



Project Evaluation

Lessons from IDB Group's NSG Problem Projects

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Acronyms and Abbreviations

CAN	Country Department Andean Group
CCB	Country Department Caribbean
CID	Country Department Central America, Haiti, Mexico, Panama & Dominican Republic
CSC	Country Department Southern Cone
DEG	German Investment Corporation
DIAS	Development Impact and Additionality Scoring
EBRD	European Bank for Reconstruction and Development
EPC	Engineering, procurement, and construction
IDB(G)	Inter-American Development Bank (Group)
IFC	International Finance Corporation
IIC	Inter-American Investment Corporation
IO	Investment officer
LAC	Latin America and the Caribbean
LGD	Loss-given-default
MDB	Multilateral development bank
MOK	Mountain of Knowledge
NSG	Non-sovereign-guaranteed
OMJ	Opportunities for the Majority
OVE	Office of Evaluation and Oversight
PD	Probability of default
PTM	Portfolio Management (IDB Invest)
REG	Regional
SAT	Special Assets Team (also Unit or Department, at some comparators)
SCF	Structured and Corporate Finance Department
TM-RAC	Target market, Risk-acceptance criteria
WACS	Waivers, amendments, and consents

Executive Summary

In pursuing their mission, multilateral development banks (MDBs) risk financial losses, which may both affect their long-term sustainability and send negative signals to key stakeholders. In projects without sovereign guarantees, apart from the risks of not achieving their development objectives, MDBs also face the prospect of financial losses. If unchecked, these may ultimately undermine an MDB's sustainability. Apart from these direct effects, losses may also affect the MDB's reputation with key counterparts, such as rating agencies or current and future MDB clients.

This evaluation focuses on problem projects, defined narrowly as those "financially impaired" because they hold the possibility of financial losses. Problems may be defined as any departure from expected results, but when this departure relates to potential financial losses, accounting rules require that specific provisions be made. At the request of the Board, this evaluation seeks to learn from IDBG's past problem projects - those with specific accounting provisions - and from comparator MDBs' practices for avoiding and resolving problems. Comparators included the International Finance Corporation (IFC), the European Bank for Reconstruction and Development (EBRD), the Asian Development Bank, the African Development Bank and the German Investment Corporation (DEG).

At IDBG, problem projects were a minority within a predominantly sound portfolio. The evaluation covered all projects by the Inter-American Investment Corporation (IIC), the IDB's Structured and Corporate Finance Department (SCF), and the Opportunities for the Majority Initiative (OMJ) that were "financially impaired" at some point between 2007 and 2016. On average, 2.4% of non-sovereign guaranteed (NSG) projects' outstanding amounts were impaired at the end of each year. Because of the IDBG's patience and determination to collect, the actual IDBG losses were much lower: 0.2%, which is in line with comparators, and about ten times lower than for Latin America and the Caribbean (LAC) commercial banks.

But learning from past problems is still important, especially as IDB Invest seeks to grow in areas such as infrastructure that in the past had a significantly higher probability of default (PD). The incidence and handling of problem projects could also have important reputational effects for key stakeholders, such as rating agencies, cofinanciers, and clients. The evaluation found that for IDBG, recovery was

conducted without significant adverse effects on the institution's reputation, and that project companies were preserved: about three quarters of them are still in business.

The evaluation used a qualitative, forward-looking approach. Methodological challenges – including the relatively small number of problem projects – made it unfeasible to create a model to predict the causes of problems. Instead, the evaluation identified working hypotheses on the causes of problems and potentially promising practices. It used three complementary methods: portfolio analysis (using IDBG's databases), project analysis (on the entire population of problem projects), and structured interviews (with about 40 IDBG staff and external experts from selected comparators – multilateral and bilateral international financial institutions with experience working with the private sector). Overall, OVE approached problem projects as opportunities to learn rather than considering them as failures; and created some tools (a problem project database and risk analysis template) that are potentially useful to Management in the future.

On average, the problem projects analyzed were declared impaired about three years after approval, but about midway OVE identified a first problematic event, material enough to cause concern. According to OVE's analysis, the projects in this vintage batch experienced on average an initial problematic event about a year and a half after approval, were flagged as potentially problematic about 10 months later, and were declared financially impaired about seven months after being flagged. Among them, 41% of projects were impaired almost immediately after being flagged. The evaluation also found that problem projects did not have better expected development impacts than non-problem ones.

IDBG recoveries were high and in line with comparators, but recoveries varied by project characteristics. Large projects, which made up the vast majority of the total impairments, had much higher recoveries, almost twice as high as for smaller projects. Apart from project size, recoveries were better the later the first problematic event occurred, the stronger the sponsor support, and the more asset-intensive their sectors were. Companies that stayed in business were also associated with higher recoveries. Slower resolution did not lead to better recoveries, regardless of project size. Going forward, IDB Invest plans to reduce its direct investing in small and medium-sized enterprises, which in the past accounted for most problem projects by number, thus likely changing the future profile of problem projects and the expected recoveries.

OVE grouped the causes of problems into five, non-exclusive categories: market, venue, partners, rigidities and incentives. Market causes were linked to wider than expected volatility in sector or macroeconomic factors. Venue causes related to sociopolitical,

regulatory or environmental issues particular to the projects' location. Partner causes arose out of shortcomings in the character or capabilities of key project partners. Rigidities stemmed from operational or financial constraints that prevented projects from adapting. Incentive causes linked to the misalignment of interests among key stakeholders. Each category is associated with a main mitigating theme: market with forecasting, venue with prevention, partners with screening, rigidities with contingency-planning and incentives with alignment. The categories differed in their prevalence and severity to IDBG.

