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Carola Álvarez
Jacqueline Bueso-Merriam
Rodolfo Stucchi

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Carola Álvarez, Strategy Development Division, Inter-American Development Bank, Washington D. C., carolaa@iadb.org. Jacqueline Bueso-Merriam, Strategy Development Division, Inter-American Development Bank, Washington D. C., jacquelineb@iadb.org. Rodolfo Stucchi, Strategy Development Division, Inter-American Development Bank, Washington D. C., rstucchi@iadb.org.

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Abstract: This paper focuses on the performance of IDB projects between 1996 and 2011 disbursements. We present evidence on the evolution of disbursements with respect to the available funds and the evolution of disbursements with respect to the historic disbursement curve of IDB projects. We also identify the main factors driving disbursements. Our findings show that disbursements improved in the last 10 years; in particular, they improved after the organizational changes instituted after 2006. With respect to the factors driving disbursements, we find that: (i) Country is more important than sector in understanding performance. (ii) Most of the remaining variance in project performance can be explained by variance within each country. (iii) The team leader plays an important role in understanding project performance. (iv) The effect of team leader location on disbursement performance has not been constant over time. The effect is negative for projects approved after 1996. However, if we focus on projects approved after 2009 the effect is positive. This result also provides evidence on the success of the organizational changes undertaken after 2006. (v) Projects that underwent a change in team leader show an improvement in performance after one year of the change. (vi) Team leader characteristics related to the experience or seniority of the team leader are non-significant, though in the expected direction. Team leader may be pointing to other non-observable characteristics of the individual or characteristics of the larger team that supports that team leader in execution and supervision of the project.

Keywords: Aid effectiveness, Project performance, Project management, Latin America.

JEL Classification: F35, H43, H81, O22, O54

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1. Introduction

In this paper we focus on the performance of IDB project disbursements and we identify some of the salient factors driving their performance. Understanding disbursements is relevant in order to (i) ensure that the Bank can enhance its execution capacity even while increasing lending volumes to the region, (ii) prudently manage the Bank's capital[1], and more important (iii) achieve expected results on the ground, thus contributing to the development of LAC.

We begin by analyzing disbursement trends of the Bank over the last decade in order to understand how the 2007 organizational reform and the General Capital Increase (GCI-9) have impacted disbursement trends. Second, we identify the most relevant factors behind overall disbursement performance. To accomplish this, we first derive the IDB historic disbursement profile and then we study the factors that affect deviations with respect to that profile.

In terms of the evolution of disbursements, the results in this paper show that: (i) in the last decade the performance of disbursements has improved both with respect to undisbursed loan balance and with respect to the Bank's historic disbursements; (ii) the organizational changes in 2006 led to improved disbursement performance. With respect to the factors that influence disbursement performance, our results show that: (i) country is relatively more important than sector in understanding deviations with respect to the historic disbursement curve – and this result is valid even after considering the effect of congress ratification and other authorization requirements which are relevant in some countries; (ii) the team leader plays an important role in understanding disbursement deviations; (iii) team leader location is important and its effect on disbursement performance has not been constant over time. In fact it reversed; when studying projects approved since 1996 we see that projects whose team leader is located in country office disburse at a lower rate, however the opposite is true for projects approved after 2009 which show higher disbursements when the team leader is in a country office; and (iv) projects that underwent a change in team leader show a better performance after one year has elapsed since that change, among other findings.

The rest of this paper is organized as follows. Section 2 describes the dataset used in the analysis and defines a relevant benchmark to compare disbursements: the IDB historic disbursement curve. Section 3 provides information about the trend of IDB disbursements. Section 4 presents an analysis to understand deviations with respect to the benchmark. Finally, section 5 concludes.

[1] The Bank's capacity to accurately forecast its disbursement level for the next year is important because of: i) its effects on loan charges (if we over estimate disbursements we would over estimate income which means that in fact loan charges are too low), ii) the Bank may hold excess liquidity if actual disbursements are under projected levels, and iii) it affects the Bank's borrowing program for the year.

2. Related Literature

When it comes to development aid, there are differing views on whether more is better. On the one hand, Easterly (2002) sets forth that the West has been on what he calls an elusive quest for growth, failing to understand the needs of impoverished communities and spending trillions of dollars on ineffectual aid because of it. While he cautions measuring success by how much money is spent, Sachs (2005) urgently calls for more spending, admonishing the developed world for not doing enough, and setting forth a global responsibility of ending poverty, enabling the poor to escape the poverty trap by 2025.

A response to this call for action is at the core of the multilateral development banks' (MDBs') raison d'être, and in recognition of the vivid examples of ineffective aid sometimes set forth by economists like Easterly, the MDBs are committed to understanding what works and what doesn't in order to increase the effectiveness of their delivery. A review of the literature reveals many studies attempting to answer what factors matters to achieve good projects. For starters, the focus of many of these studies attempted to answer which country conditions, at the macro level, were most conducive to successful projects.

For example, Isham and Kaufmann (1995) set out to answer whether economic distortions make for less productive investments. Using the ex post economic rate of return (ERR) as their dependent variable, they find that macroeconomic distortions, such as distortions in the exchange rate, trade, and the pricing of tradable goods, critically worsen the productivity of investments. Following suit, Isham, Kaufmann and Pritchett (1997) find that the negative impact of a lack of civil liberties is as large as that of economic distortions on project ex post ERRs. Dollar and Levin (2005) seek to understand the importance of institutional quality on project outcomes, as measured by success ratings at exit, assigned by the World Banks' independent evaluation arm. They find that the quality of institutions in the recipient country is critical to economic success.

If country conditions are of such import, the question then becomes whether aid should be limited to countries meeting certain pre-conditions. Amongst the aforementioned authors, Isham and Kaufmann (1995) argue that investments in the most vulnerable countries are still warranted from an equity standpoint and because even though returns are mitigated in such countries they are not obsolete. Guillaumont and Laajaj (2006) further answer this question in their study of whether instability increases aid effectiveness. They find that in fact, more aid should be allocated to the most vulnerable countries - where they do agree that project success rates are lower, but where they argue that project evaluations cannot capture the macro-stabilizing effect of aid delivered through projects.

In addition to studying how country conditions affect a project's success, the literature offers some attempt at understanding specific actions an MDB can take to enhance a project's success. Kilby (1995) analyzes the benefits from supervision as measured by gains in the ex post ERR

and finds that they far outweigh the costs simply because relative to the size of the projects supervision costs are marginal. Further to this, Deininger, Squire, and Basu (1998) seek to answer whether economic and sector work adds value to the ex post ERR. Given its high impact, they recommend that resources should be switched from preparation and supervision to economic and sector specific work.

Khwaja (2009) marries these two veins in the literature by seeking to answer: can good projects succeed in bad communities? Khwaja specifically limits his study to infrastructure projects in Pakistan, and utilizes their maintenance level as the measure of success. He finds that community specific constraints do matter, but appropriate design can enable projects to succeed even in communities where local conditions are stacked against project success.

Subsequent to this, Denizer, Kaufmann and Kraay (2011) examine more generally what factors contribute to individual project success as measured by subjective self-assigned ratings of development objective achievement. A main finding is that while country-level macro measures of success are important, individual project success is also largely dependent on within country factors. Specifically they find that high project preparation costs and larger projects both lead to lower outcome ratings, while task manager quality has a significant impact on performance. Although they provide an important contribution in studying the determinants of projects success, in their preferred specification they only account for 12 percent of project outcome variation and therefore they recommend using more robust tools for capturing performance.

In the present study, we seek to better understand what an MDB can do to improve project outcomes. With the goal of having an objective measure of project performance that allows for an ample project universe, we first build a historical disbursement curve for Bank's projects to use as a benchmark against which to measure performance. Like Denizer et al. (2011) we seek to understand the relative weight of within country variables in explaining performance and link project outcomes to project-level explanatory variables. Ultimately we believe that we can have "good" projects in "bad" communities, and seek to understand those factors which we can specifically manage to enhance their probability of success.

3. Data and descriptive statistics

a) Data Source

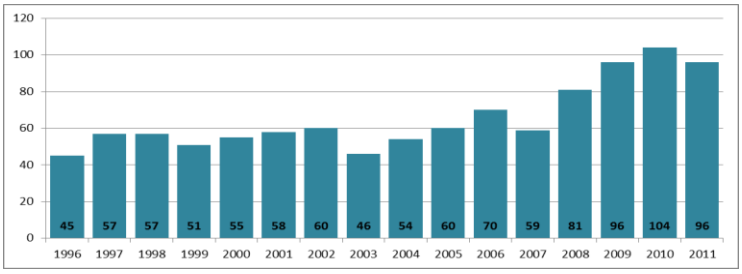
For this paper we merge the information of two different datasets. The first one contains information about each project. We use data from sovereign-guaranteed investment projects approved after 1996. Except when explicitly noted, we exclude Emergency (EME) and Policy Based Loans (PBL) that generally have faster disbursement profiles. Figure 1 summarizes the number of projects we use in this empirical analysis by approval year (panel a), by country (panel b) and by sector division (panel c). We construct a panel of projects with annual

information from 1996 to 2011.[2] The total number of projects is 1,049 and the corresponding number of observations is 7,816 (i.e. disbursements of each project). This dataset provides valuable information that allows us to understand performance. The two main variables we use in this paper are the percentage disbursed at the end of each year and the number of months since the approval of the project. Disbursements are a necessary step in being able to achieve results.

In addition to the main variables we also observe variables that allow us to study the project with regard to its context. These variables are country, sector, sub-sector, and the investment amount of the project. In this dataset it is also possible to identify who is the team leader. For purposes of this paper, team leader is the professional in charge of the supervision of said project in the Bank's systems. For projects before 2009 the information is limited to who is the last team leader that is running (or ran) the project. The total number of team leaders in our dataset is 346; i.e. each team leader has lead on average 4.7 projects.[3] The second dataset contains information about specific labor characteristics of team leaders. The information includes IT username. This information allows us to merge this dataset with the projects dataset. We also know the date of birth and therefore the age of each person and the date he or she started working, which allows us to compute his or her years of experience at IDB. We also have information about seniority, type of contract (international or local) and the division to which each person reports; as well as his or her location (headquarters versus country office). We observe this information in each moment of time[4].

Figure 1: Number investment of projects used in the analysis

a) By approval year

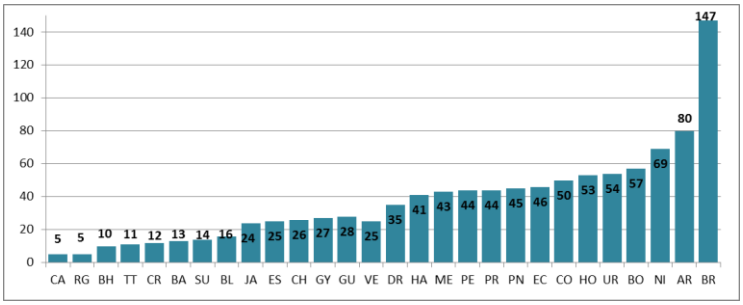


[2] We also considered using monthly data for the period 2009-2011 for which we have the data. Results were consistent.

[3] In the analysis of the factors driving performance we focus on those projects for which the team leader led at least three projects. In this case, the total number of projects is 800 and the number of team leaders is 163. In this case the average number of projects per team leader is 5.7.

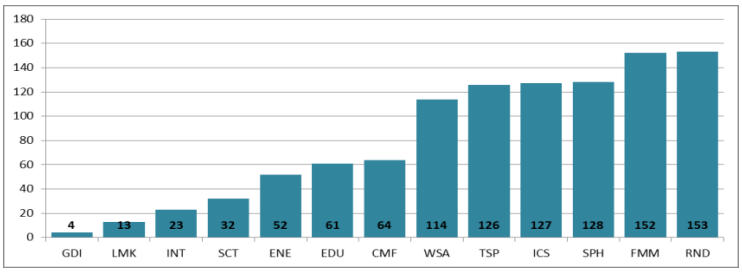
[4] Personal and confidential information about employees were not accessed by the authors for this study.

b) By country



Notes: Data used in the graphs cover the projects used in the empirical analysis.

c) By sector



b) The historic disbursement curve of IDB projects

To understand the natural progression in execution of the Bank loans and to establish a benchmark for comparisons, we consider the historical trends of actual disbursement behavior of Bank loans. IDB projects begin disbursing after they have met the necessary eligibility conditions. Reaching eligibility can be time-consuming as in some countries where projects need to be ratified or authorized by Congress. In delineating this behavior against time, an S-shape naturally arises.

To model this behavior we estimate the historic disbursement curve by employing a logistic growth curve, a function that is frequently applied in models of population growth. The estimating equation is given by:

$$d = b_o + \frac{1}{1+b_2 e^{-b_1 k}} + v \qquad (1)$$

where *d* is the proportion of the total approved amount disbursed after *k* months since approval and *v* is an error term. We observe the disbursement proportion (*d)* at December 31 of each year and we know the exact approval date which allows us to compute *k*.

Let $\hat{b}_0$, $\hat{b}_1$, and $\hat{b}_2$ be the non-linear least square estimates of the parameters b_0, b_1, and b_2 in equation (1), then the historic disbursement curve is given by

$$hd(k) = \hat{b}_o + \frac{1}{1+\hat{b}_2 e^{-\hat{b}_1 k}} \quad (2)$$

This expression provides us with the expected value of disbursement –the historic disbursed value—for different values of *k* –i.e. at different months since approval.

The historical disbursement curve allows us to classify projects as: (i) "Above Average" if the proportion disbursed after *k* months since approval is larger than what is expected for a project with the same number of months having elapsed since approval (*d* > *hd*), (ii) "Average" if the proportion disbursed after *k* months since approval is equal to what is expected for a project with the same duration since approval (d=hd), and (iii) "Below Average" if the proportion disbursed after t months since approval is lower than what is expected for a project with the same number of months having elapsed since approval (d<hd). However, given that few projects fall exactly on the historical disbursement curve, we have defined limits of what can be considered "on average equal to the disbursement curve". These limits are equal to the curve plus half a standard deviation of the disbursement deviation (upper limit) and the curve minus half a standard deviation of the disbursement curve (lower limit).[5] In this way, projects can be classified as:

(i) "Above Average" if the proportion disbursed after k months since approval is larger than the upper limit for a project with t months since approval (*d* > upper limit),

(ii) "Average" if the proportion disbursed after k months since approval is between the lower and upper limits for a project with k months since approval (lower limit < d < upper limit), and

(iii) "Below Average" if the proportion disbursed after k months since approval is lower than the lower limit for a project with t months since approval (d < lower limit).

Figure 2 shows the historic disbursement curve (blue line) estimated with all the investment projects approved after 1996. The value of the parameters that define the historic disbursement curve are $\hat{b}_0 = -0.034$, $\hat{b}_1 = 0.053$, and $\hat{b}_2 = 11.83$. **The R-squared is 0.69 which is considerably high and indicates that the logistic regression curve fits disbursement data.** The upper limit and lower limits are the green and red lines, respectively.

Having estimated the historic disbursement curve allows us to answer questions like: *how is a particular project doing in terms of disbursements in 2011*? With the proportion disbursed at December 31st 2011 and the months that have elapsed since its approval, we can know if the project is above average, average, or below average. We did this exercise for all projects active in 2011 and plotted them in Figure 2. Each dot represents the combination of the proportion

[5] We first construct deviations with respect to the historic disbursement curve, y = d – hd, and then its standard deviation. We tested different limits and chose to use one-half of the standard deviation instead of using one full standard deviation because the standard deviation of the deviation with respect to the historic disbursement is large and one standard deviation would classify a high proportion of projects as "average".

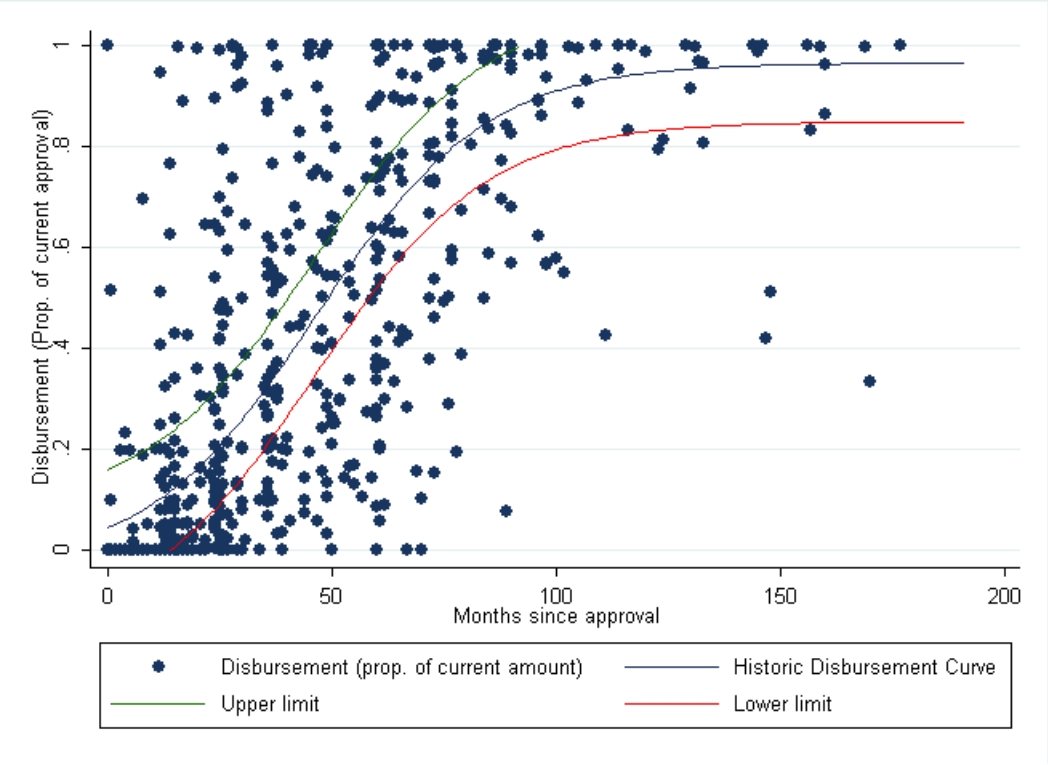
disbursed at December 31, 2011 and the duration in months since approval for the projects active at December 31, 2011.

