.11)			0.270*** (6.42)	0.240*** (5.81)
Location*Realignment			0.254*** (3.92)	0.240*** (4.11)			-0.0960 (-1.79)	-0.0757 (-1.45)
Teal Size Execution						-0.100*** (-6.32)		-0.0917*** (-8.96)
_cons	-7.11e-14 (-0.00)	0.366*** (5.41)	0.497*** (17.40)	1.166*** (32.57)	0.500 (1.38)	0.843** (2.77)	0.221*** (8.76)	0.635*** (4.27)
Country Dummies N	Yes 348	Yes 348	Yes 1051	Yes 1051	Yes 572	Yes 572	Yes 1198	Yes 1198

Note: Location is a dummy that takes the value 1 if COF and 0 if HQs

t statistics in parentheses

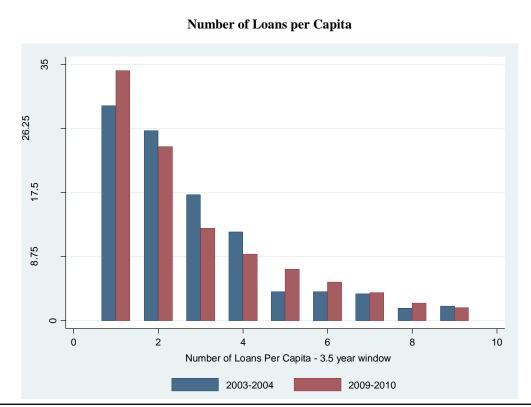
<sup>\*</sup> p<0.05 \*\* p<0.01 \*\*\* p<0.001

Note that since many of the OA are consultants (which are excluded from the Time and Labor data used here), these figures probably underestimate the relative importance of the OA in execution.

Formally, the reduced-form regression model is  $y = \beta_0 + \beta_1 X + \beta_2 L + \beta_3 W + e$ , where y is a dummy variable for team leader, X is the variable of interest (Realignment), L is a dummy for location, W are control variables for team size, number of projects per capita, and country project, and e is the error term.

#### Box 1. Workload before and after the Realignment

Operational staff are simultaneously involved in an average of four loan operations, both before and after the Realignment (see figure below). However, applying the "10% threshold" halves the number—while employees typically participate in four loan operations at the same time, but they are heavily involved in only two of them. The number is slightly higher for staff at headquarters (see Annex, Table A4). Even though the statistics do not indicate that the workload of loan operations increased after the Realignment, most staff interviewed for this evaluation perceive that their assignments sharply increased after 2007, especially taking into account their involvement in knowledge products and the fulfillment of administrative requirements.



## B. Staff Fragmentation throughout the Project Cycle

3.5 The Realignment succeeded in increasing the continuity of staff between design and execution, mainly because country office staff now participate more in the preparation of operations. Moreover, it fostered higher continuity of and involvement by both team leaders and main execution supervisors throughout the project cycle. Projects in the three main sectors benefitted from greater team continuity, and SCL projects faced the greatest change. From the clients' perspective, all country groups and regions experienced a reduction in staff fragmentation after the Realignment.

### 1. Team members

3.6 The continuity of team members throughout the project cycle strongly increased after 2007. Before the Realignment, roughly half of the team members typically worked on both the design and execution stages. After the Realignment, the continuity level reached 67%, and the difference is statistically robust (Annex, Table A5). Moreover, the entire distribution of mean continuity shifted to the

right, indicating that the increased continuity was not driven by outlier teams (Figure 3).