- **Market conditions were a cause of problems for more than three-quarters of the projects.** About half of the problem projects faced reductions – in either quantity or price – in the demand for their products or services. Another quarter of projects were affected by wider-than-expected macroeconomic shifts. Mitigants included working where IDBG had amassed deep sector expertise, predefining risk-acceptance criteria for each target market, ensuring that assumptions were compatible with longer-term historical volatility, and proactively mitigating excessive client concentration.
- **Venue risks – including sociopolitical and regulatory issues, as well as climate and natural disaster events – were a cause of impairment for about half of the projects.** Infrastructure projects and projects generating a large share of local employment were particularly exposed to the negative effects of regulatory adjustments or opposition by civil society. Deteriorating citizen security, while present in only a few cases, posed high barriers to project success and fair valuation of liquidated assets. Climate change and natural disasters affected only a few projects dependent on natural resources, but it is a growing concern that needs to be tracked and insured. Mitigants include involving potentially affected parties, even when this is not strictly required, and creating exposure indices to climate and citizen security risks to try to anticipate problems.
- **Partners' shortcomings were a cause of impairment for about half of problem projects.** About one in six projects had a partner whose character turned out to be detrimental, and about one in three had one whose capabilities – including financial strength – were inadequate. Poor capabilities were associated with better recoveries, but character issues led to low recoveries. Character issues were rarely salvageable, so their assessment is essential. Mitigants include ensuring that there is institutional memory about partners' character, expanding the oversight to include their related entities,

monitoring external signs of problems such as sinking stock prices for publicly traded companies, and ensuring fast and decisive corrective action.

- **Rigidities – operational or financial – were a cause of impairment for about half of problem projects.** About a third of projects were affected by difficult-to-adapt operational decisions – e.g., selection of key technology, scale of plant and equipment, dependence on key suppliers, or substandard production inputs. About one in five projects suffered from rigidities linked to suboptimal capital commitments by initial shareholders, unable to invest further or with built in restrictions to avoid being diluted. Mitigants included having deep sector expertise to pre-identify operational red flags and be able to assess key technology choices, assessing the market dynamics for key inputs, and leveraging IDBG’s negotiating power at approval to try to structure preset triggers requiring sponsors to contribute more capital or allow their dilution if needed.
- **Incentive issues were significant in about a third of problem projects, but rarely a primary cause of impairment.** About one in five projects suffered a growing misalignment of stakeholders’ interests, including the declining interest of some – usually financial – sponsors, weak governance allowing non-arms-length related-party transactions, the self-interest of external and internal parties making ex-ante estimates less reliable (particularly in categories that are difficult to spot when projects end up going well—for example, partner character, regulatory environment weaknesses, or operational rigidities) and the pledging of collateral insufficient to strengthen repayment incentives. Mitigants include establishing clear rules to ensure the alignment of stakeholders’ interests over time, proactively working on corporate governance, tracking the *ex-post* accuracy of forecasts by staff and consultants, and ensuring that collateral lies over assets that are critical to the client, and that its value is realistically estimated and uncorrelated with project success.

To deal with problem projects, comparators highlight the importance of setting clear criteria for the timely transfer of projects to the special assets unit (SAT at IDB Invest). Determining when to transfer a project from supervision to SAT can be a sensitive issue because of internal incentives, but doing so is critical to successful recoveries. It is also important to include the possibility of reversal – which has occurred at IDB Invest – to foster greater trust and collaboration with SAT. Setting an early recovery strategy is also important to achieving better results. Strategies – including

whether it makes sense for SAT to lead the efforts – should take into account past recovery costs. At comparators, and now at IDB Invest, SATs also have a pre-transfer, advisory role.

Comparators empower their SATs with ample delegated powers and resources. IDB Invest’s Board has delegated to Management some decisions when dealing with problem projects subject to certain thresholds. Some also set aside jeopardy accounts to cover time-sensitive costs associated with recovery, reportedly enhancing the SAT’s effectiveness. As to staffing, SAT needs to accommodate a usually cyclical demand while maintaining the highest professional reputation. Some comparators report that at times SAT was considered “the place to be” in terms of career growth, serving as an invaluable training ground for staff. Some MDBs have set up staff rotation programs.

Feeding back lessons and measuring SAT performance is key to understanding what works, but most MDBs still face challenges. MDBs need to find ways to learn from problem projects, by working on both the production and use of lessons. Some comparators stimulate use by measuring long-term departmental or individual performance. Production relies not only on SAT, but also on the rest of the organization being measured for the usefulness of lessons contributed. IDB Invest has made progress in further involving SAT – and the Risk Department to which it now reports – in sharing lessons during the eligibility of future projects and through a lessons repository (“Mountain of Knowledge,” or MOK). Most MDBs view their SATs as cost centers and rely on relatively simple measures centered on the efficiency of recovery. Ideally, SATs should be able to report not only on individual projects, but also on their current and forecasted aggregate effects on the MDB’s bottom line, from both a financial and a developmental standpoint. Many SATs, including at IDB Invest, currently lack proper management information systems to conduct this reporting and analysis.