For each project we can construct the deviation with respect to the historic disbursement curve as the difference between the disbursement proportion and the historic disbursement curve. Then the deviation with respect to the historic disbursement curve is given by

$$y(k) = d(k) - hd(k) \tag{3}$$

Graphically, this is the vertical distance between any given observation and the point that lies directly above or below it on the historical disbursement curve. This variable provides us with the proportion disbursed above or below what it is expected for a project with *k* months since approval. For example, if we have a project with *y* equal to 0.2, this means that it has disbursed 20% more of its approved amount than the historic proportion disbursed by projects with the same months since approval.

Figure 2: IDB historic disbursement curve and projects in 2011



The deviation with respect to the historic disbursement curve allows us to compare projects in different countries, sectors, and divisions. It also allows us to compare the evolution in performance across time.

Figure 3 shows the average deviation from the historic disbursement curve defined in equation (3) for each country and IDB sectorial classification. This figure shows that for each moment in time the average project in Mexico or Chile disburses around 20% of its approved amount above the typical percentage disbursed by the average IDB project. Colombia, Belize, Ecuador, Bahamas, and Uruguay also showed positive average deviation. Projects in Suriname hover close to the disbursement curve and mirror average IDB disbursement performance. Projects in Costa Rica on the other hand tend to underperform with respect to IDB historical disbursement behavior.

It is important to note, that we find that the deviation across countries is larger than the deviation across IDB sectorial divisions. The lower part of Figure 3 shows the average deviation from the historic disbursement curve by the IDB sectorial division responsible for the project. **This finding reflects that country specific institutional or legal characteristics seem to be more important than the sectorial characteristics of the project in understanding deviations with respect to the historic disbursement curve.**[6] This finding has two main implications for our study: first, when classifying projects using disbursements it is preferable to use a country specific disbursement curve, and second, in the analysis for understanding deviations in the following section, it is crucial to at least control by country.

c) Country and IDB sectorial division specific disbursement curves

Given that the deviation in disbursement performance is more contingent on the country of execution than the sector, we estimate individual country historic disbursement curves. [7] Figure 4 shows each individual country historic disbursement curve compared to the IDB historic disbursement curve. We organized countries according to the IDB regional classification (i.e. Caribbean, Andean, Central America and DR, and Southern Cone). Countries with curves to the left of the IDB curve imply faster disbursement than the IDB average –i.e. higher disbursement proportion for the same amount of months since approval or less months to disburse the same proportion. Similarly, countries with curves to the right of IDB curve show slower disbursement than the IDB average.

[6] Subsequently, more concrete evidence will be provided to this effect.

[7] This implies estimating equation (1) for each individual country. Given that this equation is non-linear in the parameters of interest, we use non-linear least squares to estimate b_0, b_1 and b_2 for each country.. When applying non-linear least squares it is possible that the objective function to be minimized has more than one minimum value—it can have several local minima—and, given that the solution is obtained through polynomial approximations, the value of the parameters could differ depending on the initial value set in the optimization algorithm. For the estimation of the coefficients for each country we use as initial values of the parameters the value of the coefficients for IDB as a whole. This makes a difference only for the parameters estimated for Chile; in this case, without setting these initial values, we get a local minimum instead of the global minimum and the historic disbursement curve is not well estimated. The estimated coefficients are in Tables B1 to B4 in Appendix B, we use those in panels (b) referred to as "Optimization with initial values equal to IDB parameters".

Having a country-specific benchmark is useful to qualify the performance of projects in each country. For example, a project with 60 months since approval and 40% of funds disbursed would be below the average in Mexico but it would be equal to the average in Costa Rica. Although not shown in the graphs, for each country we also constructed an upper and lower limit of what it is considered "normal" disbursement for a project that has been approved k months ago.[8]

Table B5 in the appendix shows the proportion of projects for the 2011 portfolio which are above the upper limit, within the limits, and below the lower limit. This Table compares the classification using the IDB historic disbursement curve and the disbursement curve of each country. Thus, for example, while 46% of projects in Chile lie above the IDB-average historic disbursement curve, only 12% outperform the Chilean-average historic disbursement curve. Furthermore, 84% of projects in El Salvador closely mirror the average IDB disbursement performance, and 100% of them fall within the bounds for what is considered average with respect to the Salvadorian country historic disbursement curve.

Figure 5 shows each individual IDB sectorial division historic disbursement curve compared to the IDB historic disbursement curve. We organized division according to the IDB sectorial department classification.[9]

Infrastructure and Environment (INE) projects –with the exception of transport (TSP) projects— disburse approximately equal to the IDB average. TSP projects disburse at a slower pace–while an average IDB project disburse 60 percent of its approved amount after 55 months, a TSP projects needs on average 70 months to disburse 60 percent.

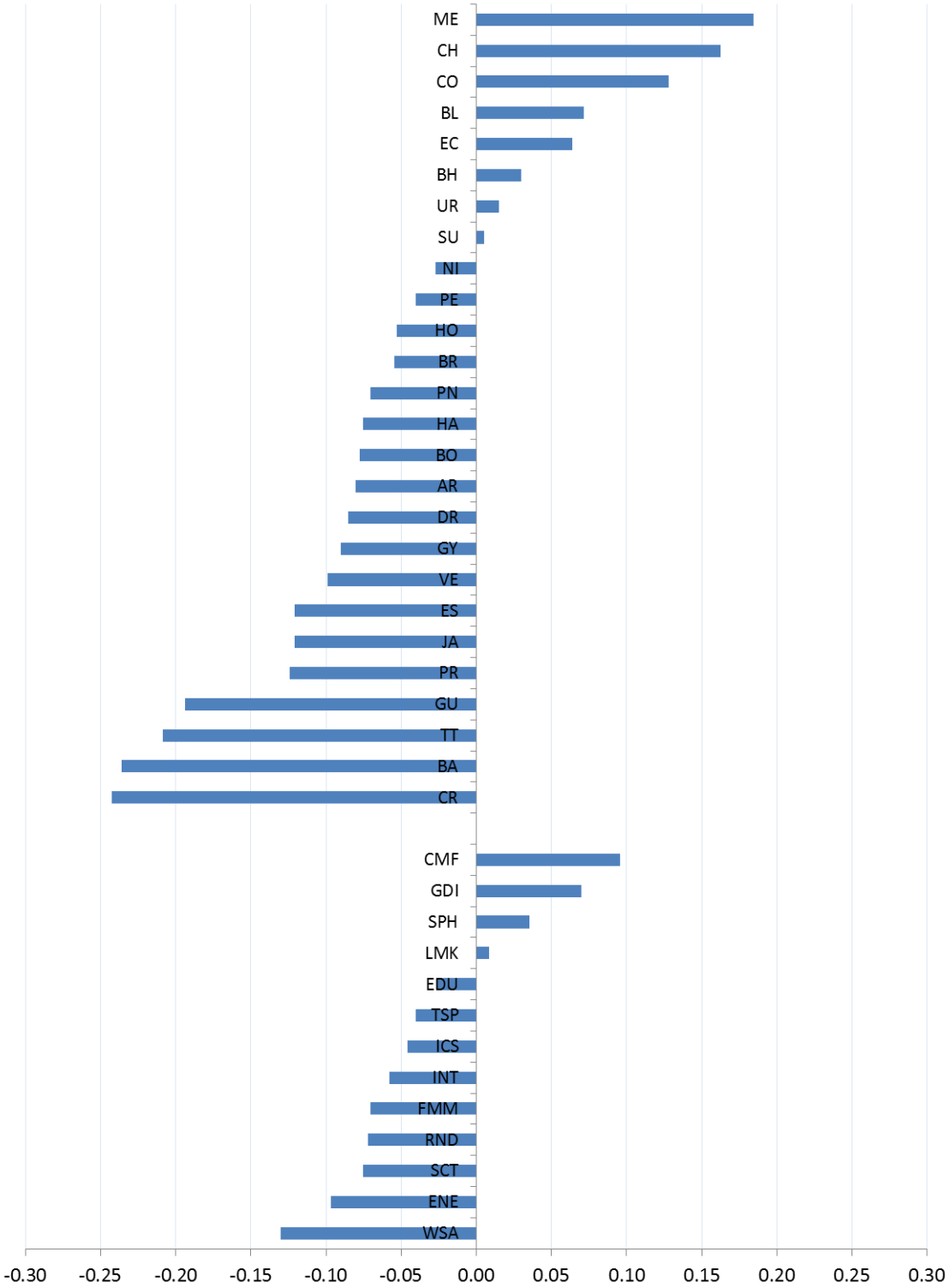
Social sector (SCL) projects outperform the IDB average. Education (EDU) shows the same pattern of disbursements as the IDB average. With respect to Institutions for Development (IFD) projects, both Modernization of the State (ICS) and Fiscal and Municipal Management (FMM) projects show a similar pattern as the IDB average. CMF and SCT projects show different patterns. While Capital Markets and Financial Inclusion (CMF) projects disburse at a higher pace than the IDB average, Competitiveness and Innovation Division (previously SCT) projects disburse at a slower pace than average.

Finally, Integration (INT) projects start disbursing at a slower pace than is average for IDB and after reaching 20 percent disbursement they start disbursing faster than the Bank's average.

[8] We use the same method described above to define the upper and lower limits.

[9] We used as initial value of the parameters of each individual division the value of the IDB parameters.

Figure 3: Average disbursement deviation with respect to the historic disbursement by Country and IDB sectorial division



Note: This figure shows the mean of the deviation with respect to the historic disbursement curve defined in equation (3) for the projects in each country and sectorial division.

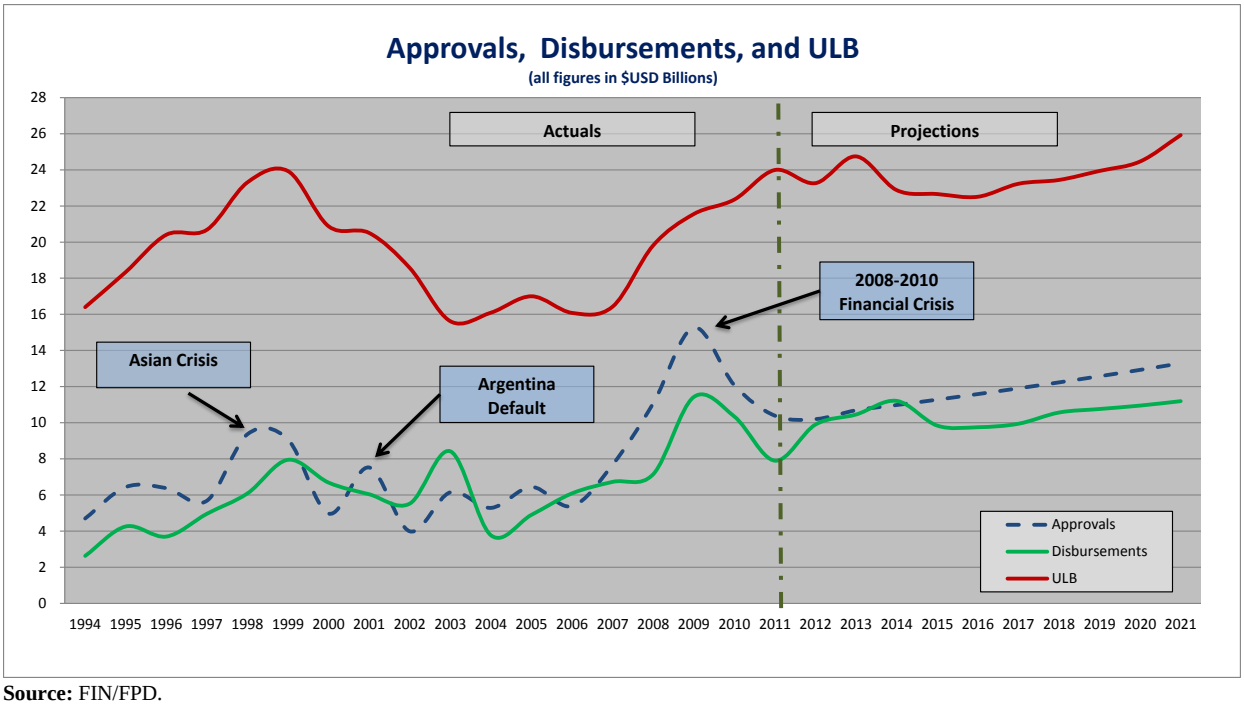
4. Disbursement Trends

a) Long-run trends

Figure 4 shows the evolution of approvals, disbursements, and the undisbursed loan balance (ULB) for the Bank since 1994. During the last decade, all these variables have been on an upward trend. The increase in approvals as measured in dollars corresponds to the increase in the number of operations approved per year shown in Figure 1a above. This trend also shows a significant increase after 2006 with a peak in 2009 at USD15.6 billion in approvals. In 2011 the amount approved was USD 10.9 billion, which is lower than the 2009 value but still significantly above that of 2006.

If we consider a longer period of time, we observe the same trend for approvals and disbursements. The ULB, on the other hand, shows a different pattern. It increased from 16 billion to 24 billion between 1994 and 1999. Then it dropped to 15.5 billion in 2003. In 2008 it starts growing and in 2011 it reached 24 billion once again.

Figure 4: Trends in approvals and disbursements



Source: FIN/FPD.
Note: The Undisbursed Loan Balance (ULB) refers to the cumulative undisbursed loan balance for all projects in the portfolio at the beginning of each year—it is a stock. Approvals and disbursements, on the other hand, refer to the annual amounts and therefore are a flow.

Figure 5: The evolution of disbursements with respect to undisbursed balance

(a) SG operations (INV, PBL, EME) **(b) Only Investment projects**

Notes: ULB and EULB are the Undisbursed Loan Balance and the Eligible Undisbursed Loan Balance. Both of them are measured at the beginning of each year.

A closer look at the relationship between disbursements and the ULB shows that disbursements have been growing with respect to the amount that can be disbursed (Figure 5). This is the case both if we consider ULB or the eligible undisbursed loan balance (EULB). **This shows that IDB has not only been approving more loans but also increasing the pace of its disbursements.**

It is also evident from the graph that the ratio of disbursements to ULB dropped after 2009. Even when the percentage of disbursements with respect to the undisbursed loan balance in 2011 is still on an overall upward trend, the recent change suggests that it is necessary to analyze whether 2009 was an anomaly or whether a reversal in the trend will ensue.

To understand the evolution after 2008 we first focus on the evolution of the ratio by countries. We can think of the ratio disbursement to ULB used in Figure 3 as being a weighted average of the country ratios; i.e.

$$dulb_t = \frac{D_t}{ULB_t} = \sum_{j=1}^{J} w_{jt}\ dulb_{jt} \qquad (4)$$

where D_t is the total amount of IDB disbursements in period t, ULB_t is the IDB undisbursed loan balance, w_{jt} is the share of country j in the IDB ULB in period t which is given by ULB_{jt}/ULB_t, and $dulb_{jt}$ is the ratio disbursements to ULB of country j in period t. We can apply equation (4) to each of the cohort of projects depicted in Figure 7.

Changes in the overall ratio of disbursements to ULB can be the result of changes in the share of the country in the Bank's ULB or changes in the specific country ratio disbursement to ULB. To understand which one is more important it is useful to decompose the

total change in "Within Country" and "Between Countries" components using the following decomposition:

$$\Delta dulb_t = \sum_{j=1}^{J} w_{jt-1}\ \Delta dulb_{jt} + \sum_{j=1}^{J} dulb_{jt-1}\ \Delta w_{jt} + \sum_{j=1}^{J} \Delta w_{jt}\ \Delta dulb_{jt} \quad (5)$$

The first term is the "within country" change and it measures changes in the overall ratio of disbursements to ULB accounted by changes in the country specific ratios of disbursement to ULB. Note that the change in disbursements is weighted by the share of the country in the IDB ULB. The second term is the "between countries" change and it measures changes in the overall ratio of disbursements to ULB accounted by changes in the individual country shares in IDB ULB. Finally, the third term is known as the "cross-term". This term is a measure of the covariance between changes in shares and changes in the disbursement to ULB ratio.

Table 1 shows the ratio of disbursements to ULB for investment projects –both for all projects and eligible projects—its change, and the percentage of the change that is accounted for each one of the terms in equation (2).[10]

The ratio of disbursements to ULB increased 16.4 percentage points in 2009 and 94.8% of this increase is explained by the change in the ratio within countries. Similarly, the ratio dropped 9.4 and 7.9 percentage points in 2010 and 2011 respectively and this fall is entirely explained by the within country variation.

The ratio disbursement to EULB increased 31 percentage points in 2009 and all the increase is accounted by the within country changes. The explanation for the drop in the disbursement to EULB ratio in 2010 and 2011 is different. In this case, the changes in the share of EULB were also important. This means that part of the fall—46.5% in 2010 and 30% in 2011—can be explained by changes in the ratio within countries and the rest by the simultaneous reduction in disbursement and increase in the EULB –i.e. by the cross-term.

Given the importance of the within country component, the next step is to identify which country—or countries—can explain the evolution of this component. It is important to note that not all the changes in the disbursement to ULB ratio are equally important to explain the aggregate evolution of the IDB ratio. The share in the total ULB plays an important role. This fact helps us to focus our attention on those countries with large share in the ULB. There are three countries whose average share in ULB is larger than 5%; these countries are Argentina, Brazil, and Mexico. They account for approximately 50% of the Bank's total ULB for investment projects.