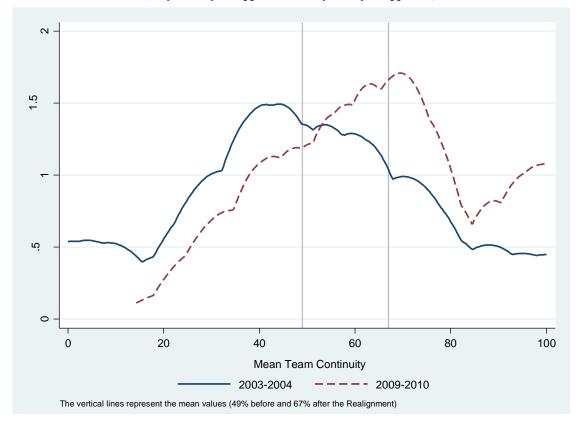


Figure 3. Distribution of Mean Team Continuity (1.5 years before approval and 2 years after approval)

- 3.7 This increased continuity at the team level is reflected at the project level. On average, before the Realignment more than half of the team members worked throughout the project cycle in about one-third of the operations, compared to two-thirds of the projects after the Realignment (Annex, Table A5).
- 3.8 There is a strong and positive correlation between level of involvement in the design of an operation <sup>14</sup> and continuity, both before and after 2007 (Annex, Table A6). For example, whereas none of the *lowest* contributors to the design of an operation (the first quartile in the distribution of the share of hours contributed to design) continued working on implementation, 8 in every 10 of the *highest* contributors (the fourth quartile in that distribution) worked throughout the cycle before the Realignment (see Table 3, row 1, columns 1 and 4). It is noteworthy that the share of operational staff who worked in both stages of the cycle strongly increased across all levels of contribution (Table 3, row 2 vs. row 1), to the extent

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For this exercise, we grouped IDB operational staff in quartiles according to their contribution to the design stage of a project (with the lowest quartile grouping the 25% of specialists that contributed the least, and the highest quartile grouping the 25% that contributed the most, measured in terms of share of the total hours that the team allocated to the operation).

that in the post-Realignment period, 9 in every 10 *highest* contributors in design keep working in the execution stage.

Table 3. Continuity Share by Level of Contribution to Design

Qua	Quartiles of Contribution to the Design Stage						
	1	2	3	4	Total		
Pre-R	0%	76%	69%	76%	49%		
Post-R	14%	75%	74%	93%	67%		

Source: OVE, based on Time and Labor data.

3.9 In line with the results presented in the previous section, the increased continuity of team members was mainly driven by the greater participation of country office staff in the design of loan operations. Around a quarter of team members in country offices participated in both the design and execution of loan operations before 2007, compared to 64% thereafter. Put differently, each team member is 20 percentage points more likely to work in both design and execution after the Realignment, but if located the field, his or her odds are 30 points higher than before (Table 4). The differences are robust at a 1% level.

**Table 4. Continuity and Location**<sup>15</sup>

	1	2	3
	Continuity	Continuity if COF	Continuity
Realignment	0.207***	0.278***	0.133***
	(8.41)	(7.21)	(4.02)
Contribution to design	0.00772***	0.0105***	0.00741***
	(18.91)	(13.24)	(17.64)
Per Capita Projects	-0.00701	-0.0223	-0.00610
	(0.97)	(-1.69)	(-0.84)
Location			-0.123** (-3.15)
Location*Realignment			0.172*** (3.59)
_cons	0.386*	0.0254	0.276*
	(2.50)	(0.69)	(1.97)
Country Dummies	Yes	Yes	Yes
N	1452	614	1422

Note: Location is a dummy that takes the value of 1 if COF and 0 if HQs t statistics in parentheses

<sup>\*</sup> p<0.05 \*\* p<0.01 \*\*\* p<0.001

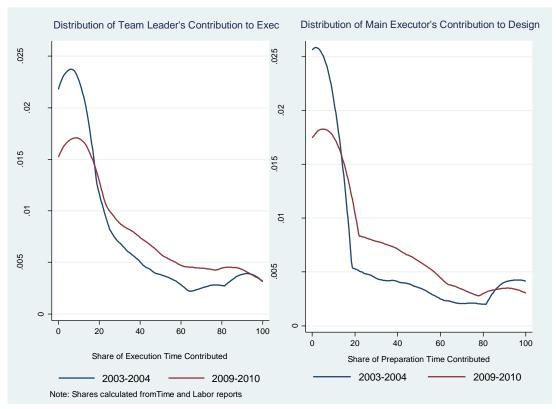
To study this reduction we used four specifications based on the following reduced-form regression:  $y=\beta_0+\beta_1X+\beta_2L+\beta_3W+e$ , where y is a dummy variable for continuity, X is a dummy for Realignment, L is a dummy for location, W are control variables on share of contribution to the design stage, per capita number of projects, and country project, and e is the error term.