Since there is no silver bullet for avoiding or resolving problem projects, OVE suggests that IDBG build on its progress to continue fostering an organizational culture that views problems as learning opportunities. Findings point to the need to continue improving all stages of the project lifecycle—starting from a learning system that effectively informs future projects, and continuing with the ongoing testing of potential improvements in the structuring and supervision of all projects, and the resolution of problems. On this basis, OVE offers two recommendations on learning and processes.

Recommendation 1 – Learning: Optimize learning from problem projects by promoting the production and use of lessons. IDB Invest should keep enriching its recently introduced knowledge repository (MOK) and *ad hoc* presentations, reinforcing incentives to ensure

the production and use of lessons. Regarding the production of lessons, IDB Invest should continue dedicating a portion of senior SAT staff time to drawing lessons relevant to IDB Invest's portfolio and considering it in performance evaluations. It could also consider more systematically capturing in the MOK lessons generated by the portfolio management (PTM), risk, and origination departments, so that all lessons are captured in a central repository. IDB Invest should also continue its collaboration with external comparators that have a larger number of projects. As to the use of lessons, IDB Invest should find ways to continue strengthening incentives. The practices of comparators could be useful provided that they fit IDB Invest organizational culture. For example, some comparators leverage SAT as a training ground by strengthening staff rotation programs with PTM and origination departments, as well as enhancing learning by further involving SAT and PTM in project teams for complex projects. DEG is considering tracking profit and loss metrics for origination departments to further motivate them to seek out lessons. IFC introduced a long-term performance component in the compensation of staff and managers, which tracks all projects along their careers. Most comparators emphasize the importance of training all the parties involved – including the Board – on lessons learned.

Recommendation 2 - Processes: Explore and test the most promising working hypotheses on how to improve practices along the project cycle.

- **Structuring: Explore the potential for standardizing project structuring tools and criteria on the basis of past performance.** IDB Invest could consider further standardizing Target-Market Risk-Acceptance-Criteria – at least for the main lines of business – so it could base future approvals on justifying the rationale for any deviations from them. This evaluation suggests increasing the focus on factors like market concentration, partner character, operational rigidities, and governance aspects, that despite being already part of IDB Invest's due diligence, still appeared as frequent problem causes. IDB Invest could also institutionalize the participation of SAT in the first concept approval committee for new operations, at least in areas with high past impairments. Another area that could enhance structuring is building a track record of the accuracy of internal and external forecasts, for example, by specialized consultants. Over time, this should help reduce forecasting errors and ensure the consistency of estimates of the same variables across projects.

- **Supervision: Further support the supervision role by clearly defining project performance criteria and reinforcing the ongoing collaboration with SAT and origination departments.** OVE suggests that IDB Invest further support PTM in the timely detection of problems by providing it with a clearer definition of key performance indicators by sector. These indicators go beyond what is required in financial covenants and focus on the business or project, allowing a practitioner to tell whether there are signs of deterioration. For example, in the hotel industry, average occupancy rates and average revenue per available room would serve this purpose. These key indicators could be applied periodically to the whole portfolio to help detect early warnings on any potential issue and help reduce discretion in the transfer of projects to SAT. SAT could also continue being involved in an early advisory role for specific projects, as well as in proactively devising mitigation measures in sectors or countries. Finally, IDB Invest should continue running portfolio stress tests to highlight problem project concentration and client-specific patterns.
- **Resolution: Continue developing project resolution capabilities by further empowering SAT and periodically assessing its performance.** As IDB Invest grows, there will likely be pressure on SAT's resources. To enhance SAT's ability to perform its mission, IDB Invest could consider granting it greater delegated authority in line with the new profile of operations. In exchange, SAT should periodically report on critical metrics, including problem project recovery costs, their financial and developmental effects, and the projected implications for the overall portfolio. SAT should strive to be able to explain its recovery strategies in terms of clear resolution principles, so that internal and Board approvals can be justified in terms of any needed divergence from these principles.



01

Context of the Evaluation

A. The importance of problem projects

- 1.1 In pursuing their mission, multilateral development banks (MDBs) risk financial losses, which may both affect their long-term sustainability and send negative signals to key stakeholders. In projects without sovereign guarantees, apart from the risks of not achieving their development objectives, MDBs also face the prospect of financial losses. If unchecked, these may ultimately undermine an MDB's sustainability. Apart from these direct effects, losses may also affect the MDB's reputation with key counterparts, such as rating agencies or present and future MDB clients.
- 1.2 This evaluation focused on problem projects, defined narrowly as those “financially impaired” because they could bring about financial losses. Problems may be defined as any departure from expected results. But when this departure relates to financial losses, there are generally accepted credit risk management principles that allow an MDB to control the degree to which it is exposed to them.¹ These principles highlight the basic trade-off between an organization's risk appetite and losses, the importance of proper governance by the Board, and the role of sound processes in ensuring consistent results. At the request of the Board, this evaluation seeks to learn from IDBG's past problem projects and the practices of comparator MDBs.
- 1.3 Given their long-term view and developmental mission, the weight of problem projects in MDBs' portfolios – about 8% – was almost four times higher than for commercial banks in Latin American and the Caribbean (LAC).² For MDBs, unlike for banks, well-performing assets are often prepaid once high-risk phases such as construction are completed, or the temporary limitations on accessing financing from the market are removed. By contrast, problem loans are rarely prepaid, and they tend to stay in MDBs' portfolios during lengthy resolution periods. Commercial banks usually want to dispose of problem projects quickly, whereas MDBs view themselves as long-term development partners and face less pressure from regulators or investors.