[10] We do not include regional products. The objective is to understand the evolution of the ratio disbursements to ULB in 2009, 2010, and 2011. With regional projects the evolution is the same and therefore they cannot explain the evolution.

Figure 6 shows the evolution of the value of disbursements, ULB, and EULB for investment projects during the period 2000-2011 by country. This figure shows that the increase in the ratio of disbursements to ULB and disbursements to EULB in 2009 are mainly explained by the increase in disbursements in Mexico and Brazil.[11] Similarly, the subsequent decrease in 2010 and 2011 is explained by the drop in disbursements in these two countries. Examining this further, we turn to Figure 7 which shows the evolution of the ratios disbursements to ULB and disbursements to EULB for each country, the shares in ULB and EULB, and the contribution of each country to the aggregate ratio.

Table 1: Decomposition of the change in disbursement to ULB ratio for INV projects

	Disb/ULB x100	Change in Disb/ULB x100	% of change accounted by			Disb/EULB x100	Change in Disb/EULB x100	% of change accounted by		
			Within country	Between countries	Cross Term			Within country	Between countries	Cross Term
2000	19.89	-	-	-	-	25.39	-	-	-	-
2001	17.88	-2.00	83.3	-26.0	42.7	24.15	-1.24	10.0	11.4	78.5
2002	20.19	2.30	87.3	5.2	7.6	29.18	5.03	102.7	40.0	-42.6
2003	20.08	-0.11	267.6	-79.9	-87.7	25.93	-3.25	127.7	-57.8	30.1
2004	19.37	-0.70	-18.9	137.0	-18.1	24.30	-1.62	125.0	-151.4	126.3
2005	25.95	6.58	123.6	-27.0	3.4	36.69	12.39	155.8	-18.4	-37.3
2006	26.75	0.79	362.1	217.5	-479.6	37.47	0.78	6.5	810.3	-716.8
2007	30.42	3.67	193.6	-53.6	-40.0	45.67	8.20	134.3	-2.3	-32.0
2008	27.41	-3.01	49.4	4.1	46.5	37.31	-8.36	35.1	-141.9	206.7
2009	43.77	16.37	94.8	-0.9	6.2	68.35	31.04	122.6	11.0	-33.5
2010	34.41	-9.36	115.6	-25.4	9.9	61.16	-7.19	46.5	-22.1	75.6
2011	26.55	-7.86	99.5	-10.7	11.2	42.70	-18.47	30.0	-88.7	158.7

Note: ULB and EULB are measured at the beginning of each year. This table does not include regional projects. The evolution in the ratios disbursements to ULB and disbursements EULB with and without regional projects are practically the same. Therefore, regional projects cannot explain the evolution after 2008 and can be omitted.

The first obvious result is the increase in disbursement to ULB and disbursement to EULB in 2009 in Mexico. In this year, disbursements were 1.6 times larger than ULB and 4 times larger than the EULB. This is possible because both ULB and EULB are measured at the beginning of year and there are projects that are approved and disburse during the year.

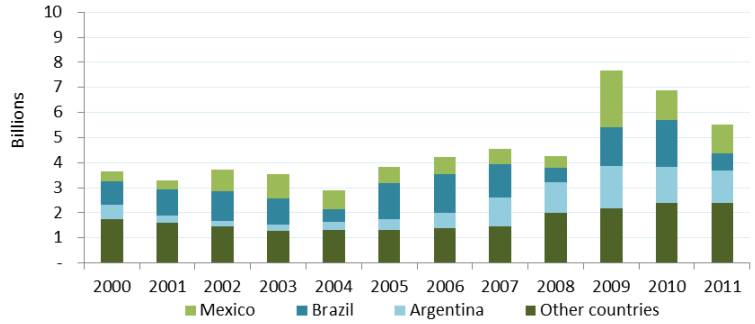
The increase in the ratio is explained by three projects approved in 2009 that disbursed USD 992.1 million in that year. These projects are: (i) *Strengthening the Oportunidades Human Development Program* (ME-L1052) which fully disbursed in 2009 amounting to USD 200 million, (ii) *Strengthening the Oportunidades Human Development Program – Second Program* (ME-L1067) that disbursed USD 597.1 million of the USD 600 million approved, and (ii) *Second Global Credit Program for Development of Mortgages Markets* (ME-L1065) that disbursed USD 495 million of the USD 500 million approved. This increase in Mexico's ratios affected the evolution of the IDB overall ratio because Mexico has the third largest average share in ULB after Brazil and Argentina; Mexico accounts approximately for 5% of the ULB of investment projects. On the other hand, the increase in the IDB ratio was large but not as large as

[11] The upward trend in previous years is explained by Argentina and the rest of countries.

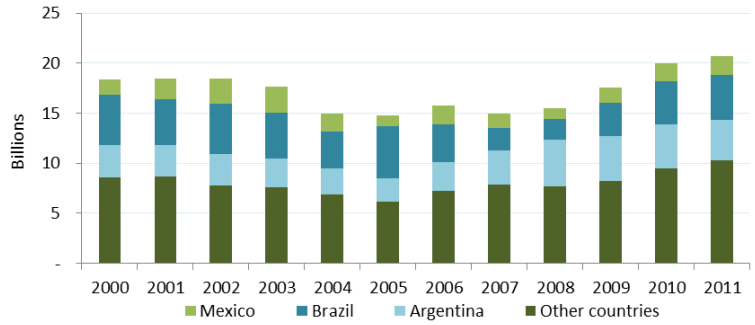
the increase in Mexico because the contribution of Mexico has to be weighted by Mexico's share in ULB. Figure 6c shows the contribution of each individual country to the aggregate ratio. In 2009 Mexico's contribution more than tripled. Brazil also plays an important role in the 2009 increase in the ratio of disbursements to ULB; however its contribution to the increase is not as large as the Mexican contribution.

Figure 6: Disbursements, ULB, and EULB in USD – INV projects

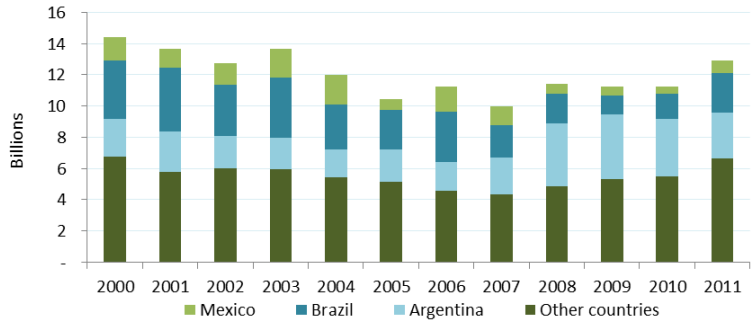
a) Disbursements



b) ULB



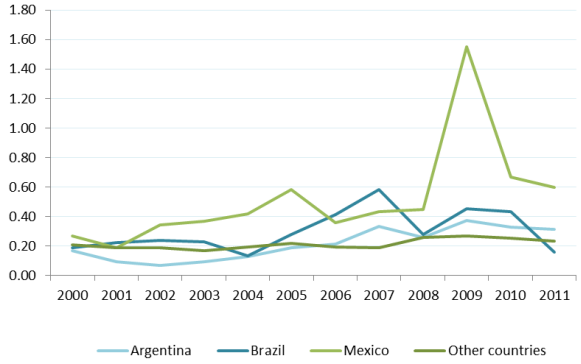
c) EULB



Notes: Does not include regional projects. Both ULB and EULB are measured at the beginning of each year.

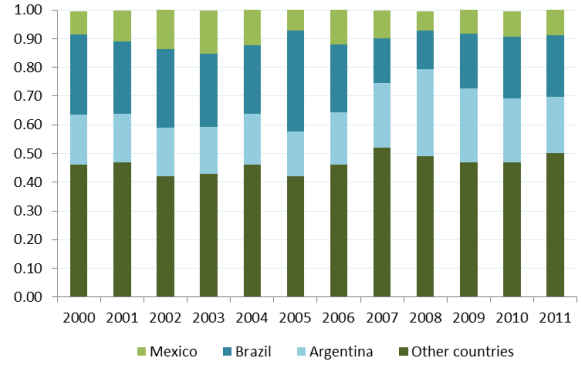
Figure 7: Disbursement/ULB, Share in IDB ULB, and weighted Disb/ULB by country

a1. Disbursement/ULB

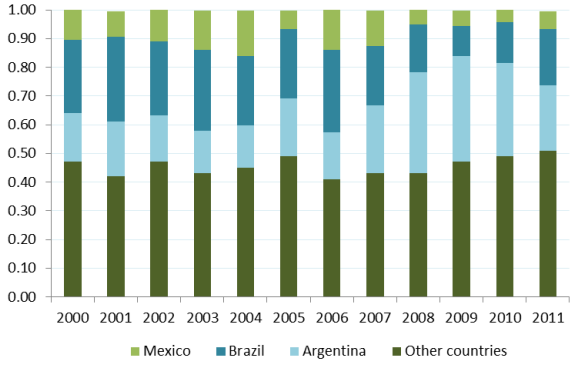


a2. Disbursement/EULB

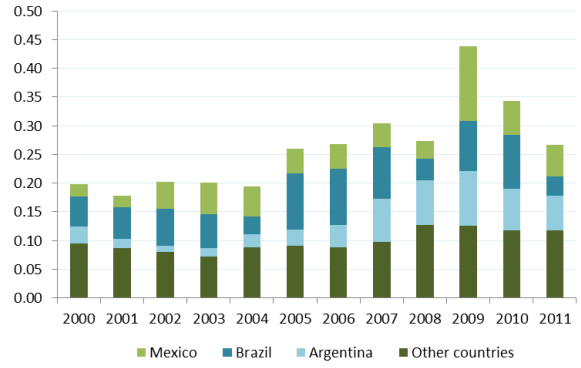
b1. Share in IDB ULB



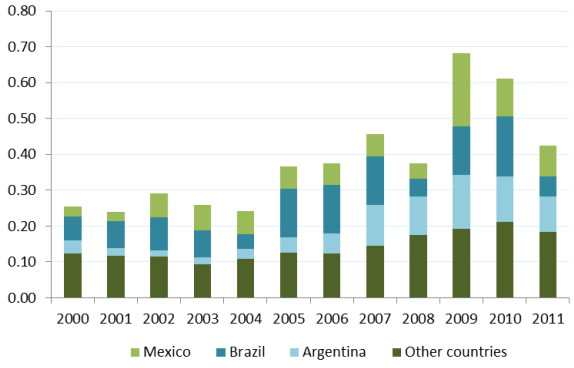
b2. Share in IDB EULB



c1. Weighted Disb/ULB



c2. Weighted Disb/EULB



The subsequent reduction in the 2010 ratio of disbursement to ULB is naturally explained by a decline in disbursements in Mexico and, to a lower extent, a reduction of disbursements in Argentina. In 2011 the reduction of the ratio is mainly explained by a reduction in the Brazilian

disbursement to ULB ratio which in turn is explained by a reduction in disbursements. This reduction in disbursements comes from IFD and INE projects. The first one fell from USD 1.1 billion to USD 140 million (80%) and the second one from USD 687 million to USD 514 million (25%).

The reduction in 2010 of the disbursement to EULB ratio is also explained by a reduction in the disbursements in Mexico. However, the reduction in the 2011 ratio is explained by a combination of lower disbursements and higher EULB in Brazil. The reduction in disbursements was discussed above. The increase in EULB mainly comes from IFD and INE projects. The first one increased from USD 590 million to USD 982 million (66%) and the second one from 988 million to USD 1.4 billion (42%).

Summarizing, the 2009 peaks in the disbursements to ULB and in the disbursements to EULB ratios were caused by atypical situations and therefore the drop of these ratios in 2010 can be considered as a return to the original path. The reduction of the disbursements to ULB ratio in 2011 however is explained by a reduction of disbursements in Brazil and the reduction of the disbursements to EULB ratio is explained by a reduction in disbursements and an increase in EULB.

b) Improvement in disbursements after the organizational change in 2006

This subsection studies the effect of the organizational change that took place after 2006 on disbursements. This year is particularly important for the Bank because the IDB Realignment took place in 2007. With the objective of transforming IDB into a results-oriented organization, IDB efforts have been focused on improving its effectiveness by improving the design, monitoring, and evaluation of projects. Toward this goal, the Office of Strategic Planning and Development Effectiveness (SPD) was established and proceeded to implement the Development Effectiveness Matrix (DEM) and the Project Monitoring Report (PMR). These instruments serve to improve the evaluability and monitoring of implementation of Bank projects. Furthermore, stemming from the idea that given closer physical proximity to a country's needs IDB could improve the performance of its projects, several sector specialists were relocated to the Bank's Country Offices (COF). The percentage of professional staff based in COFs increased from 26% at the time of the Realignment to 32% in 2011.

To study the effect of the changes introduced after 2006 we test for a structural break in 2006 using the following model:

$$y_{it} = \delta T_{it} + \alpha Z_{it} + e_{it} \quad (6)$$

where y is the deviation of disbursements with respect to the historic disbursement curve,[12] T is a dummy variable that takes value 1 after 2006—i.e. $T = 1$ if the year is larger than 2006—Z is a set of control variables, and e_{it} is an error term. To ensure robustness of our results we tested several different specifications[13].

In equation (6) the parameter δ measures the impact of the organizational change.[14] A positive value of δ implies that after 2006 deviations were higher and, given that positive values of y indicate disbursement above the historic disbursement curve, this implies an improvement with respect to the historic disbursement curve.

For this basic model we estimate four specifications to ensure robustness: First, we included as control variables country, sector, the team leader dummies, the approved amount, and the months elapsed since project approval. Second, considering that performance is persistent, we also included the deviation with respect to the historic disbursement curve in the previous year, y_{t-1}. Third, we assume that the error term in equation (6) includes an unobserved fixed effect by project—i.e. we assume that $e_{it} = c_i + v_{it}$ where c_i is the unobserved project fixed effect and we estimate using the within group estimator. Fourth, we include both the unobserved fixed effect by project c_i and the lag of y, in this case, we also estimate using the within group estimator.[15]

The estimation results of these four specifications show that the estimated coefficient for δ is positive and statistically significant (see columns 1, 4, 7 and 10 of Table A1 in Appendix A). Our preferred specification because of the implied assumptions for the relationship between the dependent and explanatory variables and the error term is the third one in which we control for fixed effects. The value of the coefficient in this case is 0.06 and is significant at the 1% level. This implies an average improvement of 6% in the proportion disbursed.

The dynamics of the improvement are also important. For example, we might be interested in knowing what happened one, two, three, four, and five years after the organizational change. Was the improvement only in the first year? Was the improvement constant over time? All these

[12] We use the deviation with respect to IDB disbursement curve. Given that we control for country and sector, we are comparing with projects in the same country and projects in the same sector.

[13] The different specifications correspond to different assumptions about the error term.

[14] The coefficient δ is equal to $E(y|T = 1, Z) - E(y|T = 0, Z)$.

[15] Although both the OLS and the within group estimators provide biased estimates, they provide upper and lower limits of the value of the coefficient and therefore they are useful for our robustness exercise. Other methods like Arellano and Bond (1991) or Blundell and Bond (1998) would provide unbiased estimates of the coefficients however because of the complexity of the estimation those are generally not used in impact evaluations, see Angrist & Pischke (2009), ch. 6. Moreover, a recent unpublished manuscript by Imbens shows that controlling for past performance with a random effect model provides consistent estimates of the parameter. The random effect model provides almost identical coefficients as those provided by OLS.

questions can be answered by estimating the dynamic effect of the changes introduced after 2006 through the following equation

$$y_{it} = \delta_1 T_1 + \delta_2 T_2 + \delta_3 T_3 + \delta_4 T_4 + \delta_5 T_5 + \alpha Z_{it} + e_{it} \quad (7)$$

where T_k (k=1, 2,…, 5) is a variable that takes the value one; one, two, …, and five years after the organizational change. We estimate the same four specifications discussed above for equation (6). The estimated coefficients of T_1, T_2, …, T_5 are all positive and statistically significant (see columns 2, 5, 8 and 11 of Table A1 in Appendix A). Moreover, we find that the coefficient increased from 0.06 to 0.15 one year to five years after the organizational change (refer to column 8 of Table A1 in Appendix A). This is quantitatively important**. It implies that disbursements in 2011 are 15% higher than they would be without the organizational change. Therefore we can confirm the positive effect of the realignment and in addition conclude that the improvement was increasing over time.**

Finally, to be sure that we are measuring a structural break in 2006 that measures the effect of the realignment and not a general trend that started several years before the organizational change, we include realignment variables before the realignment took place. If the organizational change is the cause of the improvement in performance, these variables have to be statistically non-significant. The estimating equation in this case is given by

$$y_{it} = \delta_{-4} T_{-4} + \delta_{-3} T_{-3} + \delta_{-2} T_{-2} + \delta_{-1} T_{-1} + \delta_0 T_0 +$$
$$+ \delta_1 T_1 + \delta_2 T_2 + \delta_3 T_3 + \delta_4 T_4 + \delta_5 T_5 + \alpha Z_{it} + e_{it} \quad (8)$$

where T_1 to T_5 where defined above and T_0, T_{-1}, …, T_{-4} are treatment variables the year the realignment, one year before, two years before, and so forth. Testing whether there is a structural break in 2006 implies testing the null hypothesis that $\delta_{-4} = \ldots = \delta_{-1} = 0$.