## 2. Team leaders and main execution supervisors

- 3.10 Both before and after the Realignment, the large majority of team leaders remained involved in the execution stage, but after 2007 the share increased significantly from 78% to 94% (Annex, Table A7). Moreover, team leaders' level of involvement in the execution stage increased (Figure 5 and Box 2). Before the Realignment, their contribution to execution was 23% on average, and it increased to 31% thereafter. The difference is robust, and both distributions are significantly different (Annex, Table A8). In other words, since the Realignment, the time devoted by team leaders to the implementation of an operation represents roughly one-third of the total number of hours the entire team dedicated to implementation.
- 3.11 Despite team leaders' greater participation in implementation, the proportion of them that are also the main executors increased only marginally after the Realignment, and the difference is not statistically significant (Annex, Table A9). The sectors with the largest shares of projects for which the team leader acts as main executor are IFD and SCL (Annex, Table A10).

Figure 5. Team Leader's Contribution to Execution (2 years after approval)

Figure 6. Main Executor's Contribution to Design (1.5 years before approval)



Source: OVE, based on Time and Labor data.

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We tested for equality of distributions using the Kolmogorov-Smirnov test.

3.12 Continuity throughout the project cycle also increased for the main execution supervisors. Before the Realignment, the large majority of them had not been involved in the design of the operation they were executing, in comparison to around a third after 2007 (Annex, Table A11). Projects from IFD benefited from the largest increase in continuity of the main execution supervisors: since the Realignment, in roughly three-quarters of IFD projects, the person who devoted the largest amount of hours to execution had also been involved in design (Annex, Table A12). Moreover, the main executors' level of involvement in design increased after the Realignment (Figure 6 and Annex, Table A13). Even though the difference at the mean value is not robust, the distributions17 of contributions are significantly different before and after 2007 (Annex, Table A13).

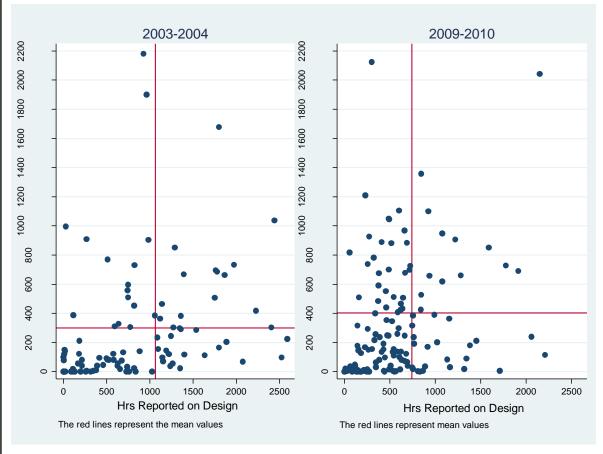
We tested for equality of distributions using the Kolmogorov-Smirnov test.

#### Box 2. Team Leaders' Participation in Design and Execution

The number of hours that team leaders report having worked on the design of the projects they led decreased from an average of 1065 before the Realignment to 741 thereafter. In contrast, the hours reported during the first two years of the execution stage increased by one-third after the Realignment, from an average of 300 to 404.