1 In September 2000, the Basel Committee on Banking Supervision issued Principles for the Management of Credit Risk that call for (i) defining an organization's risk appetite, (ii) establishing an appropriate credit risk environment; (iii) operating under a sound credit-granting process; (iv) maintaining an appropriate credit administration, measurement, and monitoring process; and (v) ensuring adequate controls over credit risk. See <https://www.bis.org/publ/bcbs75.pdf>.

2 For example, in 2016 IDB-NSG had a ratio of 8.3% and IFC had 7.4%. Sources: IDB, IIC and IFC Financial Statements, and World Bank Development Indicators (2016). Data for IFC are an average for the whole world and thus may differ from LAC's average.

- 1.4 But actual MDB losses – 0.2% at IDBG, 0.3% at the International Finance Corporation (IFC), and 0.2% at the European Bank for Reconstruction and Development (EBRD)³ – were about ten times lower than those of LAC’s commercial banks.⁴ MDBs tend to be risk-averse, seeking to mitigate risks through rather exhaustive credit-granting processes. They also tend to take a long view toward recovery, waiting for economic cycle reversals. Unlike regulated banks, MDBs have less time constraints and more flexibility in disposing of their problem portfolios. MDBs may preserve clients as operating businesses or “going concerns,” thus realizing recoveries often larger than those from liquidation. Finally, large clients often prefer to preserve their access to MDBs, even at the expense of backing up an occasional losing project.
- 1.5 Despite the low losses, problem projects have influential signaling effects for key MDB stakeholders. An MDB’s repayment track record serves as a criterion for rating agencies, potentially affecting future funding costs. An MDB’s record of enforcing contractual obligations sends a strong reputational message to existing and potential private sector clients. Problems also affect how cofinanciers assess an MDB’s reputation for structuring sound operations as a lead arranger. Finally, enforcing contractual obligations sends a strong message to the MDB’s own staff and shareholders that all operations need to be financially sound.
- 1.6 Learning from problem projects is particularly important to IDBG, as it grows its non-sovereign-guaranteed (NSG) business. In 2008, IDB created a Structured and Corporate Finance Department (SCF) to focus on large projects in infrastructure and with financial intermediaries. In parallel, the Inter-American Investment Corporation (IIC) and IDB’s Opportunities for the Majority Initiative (OMJ) focused on smaller projects. In 2016, these windows were consolidated into IDB Invest to increase NSG annual approvals to US\$3.7 billion and double resource mobilization to US\$8.5 billion by 2025. IDB Invest plans to expand its work with larger projects, significantly increasing the share of infrastructure projects while reducing the share of projects with financial intermediaries.⁵

3 Average NSG losses (write-offs) from 2007 to 2016 (data available only until 2015 for EBRD).

4 Based on Standard & Poor’s Estimates (August 2017) and OVE calculations.

5 Business Plan 2016-2019. IDB Invest is now planning to reduce its direct investing in small and medium-sized enterprises (except for occasionally financing them in strategic areas to fulfill its mandate).

B. Evaluation scope and methodology

1.7 The evaluation reviewed IDBG’s problem projects and the experience of selected comparators to identify potential lessons for IDB Invest. It looked for patterns among the main causes of problems; identified what project traits or IDBG processes appeared to be associated with better post-default outcomes; and looked at the practices for dealing with problem projects at selected comparators, so IDB Invest could consider whether any of them could be useful going forward (Box 1.1). Selected comparators included IFC, EBRD, Asian Development Bank, African Development Bank and the German Investment Corporation (DEG).

Box 1.1. Evaluation questions

- **What are the main causes of problems in NSG projects?**
 - What were the characteristics of problem projects?
 - Are there common reasons they became problematic?
 - Were the risks in these projects identified at approval and justified on a strong development rationale?
- **What project traits and/or IDBG processes appear to be associated with more positive post-default outcomes?**
 - Were any particular project traits associated with relatively more positive post-default results?
 - Is it possible to identify post-default procedures that appear to have brought better post-default results?
- **Do the experiences of comparators offer any lessons for IDBG on how to handle problem projects?**

1.8 It used an objective, accounting definition of “problem projects.” Statement 114 by the Financial Accounting Standards Board directs all lenders to mark down projects for which losses are probable or have already been realized. IDBG adheres to these accounting standards, marking down projects and creating specific provisions, in addition to any general provisions reserved for the projects’ overall risk category. These marked-down projects – all of them NSG – were the “problem projects” used for this review. Naturally, there were other projects that experienced “problems,” but the evaluation focused on learning from those severe enough to trigger an accounting requirement to mark them down.