We use the same four specifications described above. In every case, we find that the coefficients of T-4 through T-1 are statistically non-significant (see columns 3, 6, 9, and 12 of Table A1 in Appendix A). **Therefore, we can conclude that the positive effect on disbursement performance is not attributable to a general trend, but to the organizational changes that started in 2006**.[16]

The increasing improvement after the organizational changes that started in 2006 can be clearly seen in Figure 8. This figure shows the coefficients T-4, T-3,… , T5 estimated in column 9—which include fixed-effects at the project level—and the corresponding 95% confidence interval

[16] In principle, it might be confounded with other occurrences outside the bank that started in 2006 which are different from the organizational changes at IDB. However, it is difficult to think of such events and the effect is in all likelihood due to the organizational changes that started in 2006.

for these coefficients. **The coefficients are only significant after 2006. Moreover, it is only after 2007 that the interval does not include zero.**

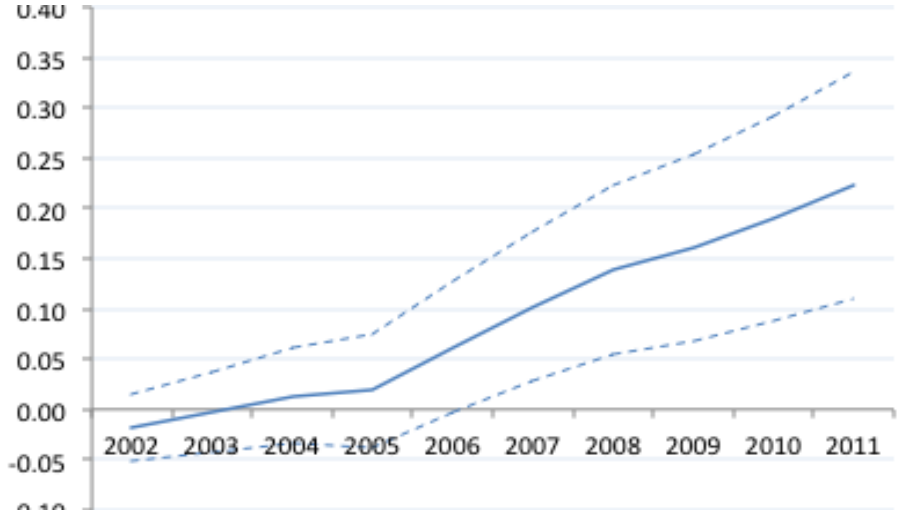
Summarizing, there are three important conclusions that need to be pointed out from this analysis: (i) there is a clear improvement in disbursements after 2006; (ii) the effect cannot be confounded with a general trend that started before 2006; and (iii) the positive effect of the organizational changes is increasing over time.

c) Improvement in execution or in the time elapsed from approval to eligibility?

The improvement in the performance of disbursements with respect to the disbursement profile can come from a reduction in the time elapsed from approval to eligibility –i.e., projects start disbursing earlier—or from an improvement in the disbursements during execution.

Figure 9 shows the average time elapsed from approval to eligibility and from signature to eligibility in months.[17] This figures shows a reduction in the time elapsed from approval to eligibility. However, most of the reduction took place before 2006. In fact, after 2006 the average time is 13 months and relatively constant. Therefore, **we conclude that the improvement after 2006 is explained mainly by improvements in execution rather than by time elapsed from approval to eligibility.**

Figure 8: The impact of the realignment and changes after 2006.



Note: Coefficient and 95% confidence interval from column (9).

Figure 9: Average time elapsed to eligibility

[17] For the projects that reach eligibility we computed the time from approval to eligibility and the time from signature to eligibility.

5. Factors influencing disbursements

In this section we focus on what specific characteristics of loans and which institutional factors help us understand the performance of our loans during execution as measured by the disbursement profile of each individual loan with respect to the IDB overall historic disbursement curve.

a) Difficult countries, difficult sectors, or difficult projects?

Section 2 showed that average deviations across countries are larger than average deviations across the Bank's sectorial divisions. Now to provide further evidence we check the variation explained by country and division.[18] To compute the percentage of project performance that is accounted for by country differences, we regress the disbursement deviation with respect to the IDB historical disbursement curve on country and year dummies. Similarly, to compute the percentage accounted for by divisions we run the regression of the deviation from the IDB historical disbursement curve on division and year dummies. **We find that while country level variation accounts for 21% of the variation in projects performance, IDB division only accounts for 7% of the variation. Therefore, we can conclude that country indeed matters more than sector in explaining deviations in disbursement performance from the historic disbursement curve.**

Although country-level variability accounts for a large proportion of the variation in disbursement performance, **this finding also implies that 80% of the variation occurs within country.**[19] Therefore, to understand the performance of IDB disbursements it is relevant to

[18] This decomposition is similar to the one proposed by Denizer, C., K. Kaufmann, and K. Aart (2011) "Good Countries or Good Projects? Macro & Micro Correlates of World Bank Project Performance," The World Bank, Working paper 5646.

[19] The percentage is even larger if we consider only IDB divisions (93%).

study what happens within countries, or namely it is important to understand project-specific characteristics.[20]

b) The determinants of disbursement performance within country and sectors

To study the performance of IDB disbursements within countries and sectors we use the following linear regression model:

$$y = \beta_1 \mathrm{X} + \beta_2 \mathrm{W} + \mathrm{e} \quad (9)$$

where *y* is the difference of the proportion disbursed and the IDB historic disbursement curve defined in equation (1).[21] X are the variable of interest and W is a set of control variables. We have defined the main variables of interest as team leader, team leader location (headquarters vs. country office), size of the project (measured by the approved amount) and preparation time. We use as control variables country, sector, subsector, approval year, and year. We also use as control variables the time in months since approval, its square and cube. These variables capture the relationship between the proportion disbursed and months since approval that were not fully captured by the functional form used to estimate the historic disbursement curve.

Table A2 in Appendix A shows the results of estimating equation (9). Given that we are interested in the effect of the team leader, we limited our sample to those projects whose team leader has served as team leader in three or more projects. We follow this approach because in the cases in which the team leader only manages one or two projects there might not be enough observations to provide good estimates of the team leader effect.

To understand the effect of the different variables and the correlations between them we start from a simple model and sequentially add new variables.[22] The simple model includes country, sector (or division) and the control variables (columns 1 and 2 in Table A2).[23] Confirming

[20] We did the same decomposition as Denizer et al (2011) and we found that 71% of the variation explained by the model corresponds to within project variables. One difference with Denizer et al. (2011) is that we find the contribution of within country variance to the explanatory power of performance deviation to be much higher. This stems from the difference in the independent variable, as our proxy of disbursement profile results in a much higher explanatory power for micro-level variation in deviation. (See Table A4 in the Appendix.)

[21] We are controlling for country dummies and therefore the effect of country is not relevant. However, as a robustness check we used the deviation with respect to each country curve and the results hold. See Table B6 in Appendix B.

[22] While there is no wrong or right order per se, our logic was to include the most basic and typical controls up-front, followed by other less obvious controls and eventually the project-specific characteristics which have seldom been tested before. Namely, we begin by including countries and sectors/divisions, then the ratification requirement, dummy variables for large projects with fast disbursements which we wanted to ensure were not driving the results, and finally project-specific characteristics such as team leader location and age, project preparation time, team leader, and changes in team leader.

[23] The results of using IDB division or sector were similar and therefore in the other specifications we focus on sector. We also controlled by subsector to study the robustness of the results.

previous results, we find that there are more countries for which the coefficients are significant than sectors. **Another interesting finding is that the larger the project the faster its funds are disbursed, this finding may indicate some economies of scale**.[24]

As we mentioned above, one reason for which country can be more important in explaining deviations with respect to the historic disbursement curve is the fact that some countries need *ratification* by the congress after approval and therefore projects might start disbursing later. Therefore we included a dummy variable that takes value one for those countries that need ratification.[25] The results of the estimation, as expected; show the sign of this variable is negative (Column 3). It is interesting to note that even after controlling for the ratification requirement, there are more statistically significant country variables than statistically significant sector variables. **Therefore, even after controlling for the ratification requirement, country is more important in explaining differences in performance than sector.**

There are two types of projects that could be large enough to drive the results at the country or sector level and have fast disbursements. These projects are those related to *BNDES* in Brazil and those related to *Oportunidades* in Mexico. Therefore we included dummy variables for those projects. As expected, the sign of these variables is positive. (See column 4)

The first project variable that we are interested is the *team leader;* therefore we include a dummy variable for each one of the team leaders. These variables capture all the non-observable characteristics of team leaders that are constant over time (for example, managerial capacity or experience). Because of space restrictions Table A2 does not show the coefficients of all the team leader dummies. Instead of doing that we tested the null hypothesis that all the coefficients of the team leader are equal to zero –i.e. the null hypothesis of no role played by the team leaders. We rejected the hypothesis with p-values equal to zero and therefore we can conclude that who the team leaders are partially account for project performance. Moreover, the adjusted R-squared in the equation with team leader dummies and without team leader dummies are 0.39 and 0.22, respectively. **Therefore, who the team leader is explains a large proportion of deviations. This is the largest increase in adjusted R-squared after including additional variables to equation (9).** It is important to note that the information we have about the team leader is limited to the last team leader listed for the project. Thus, these are the team leader in charge of the execution not necessarily the one that prepared the operation or the one that spent the most time in charge of execution of a given project.

[24] The control for the non-linear form in the relationship between deviations from the IDB historic disbursement curve and months since approval are significant. This captures other non-linearities that were not captured in the functional form imposed in equation (1).

[25] While we are already controlling for country-specific fixed effects, ratification is a requirement that affects a group of countries, so we included the variable to test whether the deviation is different on average for this group of countries, given the ratification requirement.

Table 2: Proportion of variance explained by different specifications

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sectorial classification	Division	Sector	Sector	Sector	Sector	Sector	Sector	Sector	Subsector
Country	x	x	x	x	x	x	x	x	x
Year	x	x	x	x	x	x	x	x	x
Approval year	x	x	x	x	x	x	x	x	x
Months since approval	x	x	x	x	x	x	x	x	x
Approved amount	x	x	x	x	x	x	x	x	x
Country requires ratification			x	x	x	x	x	x	x
BNDES				x	x	x	x	x	x
Oportunidades				x	x	x	x	x	x
Team leader					x	x	x	x	x
Team leader in Country Office						x	x	x	x
Time from profile to approval							x	x	x
Team leader's age								x	x
Changed team leader								x	x
Proportion of the variance of deviations with respect to IDB historic disbursement curve explained by the model	**23%**	**22%**	**22%**	**22%**	**39%**	**39%**	**39%**	**40%**	**44%**

Related to who the team leader is, is the question of *where the team leader is located*. Thus, we include a dummy variable that takes value one if the team leader is located in a country office (COF) and 0 if at Headquarters. This variable is particularly important because, with the hypothesis that being closer to countries' needs it is possible to improve the performance of projects, the Bank has been transferring specialists from headquarters to country offices since 2007. The coefficient of COF is negative and therefore it goes in the opposite direction (see column 6). This finding requires further analysis, which is provided subsequently. First, here we are considering all the projects approved after 1996, and it is possible to have a different trend for projects approved after the realignment. This hypothesis will be tested in the last subsection. Second, we only observe who the team leader is and his or her location for the last team leader managing the project. For projects approved after 2009 we do know who the team leader was in each moment of time and where he or she was located, but not for projects before that date. This analysis is also presented in the last subsection.

The time used in project preparation can be both an indicator of a project's quality (the more time is used for preparing the project the better the project) and an indicator of the difficulty of the project (more challenging projects require more time for preparing them). Therefore, the expected sign in each case could be different; positive in the first case and negative in the second. In our estimation, we included the time used from project profile–the first document in the project cycle— to approval (column 8). **We find that the larger the time from preparation to approval the worst the performance of disbursement. This finding suggests that preparation time is an ex-ante proxy for the difficulty of the project.**

Finally, we included a dummy variable that takes a value one if there was a *change in the team leader* and the *team leader's age* and *team leader's age squared* (columns 8). The variable for team leader change takes value one when the number of years that the last known team leader has been at the bank is lower than project age (and therefore could not have been the team leader at project inception). Therefore, all the identified changes are definitely projects with changes in the team leader but this is not exhaustive and there could very well be other team leader changes that we are not able to observe. In the last section we address this issue with the exact changes in team leader for a subset of the sample for which we have data. We find that projects that have experienced a change in team leader show lower performance. Given that we observe only the last team leader and we are studying correlations this might also reflect that underperforming projects purposefully underwent a change in team leader. The effect of age is positive and decreasing rates as expected; however, it is statistically non-significant.

c) On the role played by the team leader

An important result from the analysis above is that the person running the project plays an important role in the performance of the project. We noticed some limitations in the dataset of all the projects approved after 1996. In particular, we pointed out that the information of the team leader, his or her location, and personal characteristics correspond to the last person managing the project. In this subsection we focus on projects approved after 2009 because for these projects we can observe on each moment of time, who the team leader is, his or her location, and other characteristics as age, experience at IDB, and seniority.

Once again the dataset was limited to include only investment projects (SG); in this case, SG projects approved in the period 2009-2011. At any moment in time, the team leader is identified and therefore we can study the effect of changes in the team leader and his or her location.

Given that we have information for three years, i.e. at most 36 months since project approval, we do not re-estimate again the historical disbursement curve and we use the one estimated for the larger sample of 1996-2011.

Regarding changes in team leader, these changes are not random. Leadership changes occur for several reasons including poor performance, retirement, team leader moving to a new position outside IDB, or team leader moving to a new position within IDB but without the possibility of continuing as the project's team leader. Because of this, it is important to estimate an equation that considers selection both on observable and unobservable characteristics. Therefore, we estimate a difference-in-difference type equation of the form:

$$y_{it} = \beta_{-1} CH_{i,t+1} + \beta_0 CH_{it} + \beta_1 CH_{i,t-1} + \beta_3 COF_{it} + \alpha_1' TL_{it} + \alpha_2' W_{it} + \mu_t + \mu_i + v_{it} \quad (10)$$

where CH_{it} is a variable that takes value one in the period and after the period in which project *i* changes team leader. Therefore, $CH_{i,t-1}$ takes value 1 one year after the change in team leader and $CH_{i,t-1}$ takes value 1 one year before the change in the team leader. By including CH_{it} and $CHi,t-1$ we aim at measuring the effect of changing the team leader on disbursement the same year of the change and one year later. By including CH_{it+1} we aim at including a placebo –i.e. the effect of the changing the team leader cannot appear one year before the change. Therefore we expect this coefficient to be non-significant. COF_{it} is a dummy variable that takes value one if the team leader of project *i* is in a country office in period *t*. TL_{it} is set of team leader observable characteristics like age, years at IDB, and seniority. Finally, W_{it} is a set of control variables that include months since approval, its square, and its cube, μ_t.is a set of year dummies, μ_i are project level unobserved fixed-effects that control for the unobservable time invariant characteristics driving team leader changes and disbursement performance.

Table A3 in Appendix A shows the results of estimating several specifications of equation (10). All of them are estimated controlling for fixed-effects at the project level using the within group estimator and include the control variables. Column 1 of Table A3 shows the results of estimating a simple model that only includes the variables related to the *team leader change*. **It is possible to observe that there is no effect of the team leader change in the year of the change and there is a 7.5 percent improvement after one year of the change.** As expected, the effect of the change one year before it is not significant. This fact guarantees that what we are observing are changes in disbursements due to changes in team leader.

Column 2 of Table A3 also includes the dummy for the *team leader located at COF*. In this case, the effect is positive and statistically significant. **This means that if the team leader is located at COF there is an improvement in project performance**. This result differs from the one we found in Table A1when we analyzed all the projects approved after 1996. The reason for the difference is that we are now focusing only in projects approved after 2009.[26] In addition to team leader located at a COF we also estimated the effect of being located at the same COF as the project or at a different COF from where the project is executing. Table A3 shows that both variables are statistically equal; **whether the team leader is in the same country office where the project is executing or in another COF does not make a difference for better disbursement performance**. Furthermore, we tested the effect of being a team leader and being a *local specialist*—i.e. the effect of being located in the COF and being citizen of the country. Column 3 shows that **the additional effect of being a local professional on project performance is statistically non-significant**. Taken together these findings seem to be pointing to the fact that it is not where the team leader is located that matters, but rather that the Bank

[26] We estimated Table A2 for years after 2009 and we found positive coefficient for COF. However the coefficient resulted non-significant. The estimates in Table A3 are preferred because we have the location of the actual team leader and not only the location of the last team leader.

seems to have been staffing its COF after the Realignment with more competent team leaders than before.

Columns 4 and 5 include *team leader experience* at IDB measured by the number of years the team leader has been working at IDB and team leader experience and *team leader age*, respectively. None of these variables resulted significant for explaining performance. Finally, column 6 also includes *team leader seniority*. The effect of seniority appears to statistically insignificant.[27] These results may signal that the variable "team leader" could be representing other non-observable characteristics of the individual, but may also be capturing other characteristics that represented the management of the project, such as the composition of the team that supports the leader in the project's implementation.

In Column 7 we include the number of projects per team leader. **We find that the coefficient of this variable is negative and statistically significant. For each additional project the team leader manages the deviation deteriorates by about 2.7%.**

[27] The sign for seniority is counterintuitive, but the coefficient is insignificant. Nonetheless, it is worth noting that the sign reverses when including the interaction between age and seniority, although it is still insignificant (implying that at most seniority improves performance but this reverses the older the Team Leader is).

Table 3: Number of projects under supervision of Team Leaders.

Workload in 2011 (# of projects)	Number of TLs
1	56
2	53
3	49
4	22
5	23
6	10
7	7
8	1
9	2
10	1
Total	**224**

There are three important results stemming from Table A3. **First, after one year of the team leader change, projects show better performance in terms of disbursement.** This finding shows that when changes were originated given low performance of previous team leader, after one year the new team leader was able to improve past performance. **Second, when the team leader is in a country office there is an improvement in the performance of disbursements. Third, overloaded team leaders show lower performance.**

6. Findings and Conclusions

This paper analyzes the performance of disbursements of IDB projects. We presented evidence on the evolution of disbursements with respect to the available funds and the evolution of disbursements with respect to the historic disbursement curve of IDB projects. Both indicators improved in the last 10 years. Interestingly, the performance of disbursements has improved subsequent to the organizational changes instituted after 2006 at increasing rates. This finding is robust to several specifications.