#### Team Leaders' Time Devoted to Design and Execution

(1.5 years before approval and 2 years after approval)



### Source: OVE, based on Time & Labor data.

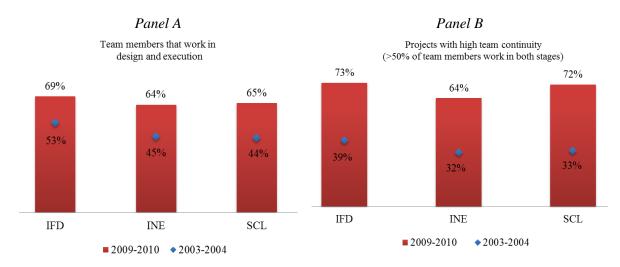
### 3. Continuity by sectors, country groups, and regions

- 3.13 To analyze differences in continuity patterns across sectors, we focused on IDB's main operational sectors: Finance and Infrastructure, Social, and State-Civil for 2003-2004; and INE, IFD, and SCL for 2009-2010. Even though the organizational changes introduced in 2007 make it hard to draw one-to-one comparisons between pairs of sectors, a descriptive analysis of changes in continuity within sectors is still informative.
- 3.14 After the Realignment, projects from the three main operational sectors experienced a reduction in their staff fragmentation throughout the project cycle. In 2003-2004, on average, between 44% and 53% of the staff working on projects from those sectors worked in both the design and execution stages; this

proportion increased to around 67% in 2009-2010. INE and SCL experienced the greatest jump (Figure 7, panel A).

3.13 At the project level, SCL led the change: whereas before the Realignment only 3 in every 10 loan operations had more than half of the team members working in both the design and execution stages, the share more than doubled after the Realignment (Figure 7, panel B). This said, IFD and INE also experienced large changes, with differences above 30 percentage points

Figure 7. Continuity by Department
Operational Departments of the Loan Operation



Source: OVE, based on Time and Labor data.

#### Box 3. Cases in Point - Projects in Trinidad and Tobago and Belize

In 2003, the Board approved the operation "Public Sector Reform Program" in Trinidad and Tobago (TT0057). Three operational staff worked on its design, all of them located at headquarters, and the team leader contributed almost three-quarters of all the hours allocated to design. The team leader and a sector specialist kept involved in the execution, but most of the implementation work was done by (the equivalent of) an Operations Analyst located in the field, who had not been involved in the design.

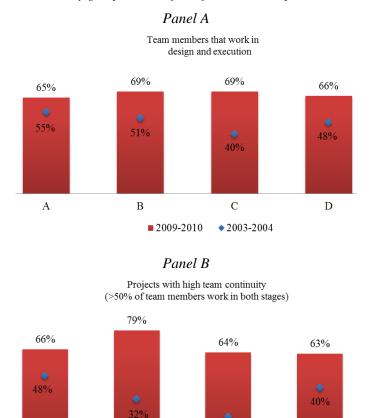
In 2010, the Board approved the operation "Community Action Plan for Public Safety" in Belize (BL-L1014). Four operational staff worked on its design, three located at headquarters and one in the Country Office Belize. The team leader, a Citizen Security Lead Specialist, was located at headquarters. Three of the four staff continued working on the implementation of the operation, and together the Operations Associate in Belize and a sector specialist located in Guyana contributed more than 80% of the hours devoted to execution.

3.14 In terms of country groups, before the Realignment projects in the richest countries had a larger share of team members working throughout the cycle than projects in the poorest countries (Figure 8, panel A). For example, on average 55% and 51% of the staff working on projects for A and B countries worked in both the design and execution stages, but only 40% and 48%, respectively, did so

for C and D countries. This gap was strongly reduced after the Realignment: indeed, between 2009 and 2010, the continuity of team members in projects in D countries was higher than that in A countries.

3.15 At the project level, projects in B countries led the change: whereas before the Realignment 3 of every 10 loan operations had more than half of the team members working throughout the cycle, the share reached 79% thereafter (Figure 8, panel B).

**Figure 8. Continuity by Country Group** *Country group that benefitted from the loan operation* 



Source: OVE, based on Time and Labor data.