- 1.9 The evaluation covered all IIC, SCF, and OMJ projects that were marked down – or “financially impaired” – at some point between 2007 and 2016.⁶ Some of these problem projects later recovered, while others spiraled downwards. This extended analysis period of 10 years was selected to allow time for projects to be resolved, test the effects of various stages of the economic cycle, and increase the pool of cases to be studied.
- 1.10 Despite methodological challenges (Box 1.2), the evaluation was able to develop working hypotheses about the causes of problems and about potentially promising practices, thus advancing learning on how to prevent and handle problem projects. As the Approach Paper (CII/RE-32) anticipated, the evaluation used a qualitative approach in focusing on problem projects, rather than trying to develop a predictive model based on comparing them with the rest of the NSG portfolio. Similarly, the review of external practices was not meant to be exhaustive, but rather to gather potentially applicable lessons from relevant comparators.
- 1.11 The evaluation used three complementary methods: portfolio analysis, project analysis, and structured interviews. OVE drew information for all NSG projects from IDBG’s databases, seeking to compare problem projects with similar, non-problem projects, at least at this aggregate level. This portfolio-level analysis is presented in Chapter II, with the caveat that information in IDBG’s databases is limited mostly to financial and time variables. To gain insights into the causes leading to problems, OVE analyzed in greater depth these problem projects by applying a standardized template (see Annex I). Chapter III presents a summary of the causes of problems, prioritized by both their incidence and severity. Finally, to distill lessons on how to prevent future problems and better resolve them once they have occurred, OVE conducted almost 40 structured interviews with key IDBG staff and experts in comparator organizations known for their problem project handling.⁷ Chapter IV offers insights from these interviews, together with key findings from the problem-project literature and lessons databases. Chapter V presents conclusions and recommendations.
- 1.12 In conducting this evaluation, OVE created some tools that are potentially useful to Management in the future. Since there is no single definition of a problem project, OVE used information from finance to create a database of impaired projects. It then

6 Apart from these problem projects, other impaired projects were excluded from the review: some had been approved before 1996, and though still impaired between 2007-2016 they were considered too old to yield useful lessons on current practices; others were equity projects or guarantees, which differ from loans in their likelihood of losses. Investments by the Multilateral Investment Fund were also excluded.

7 OVE also contrasted internal information with external sources, but to avoid any potential legal liability, OVE did not directly contact any client for this evaluation.

added information from other sources, including sector and type of project classifications, dates, original impaired amounts and recovered amounts, risk and development effectiveness scores, project team members, B-lending and other information relevant to these projects. With this database IDBG has the means to compile problem project data at a portfolio level and derive ratios like PD or LGD on an ongoing basis. Similarly, OVE created a standard template to systematically assess the materialization of risks in problem projects. The template used by OVE could be repurposed by Management to continue capturing the causes of problems in a standardized format and be able to identify, act and report upon them from a portfolio-level view.

Box 1.2. The “problem” with problem projects

Are problem projects different from non-problem ones? Not always. In fact, two identical projects may fare differently, one becoming a problem and the other never being classified as impaired. The projects may face different external conditions or may elicit different responses from critical parties—for example, equally solvent sponsors deciding to bail out one of the projects, but not the other.

Could upcoming problems be predicted? Not with IDBG’s portfolio size. Years ago, IFC – with a much larger portfolio – compared “good” and “bad” NSG projects in an effort to find “explanatory characteristics” for problems, but the analysis was inconclusive and fraught with identification issues. In fact, testing a predictive model would require looking not only to the whole approved NSG portfolio – to ensure that no “bad” projects pass – but also to non-approved ones, to ensure that no “good” projects were rejected.

What if IDBG accumulated evidence over a long time? Still not feasible. To overcome sample size issues, IDBG could accumulate projects over decades, but in the meantime IDBG needs to quickly act on problem projects and incorporate potential lessons along the way, thus potentially altering the outcomes. In other words, IDBG cannot afford to stand still to quantitatively test causal hypotheses. Similar challenges are faced in industries such as aviation, where the vast majority of flights arrive safely at their destination, and the few that crash do so because of causes that are hard to anticipate precisely.

Then what would be a useful approach? Qualitative rather than quantitative, exploratory rather than definitive, and targeted at improving processes rather than specific projects. Useful contributions – guiding this evaluation – would be to systematically identify the characteristics of problem projects that are potentially linked to the problems, prioritize them with the understanding that there may be multiple causes and non-observable confounding factors, and gather promising practices from comparators for IDBG to consider applying.

1.13 The evaluation is forward-looking, viewing the few problem projects within IDBG's largely sound NSG portfolio as opportunities to learn rather than failures. During the analysis period, IDBG approved about 800 NSG projects, the vast majority of which had no problems. Since the analysis focused on the minority of projects with problems, the evaluation is not representative of IDBG's NSG work in general. Rather, it uses problem projects as the subject of a learning exercise that Management could replicate and extend in the future. To further increase its usefulness, it focuses on lessons linked to potential improvements in processes - and organizational arrangements - that could reduce the future probability of default and losses-given-default.



02

Problem
Project
Portfolio

- 2.1 IDBG's NSG problem projects totaled US\$1.16 billion in impaired amounts. Of this amount, the vast majority corresponded to under a third of the projects that were large (each approved for more than US\$20 million and originated by SCF) in utilities and concessions, clean and renewable energy, and oil, gas, and mining.⁸ The remaining small projects (each approved for less than US\$20 million and originated mainly by IIC and OMJ) together accounted for only a small fraction of the total impaired amount. The impaired portfolio was highly concentrated, with a small number of projects accounting for about half of the impairment.
- 2.2 As a share of the overall NSG portfolio, 2.4% of NSG outstanding amounts were impaired at the end of each year. There were peaks in impairment: in 2008-2009 during the global financial crisis, when 8.7% of IDBG's NSG outstanding amounts were impaired, and in 2012-2014 after IDBG ramped up NSG lending following a reorganization. On average, 4.1% of NSG projects were impaired at the end of each year between 2007 and 2016: 3.8% of IIC projects, 2.8% of SCF projects, and 4.6% of OMJ projects.
- 2.3 By sector, projects in infrastructure – now a focus of IDB Invest – generally had a higher probability of default (PD), but much lower losses-given-default (LGD).⁹ By contrast, corporate projects – which IDB Invest also plans to increase – had lower PD, but generally higher LGD.¹⁰ Clean and renewable energy was an exception, with the highest losses.¹¹ Finally, projects with financial intermediaries – which IDB Invest plans to deemphasize – had the lowest PD.
- 2.4 By country and region, Regional and Southern Cone (CSC) projects had the highest PD, while C&D and Caribbean (CCB) countries had the highest LGD. Country groups with a predominance of large projects – CSC – had a relatively higher PD and lower LGD, except for regional projects, for which the PD and LGD were both high. By contrast, countries and regions with predominantly smaller projects – like C&D countries and the CCB region – had the lowest PD, but the highest LGD.