Another contribution of the paper is in providing an estimate of the historic disbursement curve for each one of the 26 borrowing countries. These curves allow us to more easily classify projects in our portfolio using the proportion disbursed and the months elapsed since approval.

We also analyzed the determinants of deviations with respect to the Bank's historic disbursement curve. The main findings of that analysis are:

(i) Country is more important than sector in understanding performance. This is valid even after considering the effect of the ratification requirements in some of the countries.

(ii) Even though between-country variation is greater than between-sector variation in understanding disbursement performance, most of the remaining variance in project performance can be explained by variance within each country.

(iii) The team leader plays an important role in understanding project performance. We found that after including the team leader in the regression the proportion explained by the model increases by more than 10 percentage points –the largest increase when including additional variables. We test the robustness of this result using the distance of a project to the ***country average curve*** instead of the ***Bank's average curve.*** The result is shown in table B6, and it shows that the model increases by 20 percentage points when team leader is included.

(iv) The effect of team leader location on disbursement performance has not been constant over time. The effect is negative for projects approved after 1996. However, if we focus on projects approved after 2009 the effect is positive. This result also provides evidence on the success of the organizational changes undertaken after 2006. The findings seem to suggest that the Bank staffed its Country Offices with more competent team leaders after the Realignment than before. It is not that location matters for performance, but rather that the Bank has been sending its best staff to the field.

(v) Projects that underwent a change in team leader show an improvement in performance after one year of the change.

(vi) Team leader characteristics related to the experience or seniority of the team leader are non-significant, though in the expected direction. Experience is positively correlated with increase performance, but experience alone is non-significant in explaining better performance. Team leader may be pointing to other non-observable characteristics of the individual or characteristics of the larger team that supports that team leader in execution and supervision of the project.

We conclude on quite an optimistic note about the Bank's performance on project disbursements. The Bank has not only kept up disbursement capacity to its lending capacity in the last years, but exceeded it. There is clear evidence that the Realignment has been successful in bringing about this improvement in disbursement trends. Thus, the Bank is a more efficient Bank today in managing execution than before the organizational change, which solidifies its capacity to deliver results on the ground.

We also find that there are no strong structural characteristics that explain project disbursement performance. While it is true that the country where the project is executing has a stronger role in explaining variations in performance than the sector to which the project belongs, that effect is far from being deterministic. Most variation in performance occurs within a particular country leading us to conclude that there is a lot of room for efficiency gains and improvements to be made within each of our borrowing member countries implementation environment.

One of the important findings is that where the project team leader is located matters for performance after the realignment. However, the data seem to point to the fact the Bank has been sending more competent team leaders to the field, irrespectively whether they area in close proximity to the project's execution (i.e. in the same COF as the project).

A word or two of caution to managers of sectorial specialists in the field and at headquarters emerges from the analysis. First, if the project performance is lagging, reassign responsibilities; performance is likely to improve significantly within a year's lag. Second, ensure that no team leader is unrealistically overloaded with the number of project under his or her supervision. The data shows that there is a 2.7% reduction in performance for each additional project assigned. There were 44 project team leaders with five or more project under his/her supervision in 2011, and 56 team leaders with just one project under supervision; there is room for adjustments.

Finally, while we found that who the team leader is and its location matter for disbursement performance, we still don't know what other characteristics of the team leader are relevant for implementing policies to increase disbursement performance. The "team leader" remains a black box that may account for organizational arrangements (composition and characteristics of the team), or budgetary characteristics that have not been identified yet. More research is necessary with data sets that are more heterogeneous in variables that can give a more accurate picture of the determinants of disbursement performance. Qualitative analysis of case studies can also be of great analytical value in helping the organization leverage it human asset more effectively.

In this paper we focused our attention on disbursements as a necessary condition for output delivery and therefore as a proxy for project results-on-the-ground. We recognize however that disbursing on time is a necessary but insufficient condition for output delivery and in a future study we will explore the link between disbursement performance and actual output delivery. We expect to find the two are positively correlated given that delays in disbursement usually signal problems on the ground, delays in output delivery, and ultimately the achievement of outcomes. Future studies will attempt to use data from the Progress Monitoring Report (PMR) which is directly related to output delivery. Nowadays the PMR covers a much narrower time-span and limited number of projects. As the PMR continues to be implemented it will provide a rich dataset to complement this study in understanding how we can achieve more and better results from our development projects.

Appendix A: Tables

Table A1: The effect of the realignment on disbursements

	Basic	Dynamic effect	w/ Structural Break	Basic	Dynamic effect	w/ Structural Break	Basic	Dynamic effect	w/ Structural Break	Basic	Dynamic effect	w/ Structural Break
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
T	0.0660***	-	-	0.0212**	-	-	0.0668***	-	-	0.0351***	-	-
	(0.0116)			(0.00857)			(0.00932)			(0.00730)		
T-4	-	-	-0.0302	-	-	0.00408	-	-	-0.0185	-	-	-0.00141
			(0.0189)			(0.0139)			(0.0170)			(0.0144)
T-3	-	-	-0.0163	-	-	0.0197	-	-	-0.00236	-	-	0.0134
			(0.0226)			(0.0166)			(0.0203)			(0.0180)
T-2	-	-	-0.00372	-	-	0.0252	-	-	0.0136	-	-	0.0245
			(0.0275)			(0.0204)			(0.0243)			(0.0222)
T-1	-	-	0.000635	-	-	0.0351	-	-	0.0189	-	-	0.0378
			(0.0323)			(0.0246)			(0.0286)			(0.0267)
T0	-	-	0.0361	-	-	0.0606**	-	-	0.0622*	-	-	0.0643**
			(0.0372)			(0.0289)			(0.0332)			(0.0314)
T1	-	0.0565***	0.0733*	-	0.0185*	0.0756**	-	0.0569***	0.102***	-	0.0317***	0.0923**
		(0.0135)	(0.0419)		(0.00954)	(0.0335)		(0.0106)	(0.0379)		(0.00812)	(0.0362)
T2	-	0.0800***	0.101**	-	0.0257**	0.0913**	-	0.0865***	0.139***	-	0.0493***	0.119***
		(0.0146)	(0.0469)		(0.0106)	(0.0377)		(0.0115)	(0.0426)		(0.00906)	(0.0410)
T3	-	0.0866***	0.111**	-	0.0143	0.0883**	-	0.100***	0.160***	-	0.0487***	0.128***
		(0.0158)	(0.0519)		(0.0112)	(0.0420)		(0.0127)	(0.0474)		(0.0103)	(0.0458)
T4	-	0.0968***	0.125**	-	0.0140	0.0962**	-	0.123***	0.190***	-	0.0605***	0.149***
		(0.0170)	(0.0569)		(0.0122)	(0.0463)		(0.0143)	(0.0522)		(0.0117)	(0.0507)
T5	-	0.112***	0.143**	-	0.0127	0.103**	-	0.149***	0.223***	-	0.0731***	0.171***
		(0.0190)	(0.0622)		(0.0135)	(0.0509)		(0.0160)	(0.0571)		(0.0132)	(0.0555)
Dependent variable in t-1 (y_{t-1})	-	-	-	0.852***	0.852***	0.852***	-	-	-	0.594***	0.588***	0.587***
				(0.0209)	(0.0210)	(0.0211)				(0.0133)	(0.0133)	(0.0133)
Approval amount	0.000153***	0.000153***	0.000154***	5.10e-05	5.07e-05	5.22e-05	-	-	-	-	-	-
	(5.00e-05)	(5.02e-05)	(5.02e-05)	(3.76e-05)	(3.77e-05)	(3.78e-05)						
Months since approval, months since approval squared, months since approval cube	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No
Sector fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No
Team leader fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No
Project fixed effects	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.38	0.38	0.38	0.78	0.78	0.79	0.08	0.09	0.09	0.49	0.49	0.49
Number of observations	4,426	4,426	4,426	3,626	3,626	3,626	4,426	4,426	4,426	3,626	3,626	3,626
Number of operations	800	800	800	721	721	721	800	800	800	721	721	721

Notes: ***, **, *, statistically significant at 1, 5 and 10%.

Table A2: Understanding deviations from the historic disbursement curve

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Argentina	-0.0472***	-0.0414**	-0.0279	-0.0215	-0.0749	-0.0341	-0.0430	0.0389	0.0859
	(0.0171)	(0.0175)	(0.0374)	(0.0374)	(0.0463)	(0.0492)	(0.0527)	(0.0532)	(0.0606)
Barbados	-0.175***	-0.170***	-0.156***	-0.155***	-0.202***	-0.180***	-0.158***	-0.0590	-0.0498
	(0.0300)	(0.0300)	(0.0448)	(0.0447)	(0.0482)	(0.0494)	(0.0505)	(0.0508)	(0.0546)
Belize	0.181***	0.196***	0.209***	0.209***	0.0435	0.0604	0.139**	0.269***	0.287***
	(0.0333)	(0.0325)	(0.0453)	(0.0453)	(0.0663)	(0.0676)	(0.0656)	(0.0726)	(0.0799)
Bolivia	0.00668	0.0146	0.00970	0.00954	-0.0140	-0.0279	-0.0222	-0.0951*	-0.171***
	(0.0178)	(0.0179)	(0.0175)	(0.0175)	(0.0395)	(0.0398)	(0.0413)	(0.0505)	(0.0554)
Brazil	0.00595	0.00865	0.0220	0.0243	-0.156***	-0.131***	-0.139***	-0.0523	0.00573
	(0.0157)	(0.0158)	(0.0362)	(0.0362)	(0.0495)	(0.0502)	(0.0528)	(0.0542)	(0.0609)
Chile	0.222***	0.233***	0.228***	0.230***	0.225***	0.219***	0.204***	0.152***	0.208***
	(0.0266)	(0.0269)	(0.0264)	(0.0264)	(0.0418)	(0.0418)	(0.0422)	(0.0435)	(0.0490)
Colombia	0.180***	0.189***	0.203***	0.204***	0.102**	0.134***	0.109**	0.217***	0.161***
	(0.0189)	(0.0191)	(0.0381)	(0.0381)	(0.0436)	(0.0456)	(0.0475)	(0.0491)	(0.0535)
Costa Rica	-0.184***	-0.177***	-0.182***	-0.181***	-6.67e-05	-0.0209	0.000268	-0.0678	-0.0998*
	(0.0304)	(0.0312)	(0.0310)	(0.0309)	(0.0519)	(0.0540)	(0.0559)	(0.0544)	(0.0601)
Dominican Republic	-0.0269	0.00520	0.000555	0.000367	0.0971***	0.0924***	0.0983***	0.0606*	0.0934**
	(0.0245)	(0.0244)	(0.0240)	(0.0240)	(0.0350)	(0.0348)	(0.0321)	(0.0324)	(0.0372)
Ecuador	0.129***	0.131***	0.144***	0.146***	0.0714	0.107**	0.117**	0.207***	0.185***
	(0.0195)	(0.0195)	(0.0381)	(0.0380)	(0.0450)	(0.0477)	(0.0505)	(0.0497)	(0.0567)
El Salvador	-0.0175	-0.0186	-0.0238	-0.0238	0.0655*	0.0526	0.0120	-0.0720*	-0.0995**
	(0.0296)	(0.0297)	(0.0297)	(0.0297)	(0.0372)	(0.0377)	(0.0345)	(0.0427)	(0.0471)
Guatemala	-0.106***	-0.103***	-0.0902**	-0.0893**	-0.190***	-0.151***	-0.164***	-0.0658	-0.0406
	(0.0210)	(0.0214)	(0.0392)	(0.0392)	(0.0416)	(0.0447)	(0.0464)	(0.0434)	(0.0506)
Guyana	0.0157	0.0223	0.0355	0.0353	-0.0685*	-0.0531	-0.0395	0.0622	0.129***
	(0.0190)	(0.0195)	(0.0380)	(0.0379)	(0.0415)	(0.0425)	(0.0442)	(0.0444)	(0.0490)
Haiti	-0.0394	-0.0314	-0.0364	-0.0361	0.233**	0.258***	0.321***	0.319***	0.357***
	(0.0265)	(0.0264)	(0.0259)	(0.0260)	(0.0914)	(0.0910)	(0.0960)	(0.100)	(0.110)
Honduras	0.0105	0.0139	0.00899	0.00880	0.0546*	0.0454	0.0612**	0.0215	-0.0252
	(0.0167)	(0.0166)	(0.0161)	(0.0161)	(0.0312)	(0.0314)	(0.0310)	(0.0350)	(0.0375)
Jamaica	-0.00851	-0.00603	0.00675	0.00654	-0.134***	-0.114***	-0.137***	-0.0739	-0.0418
	(0.0271)	(0.0264)	(0.0410)	(0.0410)	(0.0399)	(0.0404)	(0.0434)	(0.0450)	(0.0487)
Mexico	0.151***	0.173***	0.186***	0.184***	0.0939	0.115*	0.119*	0.249***	0.295***
	(0.0320)	(0.0301)	(0.0446)	(0.0444)	(0.0583)	(0.0595)	(0.0690)	(0.0808)	(0.105)
Nicaragua	0.0482***	0.0495***	0.0444***	0.0438***	0.0947***	0.0903***	0.0861***	0.0220	0.0115
	(0.0170)	(0.0171)	(0.0165)	(0.0164)	(0.0294)	(0.0299)	(0.0308)	(0.0323)	(0.0356)
Peru	0.0300	0.0352*	0.0487	0.0496	0.0360	0.0430	0.0455	0.0535	0.0349
	(0.0203)	(0.0204)	(0.0386)	(0.0386)	(0.0553)	(0.0560)	(0.0580)	(0.0575)	(0.0631)
Paraguay	-0.0537***	-0.0463**	-0.0514***	-0.0516***	0.0123	0.0303	0.0252	-0.0250	0.00208
	(0.0181)	(0.0187)	(0.0181)	(0.0181)	(0.0356)	(0.0363)	(0.0379)	(0.0394)	(0.0438)
Suriname	0.0346	0.0439	0.0572	0.0578	-0.0930*	-0.0735	-0.0376	0.0428	0.126**
	(0.0287)	(0.0285)	(0.0430)	(0.0430)	(0.0484)	(0.0493)	(0.0508)	(0.0507)	(0.0535)
Trinidad and Tobago	-0.154***	-0.145***	-0.131***	-0.129***	-0.256***	-0.193***	-0.185***	-0.0827	-0.00259
	(0.0241)	(0.0238)	(0.0407)	(0.0407)	(0.0454)	(0.0504)	(0.0522)	(0.0519)	(0.0581)
Uruguay	0.0528***	0.0661***	0.0798**	0.0814**	-0.000156	0.0367	0.0234	0.111**	0.165***
	(0.0176)	(0.0178)	(0.0375)	(0.0375)	(0.0471)	(0.0497)	(0.0520)	(0.0523)	(0.0618)
Venezuela	-0.0185	-0.0273	-0.0143	-0.00929	-0.0178	0.00411	-0.0232	0.0737	-0.00550
	(0.0231)	(0.0235)	(0.0404)	(0.0404)	(0.0493)	(0.0509)	(0.0539)	(0.0596)	(0.0636)
Approved amount (millions of US$)	0.000276***	0.000301***	0.000301***	0.000262***	0.000150***	0.000155***	0.000166***	0.000179***	5.24e-05
	(3.82e-05)	(3.96e-05)	(3.96e-05)	(4.35e-05)	(4.97e-05)	(4.98e-05)	(4.99e-05)	(5.15e-05)	(5.18e-05)
Country requires ratification			0.0183	0.0194	-0.103**	-0.0848*	-0.0792*	0.0612	0.0911*
			(0.0372)	(0.0372)	(0.0445)	(0.0461)	(0.0477)	(0.0467)	(0.0521)
BNDES				0.336*	0.642***	0.626***	0.392	0.396	0.691*
				(0.202)	(0.228)	(0.229)	(0.359)	(0.361)	(0.368)
Oportunidades				0.121	0.260**	0.250**	0.291**	0.248	0.311*
				(0.0993)	(0.107)	(0.106)	(0.148)	(0.155)	(0.169)
Team leader in country office						-0.0419***	-0.0173	-0.0316**	-0.0471***
						(0.0140)	(0.0152)	(0.0156)	(0.0168)
Time from profile to approval							-0.00310***	-0.00289***	-0.00159*
							(0.000758)	(0.000784)	(0.000904)
Time from profile to approval squared							2.48e-05***	2.52e-05***	1.01e-05
							(9.00e-06)	(9.36e-06)	(1.17e-05)
Team leader age								-0.0296	-0.0317
								(0.0456)	(0.0437)
Team leader age squared								-4.24e-05	2.10e-05
								(5.85e-05)	(5.79e-05)
Changed team leader								-0.0345***	-0.0708***
								(0.0127)	(0.0143)
Sectorial classification	IDB division	Sector	Sector	Sector	Sector	Sector	Sector	Sector	Subsector
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Approval year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Months since approval, Months since approval squared, and Months since approval cube	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Team leader fixed effects					Yes	Yes	Yes	Yes	Yes
R-squared	0.231	0.222	0.222	0.224	0.387	0.388	0.386	0.397	0.436
Number of observations	4,729	4,729	4,729	4,729	4,729	4,729	4,426	4,064	4,064

Notes: Robust standard errors in bracket. (a) Changed Team Leader takes value one when the last team leader entered the IDB after the approval of the project. ***, **, and *, statistically significant at 1, 5, and 10%.