Α

3.16 In terms of regions, <sup>18</sup> projects in the Caribbean benefitted the most from increased continuity. Before the Realignment, on average 18% of the operational staff working on projects in Caribbean countries worked in both the preparation and implementation stages; the share rose to 94% after the Realignment (Figure 9, panel A). The Andean region also experienced a large increase (from 23% vs. 67%). At the project level, changes were more similar across regions, averaging a 6-point increase after 2007 (Figure 9, panel B).

**2009-2010** • 2003-2004

20%

C

D

В

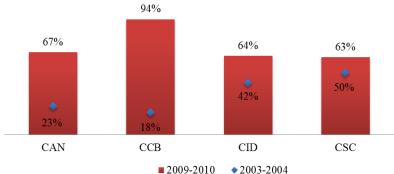
We excluded CDH from the analysis because of the very small number of observations.

Figure 9. Team Members' Continuity by Regions

Regions that benefitted from the loan operation

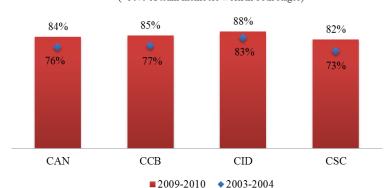
#### Panel A

Team members that work in design and execution



Panel B

Projects with high team continuity (>50% of team members work in both stages)



Source: OVE, based on Time and Labor data.

## C. Work Profile of Operational Staff

- 3.17 The changes in team dynamics and continuity levels affected the work profile of IDB team members, especially of those located in the field. Since the Realignment, operational staff are less specialized in one stage, but they are still heavily involved in the stage in which their previous experience was larger.
- 3.18 To analyze the working profile of operational staff at the IDB, we created a panel dataset tracking 146 employees over time. We categorized them in five groups according to their roles in the preparation and execution stages of *all* the projects in which they were involved, before and after the Realignment. *Project designers* are those who participated only in the design stage of projects and did not contribute to their implementation, and *project executors* are those who participated only in the implementation stage of projects and did not contribute to their design. *Mostly designers* are those who worked in the design and implementation stages of projects but the bulk of their work was in design (i.e., of the total time reported on loan operations in the period under study, more than

half was devoted to the preparation of operations), and *mostly executors* are those who worked in the design and implementation stages of projects but the bulk of their work was in execution. Finally, the *multitaskers* are those who did not specialize in any stage of the project cycle.

- 3.19 With this classification we created a "transition matrix" that shows how the employees' profiles before the Realignment changed after 2007 (Table 5). The matrix indicates that the number of operational staff who were highly specialized in either design or execution decreased sharply after the Realignment. Only 2 of the 10 employees who performed as project designer before the Realignment continued doing so after the Realignment (row one, column one); and only a third of the employees who performed as project executors before the Realignment continued doing so after the Realignment (row three, column three). In line with the findings of the previous sections, those who worked only on the implementation stage of loan operations (mostly country office staff) are currently distributed in all five working profiles, and 12 of them are even performing as mostly designers.
- 3.20 However, the operational expertise acquired before the Realignment was not lost. Most of those who were project designers before the Realignment are either project designers or mostly designers after the Realignment, and most of those who were project executors before the Realignment are either project executors or mostly executors thereafter. In other words, since the Realignment operational staff are less specialized in one of the stages of the project cycle, but they are still heavily involved in the stage in which their previous experience is greater.

**Table 5. Changes in Working Profiles of Operational Staff** (Values indicate number of employees)

			After the Realignment				
		Project Designers	Mostly Designers	Project Executers	Mostly Executers	Multi- Taskers	Total
	Project Designers	2	5	0	0	3	10
	Mostly Designers	3	31	0	2	9	45
Before the Realignment	Project Executers	3	12	5	15	8	45
	Mostly Executers	0	5	2	9	4	20
	Multi-Taskers	4	12	0	2	8	26
	Total	14	65	7	28	32	146