8 Large problem projects were only slightly larger than large non-impaired NSG projects (1.2 times larger), while small problem projects were much smaller (60% the size of non-impaired ones).

9 This could relate to IDBG supporting riskier projects and/or project stages (e.g., construction), offset by good collateral backing and the clients' interest in preserving their relationship and access to IDBG.

10 This could relate to IDBG being conservative in selecting these projects, but if they went bad the security was highly correlated with the project company, except for retail and services that usually had real estate.

11 This could relate to overextended sponsors, lower oil prices and technological obsolescence of collateral.

2.5 *Ex-ante* expectations for more ambitious development results – potentially associated with higher risk-taking – were uncorrelated with *ex-post* impairment levels. The old IIC is the IDBG NSG window with the longest track record of estimating expected development results. IIC started using a Development Impact and Additionality Scoring (DIAS) system in 2008. OVE used the subset of IIC projects with a DIAS score to test the correlation between expected development results and impairment, and found that impairment was equally likely to occur in projects with high and low DIAS.

A. Problem project status

2.6 By December 2017, resolution had been reached for about half of the total original impaired amounts (US\$1.16 billion). Recovery ratios and the total average times presented in this section are based only on those projects that have reached a final resolution. Resolved projects recovered a high portion of the impaired amounts. Incidentally, large projects were more likely to recover in full and had higher recovery ratios. Each problem project had a first problematic event that later ended up becoming a cause of impairment. OVE tried to reconstruct the timeline of all problem projects using both internal and external sources, such as news reports. With that information, OVE identified the first time there was an objective indication of the materialization of a risk that ultimately ended up causing the problem. In over three quarters of the cases, it was IDBG's internal sources that served to identify these first problematic events. Triangulating with external sources, OVE was able to identify the dates when the events leading up to problems had started.

2.7 The average problem project became impaired in about three years, but about midway OVE identified the first problematic event. OVE analyzed all problem projects and identified their first problematic events, such as losses of key customers or dramatic changes in regulation. On average, resolved projects had one such event 18 months after approval, but 25% of them had problems much earlier (by month 9). These early problems were mostly in small projects.

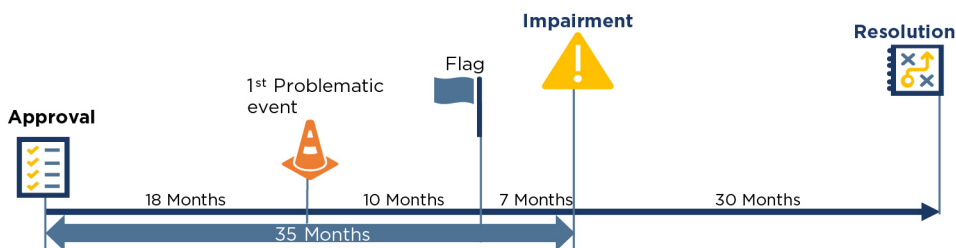
2.8 Problem projects were flagged for special attention an average of 10 months after they experienced this first problematic event. Flagging is meant to focus Management's attention on potential problems and provide early disclosure to the Board

in the context of periodic reporting.¹² SCF projects – and large projects in general – took longer to be flagged (13 months) than IIC and OMJ projects (10 months). In fact, the 10% of projects that took the longest to be flagged—25 months or more—were mostly large SCF energy projects with a focus in Brazil. Despite not being flagged, IDBG staff reports that these projects were being closely monitored and acted upon.¹³

2.9 On average, problem projects were declared impaired seven months after being flagged, but 41% of projects were flagged and impaired almost simultaneously.¹⁴ Projects providing less advance warning across the organization included the ones that had taken long to be flagged after a problematic event, and projects that had problems soon after approval. On the other end of the spectrum, about 10% of impaired projects held a flag for longer than 20 months and remained under the supervision of the portfolio unit. These included two large projects in clean energy with weak recovery prospects and five small projects with good prospects.

2.10 The average project was resolved in 2.5 years (Figure 2.1). Smaller – IIC and OMJ – projects were resolved faster than large (SCF) projects (28 months vs. 37 months). However, there was high variability. A quarter of projects were resolved in under six months. On the other end, a quarter of projects took longer than four years to resolve.

Figure 2.1
Average lifecycle of an IDBG impaired project
Source: OVE, based on project analysis



2.11 On average large projects recovered twice as much as small ones, while longer resolution times were associated with lower odds of recovery. Large projects recovered more than the high average, while small ones recovered only about half of that amount. About a third of small projects and almost half of

12 At the old IIC projects were classified as “performing”, “mentioned”, “substandard”, “doubtful”, or “probable loss”. At IDB there was a similar system: “performing”, “radar”, “watchlist”, “impaired”, or “written-off”. The stages after performing in IDB and after mentioned at IIC, but before “impaired”, were classified as “flagged”.