Table A3: The effect of the team leader on projects performance

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
One year before TL	-0.0353	-0.0167	-0.0185	-0.0175	-0.0175	-0.0194	-0.00933	-0.0117
	(0.0773)	(0.0769)	(0.0770)	(0.0772)	(0.0774)	(0.0776)	(0.0769)	(0.0770)
TL change	0.0247	-0.0212	-0.028	-0.026	-0.0255	-0.0269	-0.0324	-0.0278
	(0.0325)	(0.0366)	(0.0378)	(0.0385)	(0.0397)	(0.0399)	(0.0395)	(0.0400)
One year after TL change	0.0794*	0.0740*	0.0756*	0.0761*	0.0761*	0.0732*	0.0756*	0.0751*
	(0.0413)	(0.0410)	(0.0411)	(0.0413)	(0.0414)	(0.0418)	(0.0413)	(0.0414)
TL in COF	-	0.104***	0.0996**	0.101**	0.101**	0.0958**	0.102**	0.0960**
		(0.0384)	(0.0390)	(0.0394)	(0.0396)	(0.0408)	(0.0404)	(0.0414)
TL in COF & Local	-	-	0.031	0.0318	0.0317	0.0254	0.0343	0.0338
			(0.0415)	(0.0417)	(0.0418)	(0.0434)	(0.0431)	(0.0432)
TL years at IDB	-	-	-	0.000726	0.000665	0.00120	0.00198	0.00207
				(0.00258)	(0.00279)	(0.00297)	(0.00295)	(0.00296)
TL age	-	-	-	-	0.000164	0.000259	0.000647	0.00145
					(0.00287)	(0.00288)	(0.00285)	(0.00306)
TLSenior (Grades 1, 2, 3)	-	-	-	-	-	-0.0210	-0.0211	0.141
						(0.0391)	(0.0387)	(0.226)
Operations per TL	-	-	-	-	-	-	-0.0273**	-0.0273**
							(0.0114)	(0.0114)
Age & TL Seniority	-	-	-	-	-	-		-0.00326
								(0.00449)
Project fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.12	0.15	0.15	0.15	0.15	0.15	0.17	0.18
N. of obs.	496	494	494	494	494	494	494	494
N. of projects	269	269	269	269	269	269	269	269

Notes: (a) All regressions include months since approval, month since approval square, month since approval cube, and year dummies. (b) ***, **, *, Significant at 1, 5, and 10 percent.

Table A3: replacing TL in COF with TL in the same COF as Project or different COF

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
cof_other		0.124***	0.121***	0.122***	0.121***	0.117**	0.126***	0.120***
		(0.0449)	(0.0450)	(0.0452)	(0.0453)	(0.0458)	(0.0454)	(0.0460)
cof_project		0.0870**	0.0784*	0.0795*	0.0787*	0.0700	0.0744	0.0654
		(0.0437)	(0.0448)	(0.0456)	(0.0461)	(0.0479)	(0.0474)	(0.0487)

Appendix B: Additional Tables

Table B1: Historic disbursement curve by country. CAN.

	IDB	BO	CO	EC	PE	VE
(a) Unrestricted optimization						
b0	-0.0340***	-0.021	-0.0336	-0.00252	-0.0062	0.0058
	(6.83)	(-1.30)	(-1.85)	(-0.18)	(-0.34)	-0.27
b1	0.0530***	0.0597***	0.0673***	0.0777***	0.0636***	0.0600***
	(61.61)	-17.08	-13.25	-15.15	-14.62	-11.23
b2	11.83***	20.74***	7.707***	17.56***	17.61***	29.72**
	(20.58)	-4.84	(5.59)	(4.69)	-4.39	-2.95
Number of observations	7816	419	392	334	366	215
R2 adj	0.69	0.80	0.69	0.82	0.76	0.80
(b) Optimization with Initial values equal to IDB parameters						
b0	-0.0340***	-0.021	-0.0336	-0.00252	-0.0062	0.0058
	(-6.83)	(-1.30)	(-1.85)	(-0.18)	(-0.34)	-0.27
b1	0.0530***	0.0597***	0.0673***	0.0777***	0.0636***	0.0600***
	-61.61	-17.08	-13.25	-15.15	-14.62	-11.23
b2	11.83***	20.74***	7.707***	17.56***	17.61***	29.72**
	-20.58	-4.84	-5.59	-4.69	-4.39	-2.95
Number of observations	7816	419	392	334	366	215
R2 adj	0.69	0.80	0.69	0.82	0.76	0.80

Notes: ***, **, * statistically significant at 1, 5, and 10, respectively. t-stat in parenthesis.

Table B2: Historic disbursement curve by country. CSC.

	IDB	AR	BR	CH	PR	UR
(a) Unrestricted optimization						
b0	-0.0340***	-0.0183	-0.0323*	-0.351***	-0.0267	-0.0227
	(6.83)	(1.01)	(-2.04)	(-12.34)	(-1.36)	(-1.52)
b1	0.0530***	0.0443***	0.0471***	32.68	0.0522***	0.0614***
	(61.61)	(18.6)	-21.85	.	-14.37	-17.57
b2	11.83***	12.68***	9.905***	1.846	27.11***	12.71***
	(20.58)	(5.88)	(7.46)	(1.45)	-3.77	-6
Number of observations	7816	569	982	184	334	392
R2 adj	0.69	0.73	0.67	0.08	0.77	0.82
(b) Optimization with Initial values						
b0	-0.0340***	-0.0183	-0.0323*	-0.0215	-0.0267	-0.0227
	(-6.83)	(-1.01)	(-2.04)	(-1.06)	(-1.36)	(-1.52)
b1	0.0530***	0.0443***	0.0471***	0.0910***	0.0522***	0.0614***
	-61.61	-18.6	-21.85	-11.98	-14.37	-17.57
b2	11.83***	12.68***	9.905***	15.03***	27.11***	12.71***
	-20.58	-5.88	-7.46	-3.88	-3.77	-6
Number of observations	7816	569	982	184	334	392
R2 adj	0.69	0.73	0.67	0.82	0.77	0.82

Notes: ***, **, * statistically significant at 1, 5, and 10, respectively. t-stat in parenthesis.

Table B3: Historic disbursement curve by country. CCB.

	IDB	BA	BH	GY	HA	HO	JA	SU	TT
(a) Unrestricted optimization									
b0	-0.0340***	0.001	-0.050	-0.010	-0.105*	-0.014	0.034	0.009	-0.019
	(6.83)	(0.02)	(-1.26)	(-0.47)	(-2.22)	(-1.00)	-1.05	-0.24	(-0.78)
b1	0.0530***	0.0415***	0.0559***	0.0625***	0.0342***	0.0668***	0.0460***	0.0575***	0.0421***
	(61.61)	(6.32)	(6.15)	-12.79	-9.89	-18.24	-10.96	-9.09	-12.74
b2	11.83***	40.45	6.048**	29.49**	5.716***	30.61***	16.41**	22.00*	31.74**
	(20.58)	(1.4)	-2.86	-3.24	-3.44	-4.75	-3.02	-2.32	-3.03
Number of observations	7816	72	93	201	237	445	190	91	89
R2 adj	0.69	0.73	0.66	0.81	0.55	0.82	0.72	0.81	0.90
(b) Optimization with Initial values equal to IDB parameters									
b0	-0.0340***	0.001	-0.050	-0.010	-0.105*	-0.014	0.034	0.009	-0.019
	(-6.83)	-0.02	(-1.26)	(-0.47)	(-2.22)	(-1.00)	-1.05	-0.24	(-0.78)
b1	0.0530***	0.0415***	0.0559***	0.0625***	0.0342***	0.0668***	0.0460***	0.0575***	0.0421***
	-61.61	-6.32	-6.15	-12.79	-9.89	-18.24	-10.96	-9.09	-12.74
b2	11.83***	40.45	6.048**	29.49**	5.716***	30.61***	16.41**	22.00*	31.74**
	-20.58	-1.4	-2.86	-3.24	-3.44	-4.75	-3.02	-2.32	-3.03
Number of observations	7816	72	93	201	237	445	190	91	89
R2 adj	0.69	0.73	0.66	0.81	0.55	0.82	0.72	0.81	0.90

Notes: ***, **, * statistically significant at 1, 5, and 10, respectively. t-stat in parenthesis.

Table B4: Historic disbursement curve by country. CID.

	IDB	BL	CR	DR	EC	ES	GU	HO	ME	NI	PN
(a) Unrestricted optimization											
b0	-0.0340***	-0.011	-0.019	-0.015	-0.003	-0.004	0.003	-0.014	-0.012	-0.0362**	-0.0332*
	(6.83)	(-0.38)	(-0.59)	(-0.46)	(-0.18)	(-0.10)	-0.1	(-1.00)	(-0.54)	(-2.74)	(-2.17)
b1	0.0530***	0.0647***	0.0631***	0.0503***	0.0777***	0.0460***	0.0525***	0.0668***	0.0783***	0.0730***	0.0647***
	(61.61)	-7.62	-6.86	-10.18	-15.15	-8.66	-10.62	-18.24	-9.75	-17.62	-17.34
b2	11.83***	9.742**	114.1	16.94**	17.56***	15.15*	29.78**	30.61***	7.462***	18.97***	24.27***
	(20.58)	-3.05	(1.32)	(2.93)	(4.69)	-2.58	-2.7	-4.75	-4.23	-5.35	-4.78
Number of observations	7816	126	87	258	334	193	248	445	270	560	339
R2 adj	0.69	0.74	0.77	0.64	0.82	0.64	0.71	0.82	0.67	0.78	0.84
(b) Optimization with Initial values equal to IDB parameters											
b0	-0.0340***	-0.011	-0.019	-0.015	-0.003	-0.004	0.003	-0.014	-0.012	-0.0362**	-0.0332*
	(-6.83)	(-0.38)	(-0.59)	(-0.46)	(-0.18)	(-0.10)	-0.1	(-1.00)	(-0.54)	(-2.74)	(-2.17)
b1	0.0530***	0.0647***	0.0631***	0.0503***	0.0777***	0.0460***	0.0525***	0.0668***	0.0783***	0.0730***	0.0647***
	-61.61	-7.62	-6.86	-10.18	-15.15	-8.66	-10.62	-18.24	-9.75	-17.62	-17.34
b2	11.83***	9.742**	114.1	16.94**	17.56***	15.15*	29.78**	30.61***	7.462***	18.97***	24.27***
	-20.58	-3.05	-1.32	-2.93	-4.69	-2.58	-2.7	-4.75	-4.23	-5.35	-4.78
Number of observations	7816	126	87	258	334	193	248	445	270	560	339
R2 adj	0.69	0.74	0.77	0.64	0.82	0.64	0.71	0.82	0.67	0.78	0.84

Notes: ***, **, * statistically significant at 1, 5, and 10, respectively. t-stat in parenthesis.

Table B5: Classification of projects in 2011 according to disbursements by country and division

	Deviations with respect to IDB historic disbursement curve			Deviations with respect to country specific historic disbursement curve		
	% Above	% Within	% Below	% Above	% Within	% Below
By country						
AR	17.5%	63.8%	18.8%	26.3%	61.3%	12.5%
BA	7.7%	30.8%	61.5%	23.1%	69.2%	7.7%
BH	30.0%	60.0%	10.0%	20.0%	70.0%	10.0%
BL	12.5%	75.0%	12.5%	12.5%	62.5%	25.0%
BO	12.3%	80.7%	7.0%	19.3%	71.9%	8.8%
BR	23.1%	51.0%	25.9%	23.8%	49.7%	26.5%
CH	46.2%	53.8%	0.0%	11.5%	76.9%	11.5%
CO	42.0%	50.0%	8.0%	16.0%	72.0%	12.0%
CR	0.0%	50.0%	50.0%	41.7%	33.3%	25.0%
DR	20.0%	71.4%	8.6%	22.9%	68.6%	8.6%
EC	23.9%	76.1%	0.0%	19.6%	69.6%	10.9%
ES	0.0%	84.0%	16.0%	0.0%	100.0%	0.0%
GU	3.6%	50.0%	46.4%	7.1%	64.3%	28.6%
GY	18.5%	77.8%	3.7%	29.6%	66.7%	3.7%
HA	29.3%	46.3%	24.4%	43.9%	43.9%	12.2%
HO	9.4%	73.6%	17.0%	9.4%	73.6%	17.0%
JA	16.7%	75.0%	8.3%	16.7%	75.0%	8.3%
ME	53.5%	46.5%	0.0%	27.9%	60.5%	11.6%
NI	23.2%	75.4%	1.4%	10.1%	87.0%	2.9%
PE	18.2%	72.7%	9.1%	13.6%	75.0%	11.4%
PN	15.6%	64.4%	20.0%	17.8%	64.4%	17.8%
PR	9.1%	61.4%	29.5%	15.9%	61.4%	22.7%
SU	14.3%	85.7%	0.0%	21.4%	78.6%	0.0%
TT	0.0%	63.6%	36.4%	27.3%	54.5%	18.2%
UR	20.4%	72.2%	7.4%	16.7%	64.8%	18.5%
VE	12.0%	56.0%	32.0%	12.0%	64.0%	24.0%
By division						
CMF	32.8%	64.1%	3.1%	34.4%	59.4%	6.3%
EDU	19.7%	73.8%	6.6%	23.0%	68.9%	8.2%
ENE	25.0%	55.8%	19.2%	30.8%	53.8%	15.4%
FMM	21.1%	59.2%	19.7%	17.8%	61.2%	21.1%
GDI	25.0%	50.0%	25.0%	0.0%	75.0%	25.0%
ICS	14.2%	69.3%	16.5%	11.0%	75.6%	13.4%
INT	4.3%	82.6%	13.0%	8.7%	87.0%	4.3%
LMK	38.5%	53.8%	7.7%	23.1%	61.5%	15.4%
RND	13.7%	68.6%	17.6%	14.4%	68.6%	17.0%
SCT	18.8%	46.9%	34.4%	15.6%	50.0%	34.4%
SPH	25.0%	68.8%	6.3%	22.7%	71.9%	5.5%
TSP	29.4%	57.1%	13.5%	30.2%	57.9%	11.9%
WSA	13.2%	61.4%	25.4%	14.0%	64.0%	21.9%

Table B6: Robustness check. Understanding deviations from the Individual Country-Specific Historic Disbursement Curve

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Approved amount (millions of USD)	0.000216*** (3.48e-05)	0.000240*** (3.56e-05)	0.000237*** (3.62e-05)	0.000210*** (4.06e-05)	0.000132*** (4.82e-05)	0.000136*** (4.82e-05)	0.000151*** (4.79e-05)	0.000163*** (4.85e-05)	3.76e-05 (5.08e-05)
Country requires ratification			-0.00330 (0.00665)	-0.00404 (0.00666)	0.00127 (0.0126)	-0.00481 (0.0130)	0.00127 (0.0131)	0.0126 (0.0134)	0.0212 (0.0151)
BNDES				0.355* (0.199)	0.647*** (0.227)	0.637*** (0.227)	0.381 (0.355)	0.394 (0.356)	0.679* (0.363)
Oportunidades				0.0530 (0.107)	0.113 (0.113)	0.106 (0.111)	0.178 (0.154)	0.210 (0.152)	0.332** (0.136)
Team leader in Country office						-0.0175 (0.0110)	0.000930 (0.0115)	0.00640 (0.0116)	0.00630 (0.0122)
Time from profile to approval							-0.00352*** (0.000727)	-0.00334*** (0.000755)	-0.00231*** (0.000857)
Time from profile to approval squared							3.03e-05*** (8.62e-06)	3.14e-05*** (9.07e-06)	2.12e-05* (1.09e-05)
Team leader age								-0.0223 (0.0383)	-0.0223 (0.0397)
Team leader age squared								-2.85e-05 (5.63e-05)	1.61e-05 (5.56e-05)
Changed team leader								-0.0507*** (0.0118)	-0.0767*** (0.0131)
Sectorial classification	IDB division	Sector	Sector	Sector	Sector	Sector	Sector	Sector	Subsector
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Approval year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Months since approval, Months since approval squared, and Months since approval cube	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Team leader fixed effects					Yes	Yes	Yes	Yes	Yes
R-squared	0.114	0.101	0.101	0.103	0.300	0.301	0.308	0.311	0.362
Number of observations	4,729	4,729	4,729	4,729	4,729	4,729	4,426	4,064	4,064

Notes: Robust standard errors in bracket. (a) Changed Team Leader takes value one when the last team leader entered the IDB after the approval of the project. ***, **, and *, statistically significant at 1, 5, and 10%.