#### IV. CONCLUSIONS

- 4.1 The Realignment was intended to end the divorce between design and execution, under the assumption that keeping the same expertise involved throughout the project cycle would enhance the Bank's impact. In this paper, we studied the changes in the composition and dynamics of project teams throughout the life of loan operations, with a special emphasis on team and leadership continuity between design and execution. Our results suggest that the integration of the project cycle increased strongly after the Realignment, a change that appears to have been driven mainly by the greater participation of country office sector specialists in the design of loan operations. Moreover, specialists in the field are increasingly likely to be team leaders—a change that a recent SPD paper suggests is probably boosting disbursement performance.
- 4.2 A corollary to these changes is that the work profile of IDB's operational staff was altered after the Realignment. Sector specialists are now less "specialized" in a particular stage of the project cycle (design or execution), but they remain more heavily involved in the stage in which they had the greatest expertise before the Realignment.
- 4.3 It is important to note that we did not have the data to study the effect of the changes on project quality or on the Bank's development effectiveness. Both additional data and further research would be necessary to assess such broader impacts.

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## ANNEX. ADDITIONAL DATA AND ANALYSIS

# A1. Projects with team members located in the field during design

	2003-2004		2009-	-2010
	#	%	#	%
0 Member	101	59.8%	48	23.7%
1 Member	62	36.7%	73	36.1%
2 Members	6	3.6%	52	25.7%
3 Members	0		21	10.4%
4 Members	0		6	3.0%
5 Members	0		2	1.0%
\ <u></u>	169	100%	202	100%

# A2. Team leaders located in the field during design

	2003-2004	2009-2010
	#	#
INE	1	19
SCL	3	11
IFD	1	26
Country / VPC	5	1
MIF	2	1
ESG	2	1
SCF		6
Other		9
Total	14	74

# A3. Main executors located in the field during execution

	2003-2004		2009	-2010
	#	%	#	%
Sector Specialist	60	42.5%	98	59.7%
Operational	33	24.8%	39	23.7%
Fiduciary	23	16.3%	17	12.8%
Division Chief, Manager	5	3.6%		
Associate			2	1.2%
Country Representative	2	1.4%		
Other	15	11.4%	7	2.4%
	138	100%	163	100%

# A4. Per capita workload – loan operations

	2003-2004	2009-2010
COF	2.09	1.83
HQ	2.25	2.29

# A5. Continuity of team members throughout the project cycle

### At the team member level

Two-sample t test with unequal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
0	169 202	.4928431	.0218388	.2839049	.4497292	.535957
combined	371	.5873315	.0140087	.2698263	.5597849	.6148782
diff		1735407	.027178		2270097	1200718

diff = mean(0) - mean(1) t = -6.3853Ho: diff = 0 Satterthwaite's degrees of freedom = 321.938

## At the project level

Two-sample t test with unequal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
0	169 202	.3727811	.0373063	.4849815	.2991316	.4464306
combined	371	.5309973	.0259438	.4997122	.4799816	.582013
diff		2905853	.0500276		3889735	1921971

# A6. Correlation between level of involvement in design and continuity

## Before the Realignment

Linear regression Number of obs = 598 F(1, 596) = 503.55Prob > F = 0.0000

Prob > F = 0.0000 R-squared = 0.3782 Root MSE = .39438

continuity	Coef.	Robust Std. Err.	t	P> t	[95% Conf.	Interval]
quartile_prep_pre _cons	.2547812 1360153	.011354	22.44 -5.93	0.000	.2324826 1810811	.2770799 0909495

## After the Realignment

Linear regression Number of obs = 854

F( 1, 852) = 503.51 Prob > F = 0.0000 R-squared = 0.3004 Root MSE = .40268

continuity	Coef.	Robust Std. Err.	t	P> t	[95% Conf.	Interval]
quartile_prep_post _cons	.2357258	.0105052	22.44	0.000	.2151067 0147486	.2563449