13 All projects undergo periodic credit ratings, and a majority of problem projects had experienced credit downgrades before being flagged as potential problem projects.

14 60% of these were FINPYME, OMJ or SMEs, which are the type of projects (direct SME investments) that IDB Invest plans to discontinue, except for some financing for SMEs in strategic areas.

large projects were resolved quickly. In these cases, a majority of small projects experienced high losses, while the reverse held true for large projects (three-quarters had full recovery). In general, slower resolution did not lead to better recoveries, regardless of project size.

- 2.12 Apart from size, better recoveries seemed linked to how long it took for the first problematic event to appear, the strength of sponsor support, and the asset-intensiveness of the sector. High-recovery projects had their first problematic event past their second year after approval, while low-recovery projects experienced problems much earlier (13 months vs. 27 months). High- and low-recovery projects also differed in the strength of sponsor support. The sector also mattered: large, high-recovery projects were asset-intensive, like utilities and concessions, which were either paid off by sponsors or sustainably renegotiated.
- 2.13 A regression analysis confirms that these factors explain over 30% of the variance in recoveries. OVE found that project size, time to first problematic event, and the alignment of incentives are significant explanatory variables for observed recoveries. The analysis was consistent with the prior, qualitative analysis, within the constraints of the small population size. Larger project sizes, longer times to the first problematic event, and stronger alignment of incentives (including via collateral) positively influenced recoveries.¹⁵
- 2.14 Recovery seems to have been conducted without significant adverse effects on IDBG's reputation. Rating agencies have a positive view of IDBG's repayment record and its treatment of impaired loans. Fitch states that "risks from loan impairments are classified as low." Other agencies highlight IDBG's track record in comparison with that of other MDBs. In Moody's view, "asset performance is very strong which is notable for an MDB that lends to the private sector." Similarly, S&P states that "even with a shorter record than IFC, IIC's loan book fared much better over 2008-2016 than during its last stress period of 2001-2002."¹⁶ Few of the impaired projects had B-lenders, but only half have been resolved to date.
- 2.15 In addition, about three quarters of project companies are still in business, which in turn helped recoveries. Among them, under a third changed ownership and/or management or had their assets repurposed to continue in business. Surviving companies paid back over 2.5 times more than failing ones. Failing companies

15 Other factors were not statistically significant, presumably because of the small population size. Yet variables like market risk showed the expected sign (negative) for recoveries. See Annex I for details.

16 Sources: IIC Full rating report, Fitch ratings, October 9, 2017; IIC Annual Credit Analysis, Moody's, March 23, 2017; and IDB Invest Ratings Direct, S&P Global, December 8, 2017.

were wound down faster (21 months), while it took longer (33 months) to resolve impairments with surviving ones. Almost all failed companies had sponsor issues: half were related to character and the other half to financial issues.

- 2.16 Besides the resolved projects, some projects were still undergoing workout efforts. As of December 2016 (cut-off date of the evaluated problem project portfolio), some projects had been restructured and were meeting commitments.¹⁷ Other projects were being negotiated out of court and had been impaired for an average of 39 months. Lastly, some projects were under litigation and had been impaired for an average of 29 months.
- 2.17 As to recovery costs, external references suggest that they may average 10-12% of impaired amounts. The World Bank's *Doing Business* report compiles average recovery costs and times per country.¹⁸ An average project in LAC could cost up to 3-6% of its principal in recovery expenditures per year. However, it is important to point out that these estimates are for a highly stylized problem project "case", that may not be comparable with IDB Invest's costs.

17 IDBG has since reduced its exposure to these projects by 45% on average.

18 Resolving Insolvency, *Doing Business*, World Bank (June 2017).



03

Risks Leading
to Problems

- 3.1 OVE identified the risks that materialized in each of the problem projects, using internal IDBG documents and publicly available external information.¹⁹ OVE also looked at whether approval documents indicated that these risks had been foreseen and there was a plan for mitigating them. For each project, OVE identified the risk that appeared to have been the primary cause of impairment based in a qualitative assessment. OVE also identified a secondary cause of impairment for each project, to look into the interaction of multiple causes.
- 3.2 OVE grouped the risks that appeared to have caused the impairment into five major categories: market, venue, partners, rigidities and incentives. Each category is associated with a main mitigating theme: market with forecasting, venue with prevention, partners with screening, rigidities with contingency-planning and incentives with alignment. Categories are defined as follows (see Annex I for details):
- **Market:** linked to the volatility of sector and macroeconomic factors, including currency exposure.
 - **Venue:** linked to sociopolitical, regulatory, and environmental issues particular to a location or country.
 - **Partners:** linked to the character and capabilities of partners—comprising project sponsors, operators, and engineering, procurement, and construction (EPC) contractors.
 - **Rigidities:** arising from operational or financial constraints – such as high fixed costs or restrictions on shareholding changes – preventing projects from adapting.
 - **Incentives:** linked to the potential misalignment of interests among key stakeholders, including interests related to collateral.
- 3.3 All five categories were relevant either as primary or secondary causes. Table 3.1 shows the incidence of causes of impairment among IDBG problem projects. Market, the most prevalent primary cause, was also the most common secondary cause of impairment. By contrast, rigidities, incentives, venue and partners were not common as primary causes, but ranked high as secondary causes. Moreover, certain pairs of causes, such as incentives with rigidities or venue, were prevalent, pointing to the mutually reinforcing effect of multiple causes. OVE also tracked the materialization of all risks even when they did not rise to become the cause of the projects' impairment (Raw Incidence, Annex I).