Table B7. Robustness check. Understanding deviations from the Historic Disbursement Curve. Projects approved between 2001 and 2011

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Argentina	-0.0772***	-0.0844***	-0.123***	-0.115***	-0.0390	0.0616	0.0371	0.0476	0.142
	(0.0192)	(0.0197)	(0.0423)	(0.0423)	(0.0710)	(0.0765)	(0.0898)	(0.0904)	(0.109)
Barbados	-0.192***	-0.194***	-0.232***	-0.231***	-0.143**	-0.0968	-0.106	-0.105	-0.0829
	(0.0345)	(0.0344)	(0.0512)	(0.0512)	(0.0639)	(0.0650)	(0.0751)	(0.0750)	(0.0850)
Belize	0.00676	0.0181	-0.0190	-0.0188	0.101	0.152*	0.164*	0.170*	0.177*
	(0.0255)	(0.0253)	(0.0443)	(0.0444)	(0.0755)	(0.0791)	(0.0928)	(0.0941)	(0.103)
Bolivia	-0.0269	-0.0210	-0.0111	-0.0113	0.0125	0.00685	0.00805	-0.00547	-0.104
	(0.0207)	(0.0208)	(0.0211)	(0.0211)	(0.0524)	(0.0520)	(0.0566)	(0.0568)	(0.0707)
Brazil	-0.0241	-0.0255	-0.0634	-0.0622	-0.0189	0.0299	-0.0471	-0.0421	0.147
	(0.0182)	(0.0180)	(0.0414)	(0.0415)	(0.0729)	(0.0735)	(0.0844)	(0.0846)	(0.103)
Chile	0.208***	0.206***	0.215***	0.215***	0.272***	0.286***	0.265***	0.269***	0.389***
	(0.0288)	(0.0281)	(0.0280)	(0.0280)	(0.0566)	(0.0561)	(0.0589)	(0.0588)	(0.0696)
Colombia	0.202***	0.205***	0.167***	0.169***	0.199***	0.286***	0.238***	0.253***	0.198*
	(0.0235)	(0.0234)	(0.0441)	(0.0441)	(0.0697)	(0.0745)	(0.0864)	(0.0866)	(0.101)
Costa Rica	-0.155***	-0.150***	-0.140***	-0.140***	-0.0715	-0.0884	-0.0554	-0.0773	-0.209**
	(0.0319)	(0.0319)	(0.0321)	(0.0321)	(0.0549)	(0.0548)	(0.0620)	(0.0629)	(0.0822)
Dominican Republic	-0.00294	0.0346	0.0435	0.0433	0.0890**	0.0818*	0.0606	0.0561	0.110***
	(0.0289)	(0.0290)	(0.0290)	(0.0290)	(0.0443)	(0.0445)	(0.0398)	(0.0400)	(0.0421)
Ecuador	0.0954***	0.0942***	0.0561	0.0578	0.0844	0.169***	0.152*	0.141*	0.108
	(0.0209)	(0.0212)	(0.0429)	(0.0429)	(0.0587)	(0.0639)	(0.0787)	(0.0781)	(0.0905)
El Salvador	0.0317	0.0394	0.0505	0.0514	0.0478	0.0374	0.0454	0.0151	0.0233
	(0.0360)	(0.0366)	(0.0370)	(0.0371)	(0.0369)	(0.0369)	(0.0377)	(0.0457)	(0.0543)
Guatemala	-0.148***	-0.148***	-0.186***	-0.185***	-0.190***	-0.110	-0.142*	-0.102	-0.0386
	(0.0267)	(0.0281)	(0.0470)	(0.0471)	(0.0657)	(0.0714)	(0.0773)	(0.0719)	(0.0956)
Guyana	0.0107	0.0146	-0.0229	-0.0238	-0.0223	0.0131	0.0110	0.0223	0.132
	(0.0221)	(0.0225)	(0.0433)	(0.0433)	(0.0609)	(0.0608)	(0.0714)	(0.0718)	(0.0840)
Haiti	0.0280	0.0244	0.0340	0.0354	0.258***	0.304***	0.334***	0.352***	0.453***
	(0.0247)	(0.0259)	(0.0259)	(0.0258)	(0.0888)	(0.0901)	(0.104)	(0.106)	(0.117)
Honduras	-0.0446**	-0.0405**	-0.0305	-0.0312	0.0955**	0.0772*	0.0616	0.0404	0.0356
	(0.0185)	(0.0188)	(0.0190)	(0.0190)	(0.0426)	(0.0432)	(0.0429)	(0.0433)	(0.0461)
Jamaica	-0.0465	-0.0568	-0.0932*	-0.0939*	-0.195***	-0.153**	-0.233***	-0.223***	-0.146*
	(0.0348)	(0.0355)	(0.0506)	(0.0506)	(0.0642)	(0.0636)	(0.0736)	(0.0742)	(0.0834)
Mexico	0.0741*	0.0967***	0.0583	0.0548	0.103	0.151*	0.127	0.138	0.308**
	(0.0390)	(0.0358)	(0.0521)	(0.0516)	(0.0796)	(0.0798)	(0.109)	(0.109)	(0.141)
Nicaragua	0.0388**	0.0357*	0.0457**	0.0451**	0.119***	0.132***	0.132***	0.101***	0.117***
	(0.0184)	(0.0183)	(0.0186)	(0.0186)	(0.0369)	(0.0360)	(0.0356)	(0.0362)	(0.0452)
Peru	0.0112	0.00779	-0.0302	-0.0300	0.225***	0.250***	0.215***	0.209**	0.383***
	(0.0209)	(0.0209)	(0.0430)	(0.0430)	(0.0706)	(0.0706)	(0.0813)	(0.0820)	(0.0977)
Paraguay	-0.104***	-0.106***	-0.0963***	-0.0963***	-0.0959**	-0.0432	-0.0706	-0.0697	-0.0316
	(0.0224)	(0.0231)	(0.0233)	(0.0234)	(0.0489)	(0.0507)	(0.0552)	(0.0547)	(0.0581)
Suriname	0.0741***	0.0750***	0.0372	0.0371	0.00235	0.0416	0.0740	0.0847	0.147*
	(0.0287)	(0.0286)	(0.0466)	(0.0466)	(0.0675)	(0.0682)	(0.0760)	(0.0769)	(0.0849)
Trinidad and Tobago	-0.123***	-0.132***	-0.171***	-0.171***	-0.227***	-0.126	-0.145	-0.121	-0.0301
	(0.0311)	(0.0313)	(0.0491)	(0.0491)	(0.0781)	(0.0832)	(0.0889)	(0.0894)	(0.0968)
Uruguay	0.0195	0.0338*	-0.00477	-0.00379	-0.0183	0.0713	0.00892	0.0204	0.122
	(0.0191)	(0.0189)	(0.0422)	(0.0422)	(0.0711)	(0.0768)	(0.0895)	(0.0904)	(0.110)
Venezuela	-0.106***	-0.115***	-0.153***	-0.147***	-0.0716	-0.0189	-0.0357	-0.0309	-0.0679
	(0.0254)	(0.0258)	(0.0453)	(0.0455)	(0.0739)	(0.0752)	(0.0883)	(0.0876)	(0.0982)
Approved amount (millions of US$)	0.000361***	0.000377***	0.000377***	0.000337***	0.000294***	0.000296***	0.000264***	0.000268***	0.000127**
	(4.55e-05)	(4.59e-05)	(4.58e-05)	(5.17e-05)	(6.07e-05)	(6.08e-05)	(6.20e-05)	(6.23e-05)	(5.75e-05)
Country requires ratification			-0.0476	-0.0471	-0.0677	-0.0267	-0.0450	-0.0357	0.0132
			(0.0424)	(0.0424)	(0.0578)	(0.0589)	(0.0705)	(0.0709)	(0.0845)
BNDES				0.253	0.517**	0.507**	0.347	0.337	0.558
				(0.209)	(0.233)	(0.233)	(0.364)	(0.365)	(0.375)
Oportunidades				0.118	0.741***	0.736***	0.834***	0.833***	0.773***
				(0.109)	(0.124)	(0.123)	(0.123)	(0.123)	(0.152)
Team leader in country office						-0.0573***	-0.0241	-0.0299	-0.0299
						(0.0178)	(0.0202)	(0.0200)	(0.0226)
Time from profile to approval							-0.00169*	-0.00150	-0.000790
							(0.000967)	(0.000968)	(0.00112)
Time from profile to approval squared							1.36e-05	1.03e-05	-5.77e-06
							(1.23e-05)	(1.23e-05)	(1.44e-05)
Team leader age								-0.00698	-0.0180
								(0.0316)	(0.0338)
Team leader age squared								-2.02e-05	1.10e-05
								(8.60e-05)	(8.35e-05)
Changed team leader								-0.0304*	-0.0330
								(0.0176)	(0.0201)

Sectorial classification	IDB division	Sector	Sector	Sector	Sector	Sector	Sector	Sector	Subsector
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Approval year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Months since approval, Months since approval squared, and Months since approval cube	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Team leader fixed effects					Yes	Yes	Yes	Yes	Yes
R-squared	0.255	0.248	0.248	0.250	0.410	0.412	0.411	0.410	0.465
Number of observations	3,175	3,175	3,175	3,175	3,175	3,175	2,880	2,784	2,784

Notes: Robust standard errors in bracket. (a) Changed Team Leader takes value one when the last team leader entered the IDB after the approval of the project. ***, **, and *, statistically significant at 1, 5, and 10%.

Table B8: Classification in 2011 of projects Approved between 2001-2011 according to disbursements by country and division

	Deviations with respect to IDB historic disbursement curve			Deviations with respect to country specific historic disbursement curve		
	% Above	% Within	% Below	% Above	% Within	% Below
By country						
AR	20.7%	53.4%	25.9%	32.8%	48.3%	19.0%
BA	8.3%	25.0%	66.7%	25.0%	75.0%	0.0%
BH	50.0%	33.3%	16.7%	66.7%	16.7%	16.7%
BL	22.2%	55.6%	22.2%	22.2%	33.3%	44.4%
BO	11.4%	79.5%	9.1%	27.3%	63.6%	9.1%
BR	26.5%	41.0%	32.5%	27.4%	41.0%	31.6%
CH	52.2%	47.8%	0.0%	17.4%	69.6%	13.0%
CO	51.4%	37.8%	10.8%	56.8%	32.4%	10.8%
CR	0.0%	50.0%	50.0%	30.0%	50.0%	20.0%
DR	24.0%	68.0%	8.0%	28.0%	64.0%	8.0%
EC	32.4%	67.6%	0.0%	26.5%	61.8%	11.8%
ES	0.0%	76.5%	23.5%	0.0%	64.7%	35.3%
GU	0.0%	27.8%	72.2%	11.1%	61.1%	27.8%
GY	13.6%	81.8%	4.5%	27.3%	59.1%	13.6%
HA	34.3%	37.1%	28.6%	37.1%	37.1%	25.7%
HO	7.9%	68.4%	23.7%	18.4%	60.5%	21.1%
JA	23.5%	64.7%	11.8%	23.5%	47.1%	29.4%
ME	67.6%	32.4%	0.0%	26.5%	58.8%	14.7%
NI	24.5%	73.5%	2.0%	14.3%	81.6%	4.1%
PE	21.2%	66.7%	12.1%	24.2%	66.7%	9.1%
PN	20.0%	48.6%	31.4%	22.9%	51.4%	25.7%
PR	13.3%	43.3%	43.3%	30.0%	43.3%	26.7%
SU	7.7%	92.3%	0.0%	15.4%	84.6%	0.0%
TT	0.0%	50.0%	50.0%	12.5%	50.0%	37.5%
UR	25.0%	62.5%	12.5%	25.0%	55.0%	20.0%
VE	18.8%	37.5%	43.8%	18.8%	56.3%	25.0%
By division						
CMF	45%	53%	2%	43%	55%	2%
EDU	32%	58%	11%	37%	50%	13%
ENE	28%	51%	21%	35%	51%	14%
FMM	24%	53%	24%	21%	54%	25%
GDI	25%	50%	25%	0%	75%	25%
ICS	16%	58%	26%	19%	58%	23%
INT	5%	81%	14%	0%	95%	5%
LMK	42%	50%	8%	17%	67%	17%
RND	14%	63%	23%	17%	61%	23%
SCT	22%	33%	44%	30%	33%	37%
SPH	35%	52%	12%	34%	55%	11%
TSP	33%	50%	18%	41%	45%	15%
WSA	15%	53%	32%	19%	53%	28%

7. Appendix C: Additional Figures

Figure C1. Average share of each country in ULB and EULB, 2000-2011

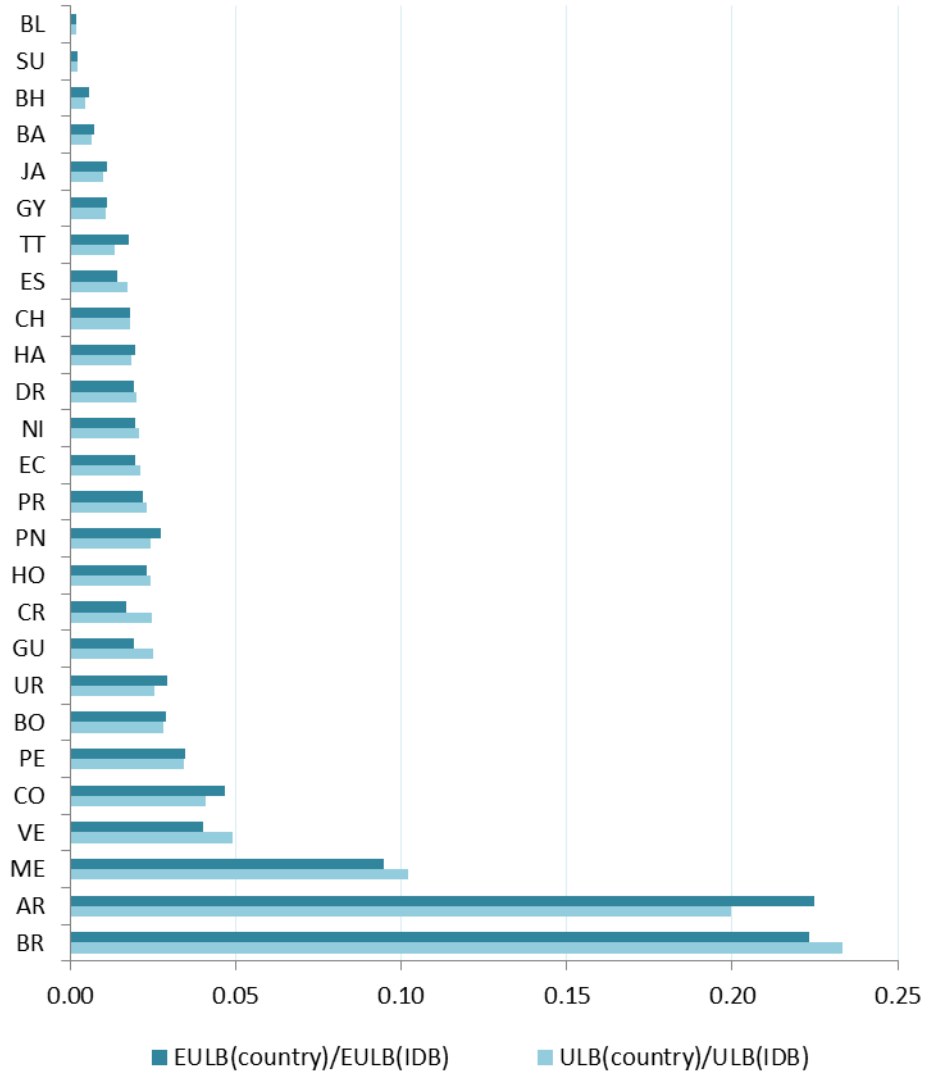
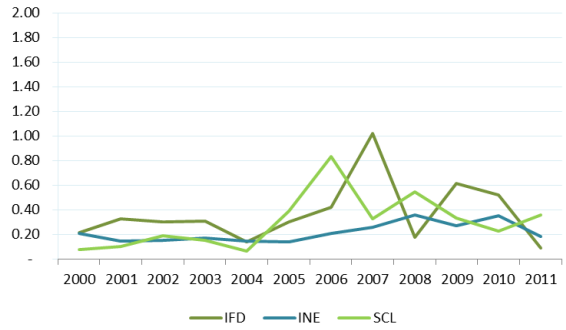
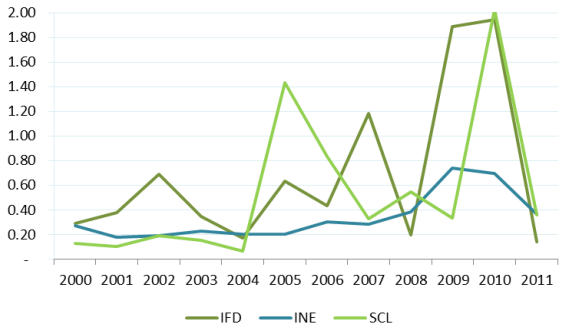


Figure C2: Disbursements/ULB and Disbursements/EULB in Brazil, investment projects

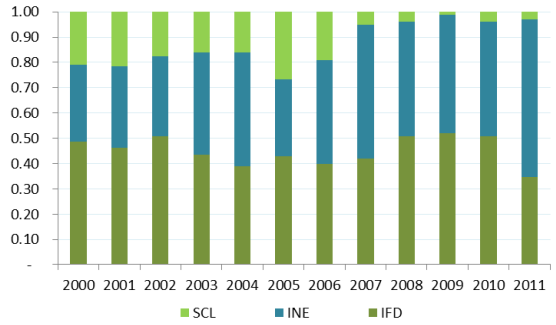
a1) Disbursements/ULB



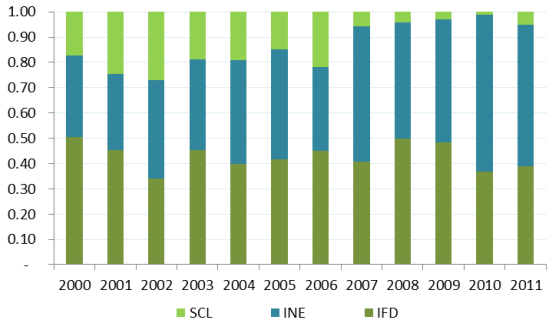
a2) Disbursements/EULB



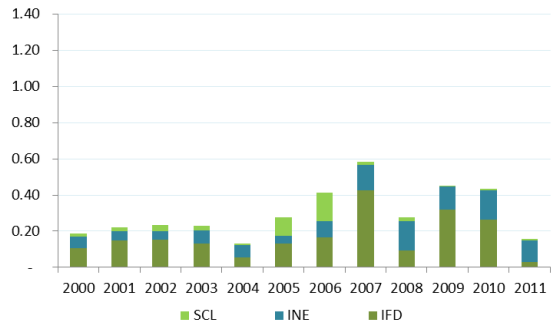
b1) Department share in Brazilian ULB



b2) Department share in Brazilian EULB



c1) Department contribution to Disb/ULB



c2) Department contribution to Disb/EULB

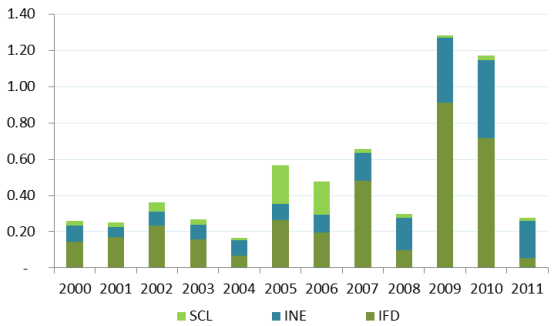


Figure C3: IDB historic disbursement curve and projects in 2011 for 2001-2011 Approvals