## A7. Continuity of team leaders throughout the project cycle

Two-sample t test with unequal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
2003-200 2009-201	168 202	.7857143 .9356436	.031752	.4115526 .2459965	.7230273 .9015145	.8484013 .9697726
combined	370	.8675676	.0176456	.3394193	.8328691	.9022661
diff		1499293	.036163		2211367	0787219

 $\label{eq:diff} \mbox{diff = mean(2003-200) - mean(2009-201)} \mbox{$t = -4.1459$} \\ \mbox{Ho: diff = 0} \mbox{Satterthwaite's degrees of freedom = } 261.786 \\$ 

## A8. Level team leaders' involvement in execution

## Difference in means

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
2003-200 2009-201	168 202	23.74264 30.59346	2.360381 2.215215	30.59404	19.08261 26.22542	28.40268 34.9615
combined	370	27.48282	1.623495	31.22855	24.29035	30.67528
diff		-6.850813	3.245626		-13.23311	4685125
diff =		3-200) - mean	n (2009–201)	degrees	t of freedom	= -2.1108 = 368

## Difference in the distribution

 ${\tt Two-sample\ Kolmogorov-Smirnov\ test\ for\ equality\ of\ distribution\ functions}$ 

Smaller group	D	P-value	Corrected
2003-2004:	0.1499	0.016	
2009-2010:	-0.0199	0.930	
Combined K-S:	0.1499	0.032	0.024

#### A9. Team leaders who are also main executors

Two-sample t test with unequal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
2003-200 2009-201	132 189	.2878788	.0395591	.4544992	.2096215	.3661361
combined	321	.3115265	.0258891	.4638405	.2605922	.3624607
diff		0401635	.0523204		1431422	.0628151
diff =	mean(200	3-200) - mean	1(2009-201)		t	= -0.7676

Ho: diff = 0 Satterthwaite's degrees of freedom = 288.133

# A10. Team leaders who are also main executors, by sectors

(As a share of the team leaders of projects within each sector)

	2003-2004	2009-2010
INE	22%	17%
SCL	20%	31%
IFD	27%	43%

# A11. Continuity of main executors throughout the project cycle

Two-sample t test with unequal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
2003-200 2009-201	169 202	.4378698	.0382769	.4975992 .4815957	.3623042 .5717983	.5134354
combined	371	.5471698	.0258778	.4984422	.4962837	.5980559
diff		200744	.0511205		3012829	1002051
diff =		3-200) - mea	,	te's degrees	_	= -3.9269 = 353.193

# A12. Continuity of main executors throughout the project cycle, by sectors

(As a share of the main executors of projects within each sector)

	2003-2004	2009-2010
INE	57%	66%
SCL	40%	55%
IFD	46%	73%

# A13. Main executors contribution share to design

## Difference in means

. ttest prep\_share, by(realignment)

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
2003-200 2009-201	169 202	21.73643 26.24486	2.59019 2.210186	33.67247 31.41265	16.62292 21.88673	26.84995 30.60298
combined	371	24.19115	1.687056	32.495	20.87373	27.50857
diff		-4.508424	3.383998		-11.16276	2.145916
diff =		3-200) - mean	n (2009-201)		t	= -1.3323

Ho: diff = 0degrees of freedom = 369

## Difference in the distribution

Two-sample Kolmogorov-Smirnov test for equality of distribution functions

Smaller group	D	P-value	Corrected
2003-2004:	0.2007	0.001	
2009-2010:	-0.0442	0.698	
Combined K-S:	0.2007	0.001	0.001

# A14. Work profile of all team members

	2003-2004	2009-2010
Multi-Project	62.1%	78.80%
Executors	18.90%	10.10%
Designers	16.30%	6.50%
Project Specialist	2.50%	4.40%
	100%	100%

# A15. Work profile of team leaders

	2003-2004	2009-2010
Multi-Project	17.6%	36.4%
Executors	2.90%	5.7%
Designers	65.60%	38.5%
Project Specialist	13.70%	19.2%
	100%	100%