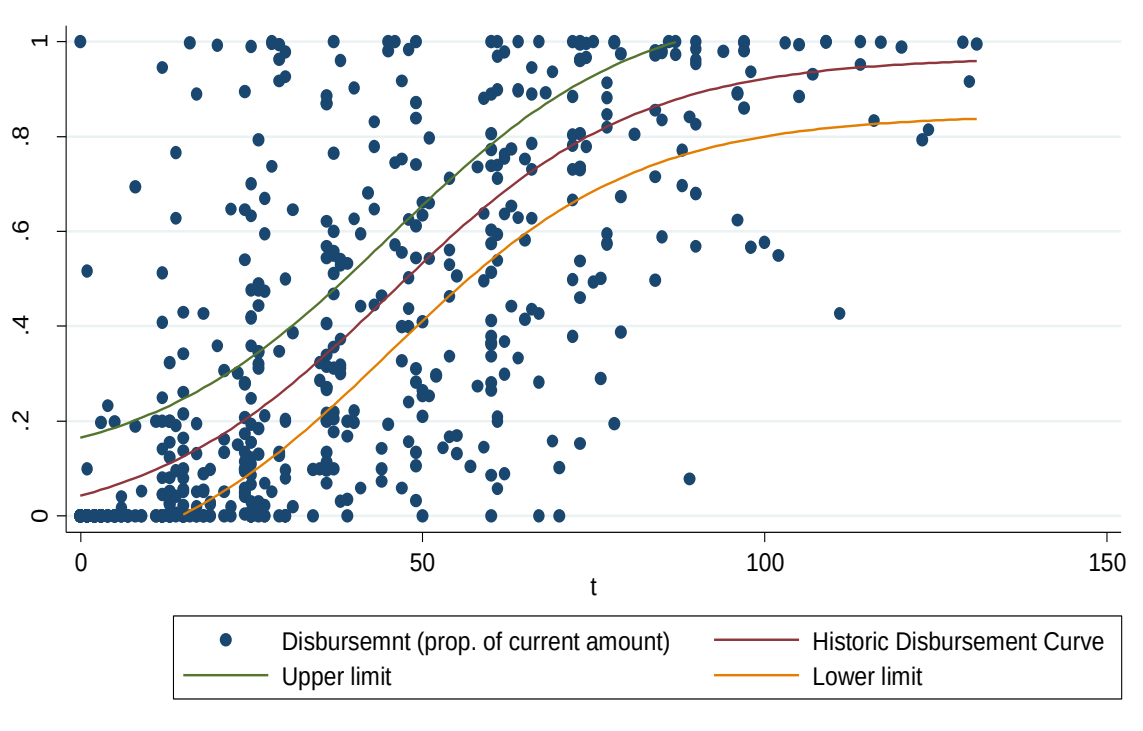
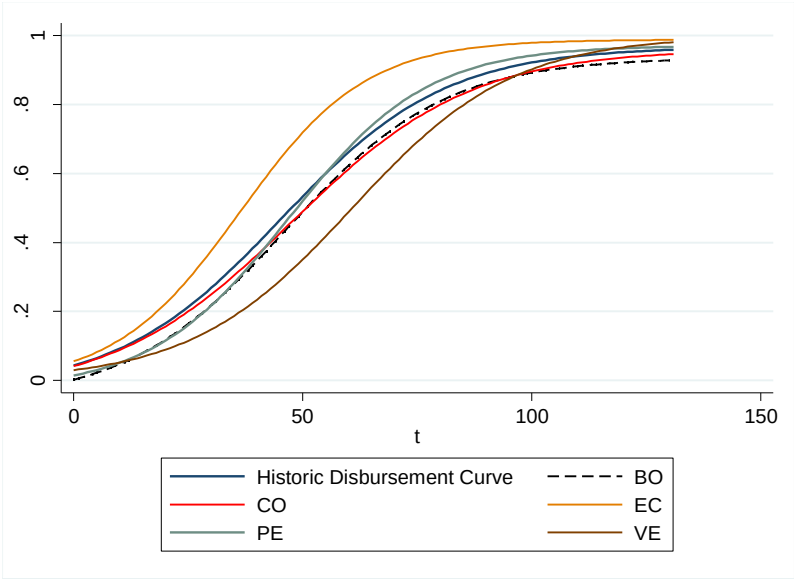
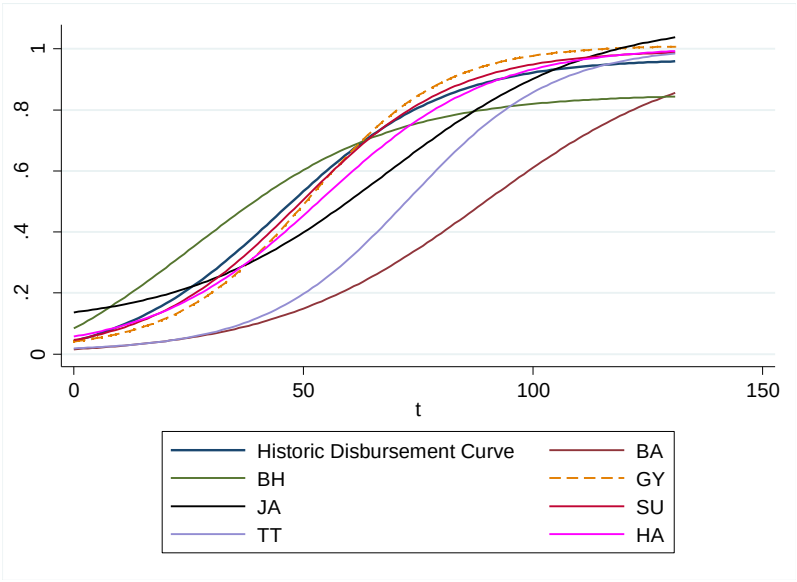


Figure C4: Historic disbursement curve by country for 2001-2011 Approvals

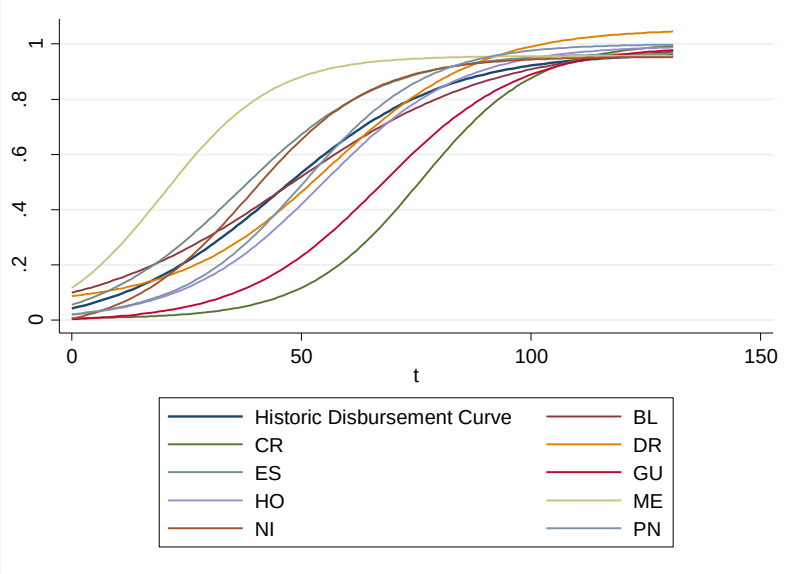
(a) CAN



(b) CCB



(c) CID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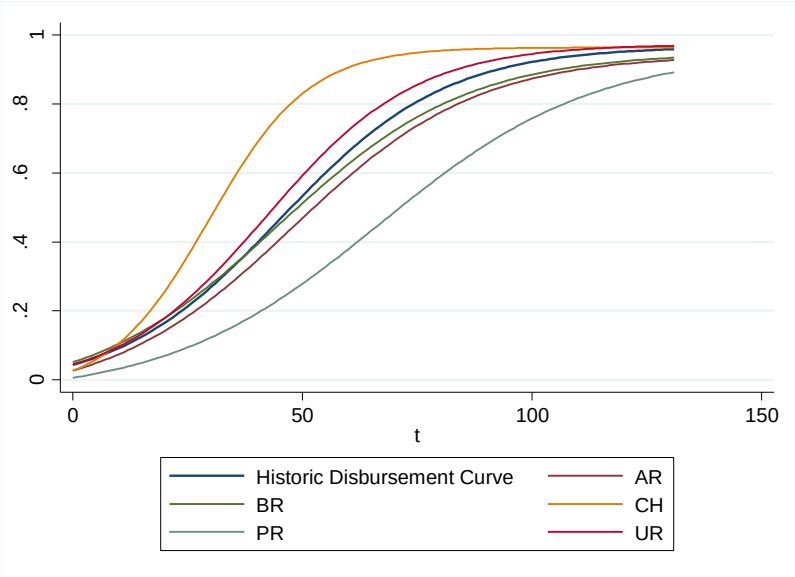
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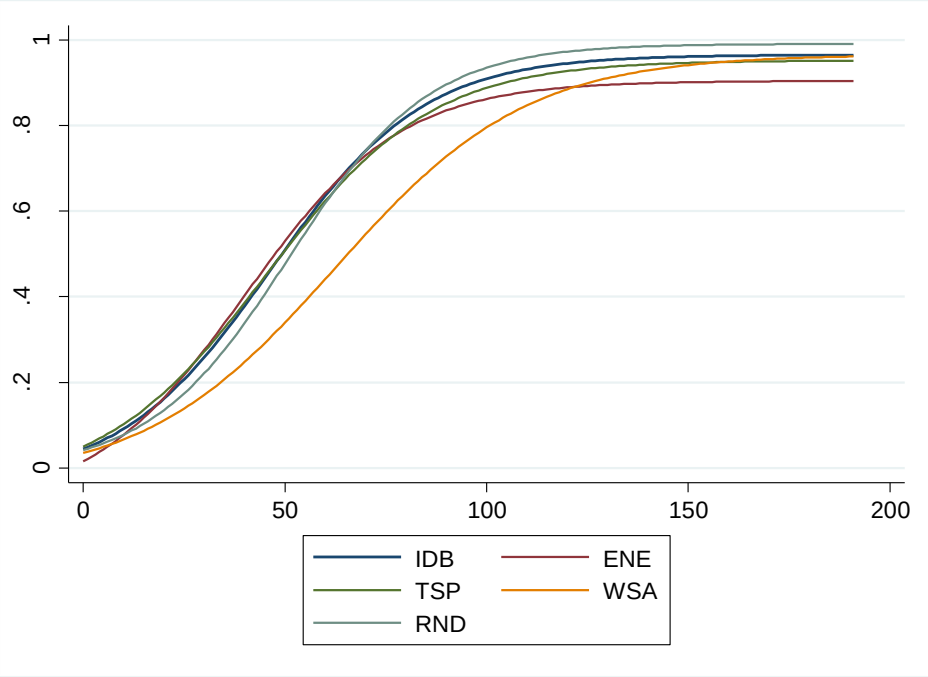
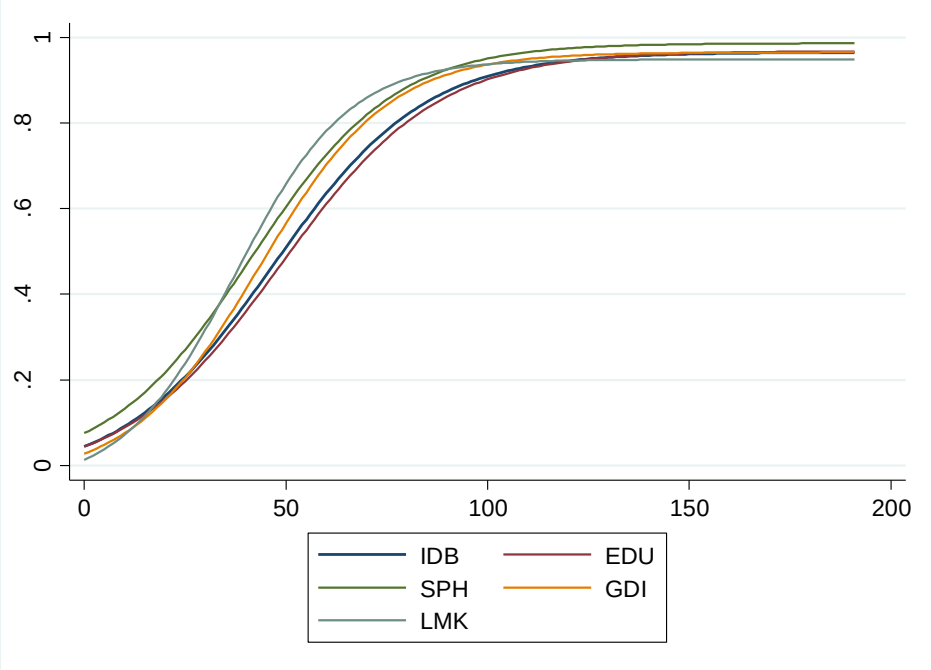
Figure C5: Historic disbursement curve by IDB sectorial division

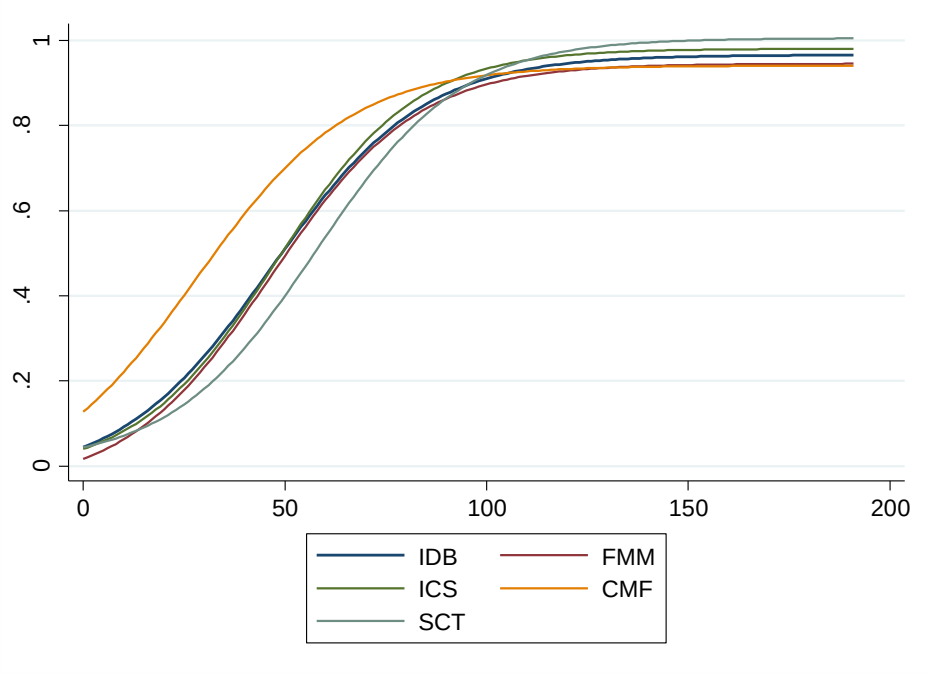
(a) INE



(b) SCL



(c) IFD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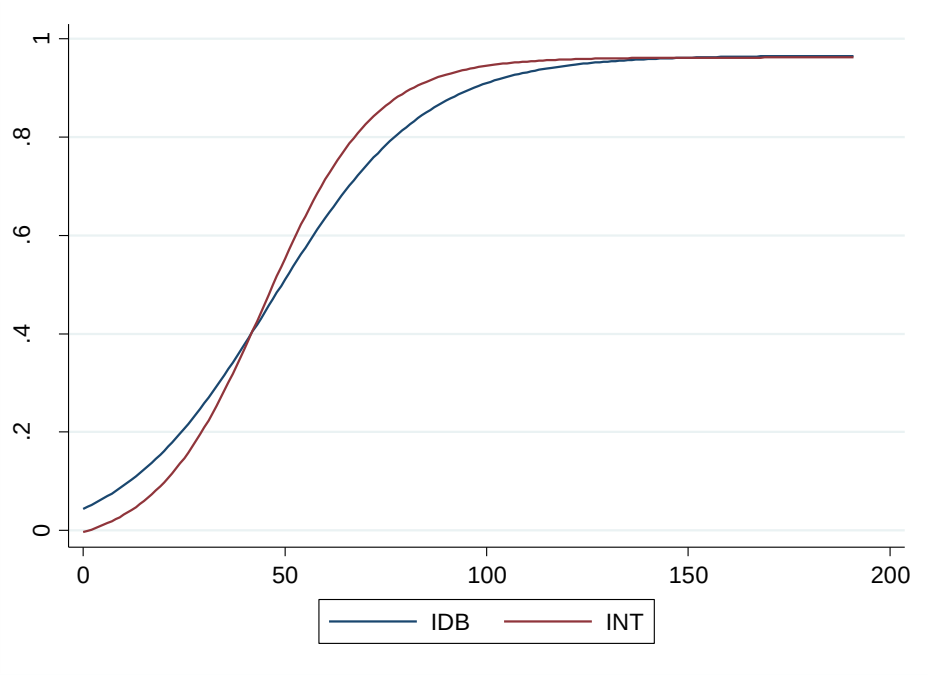
(d) INT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