¹⁹ For many of the problem projects, Management produced detailed Impairment Reports documenting the causes of problems, IDBG's recovery approach, and scenarios. OVE complemented the information on the problem projects with other IDBG documents, such as approval and supervision reports, transfers memos, and restructuring proposals.

TABLE 3.1. PROBLEMS IN IDBG PROJECTS - INCIDENCE OF PRIMARY AND SECONDARY CAUSES

Primary Cause		Market	Venue	Partners	Rigidities	Incentives
Incidence		44%	19%	16%	14%	6%
When primary cause was:		Market	Venue	Partners	Rigidities	Incentives
Secondary cause was	Market		42%	45%	33%	20%
	Venue	21%		27%	25%	20%
	Partners	16%	17%		25%	20%
	Rigidities	34%	8%	27%		40%
	Incentives	29%	33%	0%	17%	

Source: OVE, based on IDBG problem project analysis.

3.4 OVE looked at both the incidence and severity of each cause. The following sections, based on OVE’s analysis of problem projects, are organized by major cause. Each section reports on their frequency of appearance (incidence) and severity (losses for the projects affected). In addition, each cause is illustrated with examples of past problem projects, that IDB Invest may want to consider for future projects. The sections present key insights from IDBG projects and expert interviews.

TABLE 3.2. INCIDENCE OF CAUSES

Cause	As primary cause (A)	As secondary cause (B)	As either (A or B)
Market	44%	37%	81%
Macroeconomic conditions	13%	15%	28%
Demand	32%	21%	53%
Venue	19%	27%	46%
Sociopolitical and regulatory environment	14%	24%	38%
Climate and natural disasters	5%	3%	8%
Partners	16%	33%	49%
Character	0%	16%	16%
Capabilities	16%	17%	33%
Rigidities	14%	32%	46%
Operational rigidities	11%	17%	28%
Ownership and financial structure	3%	15%	18%
Incentivos	6%	29%	35%
Alignment of interest and governance	5%	17%	22%
Collateral	2%	11%	13%

Source: OVE project templates.

A. Market

3.5 Unfavorable market conditions were either a primary or secondary cause of impairment in most problem projects. About half of problem projects were affected by shortfalls in the demand for the project’s products or services (in quantity or price), and about

a third were affected by unfavorable macroeconomic contexts. Overall, market events – macro or demand – may not have been the only cause of impairment, but the stress brought about by them was present in most problem projects.

- 3.6 About a third of problem projects suffered from wider-than-expected macroeconomic shifts. Most projects were approved considering scenarios that assumed relatively stable macroeconomic indicators, such as exchange rates. However, their historical variabilities had been much wider, even going back to periods similar in length to the projects' investment horizon. Macroeconomic crises reduced economic activity – and thus project incomes, at least in the short term. In fact, recovery for these projects were relatively low and depended on whether IDBG was able to wait for cycle reversals. Similarly, currency volatility created mismatches between project revenues and the cost of key inputs, including financing.

Box 3.1. Key insights: Macro conditions

Projects fared better when macroeconomic scenarios were realistic – incorporating, at a minimum, historical variabilities – to allow timely exit-or-wait decisions. Projects had on average higher – usually full – recoveries when IDBG and comparator organizations considered historical patterns over similar horizons and tried to estimate in what part of the cycle projects were. This informed decisions as to whether to enter and later whether to stay the course.

- 3.7 About a quarter of projects were exposed to currency mismatches. Projects with incomes denominated in local currency and liabilities or key inputs in foreign currency and export-oriented companies were often affected by currency mismatches. Historical high exchange rate volatility or instability in fixed exchange regimes made projects prone to such mismatches, but approval documents generally underestimated these factors as significant risks. Some projects attempted to hedge currency risks by bringing along local currency financiers or locking in long-term sales contracts with solid buyers, particularly in commodity-based sectors.
- 3.8 Projects in cyclical sectors proved particularly sensitive to economic fluctuations. Sectors like construction and ports—which tend to require large initial investments that need long amortization periods—were extremely sensitive to the macroeconomic cycle. In addition, some operations – particularly

those with financial intermediaries – were purposely approved by IDBG as countercyclical support, and were thus exposed to unfavorable macroeconomic conditions from the outset.

- 3.9 Other projects relied too heavily on future cash flows, despite characteristics that reduced their certainty. Certain identifiable project characteristics – e.g., being greenfield, assuming high growth, being likely to face intense competition, failing to sustain a competitive differentiation, or having concentrated clients – led to higher demand risk. If business plans relied heavily on this highly volatile income, problems arose when borrowers had no ready access to additional capital.

Box 3.2. Key insights: Demand

Projectsexposedtosignificantmarketriskperformedbetterwhentheydid notrelytoohavilyonfuturecashflows. The capital structure needed to adapt (e.g., less leverage, larger reserve accounts, strong sensitivity scenarios) to take into consideration higher demand volatility. This finding is also acknowledged in IDB Invest’s lessons database, “Mountain of Knowledge.”

Overall, a key to avoiding problems and maximizing recovery was that IDBG had deep internal knowledge of the sector. The sounder projects were those for which IDBG was able to vigorously test any claimed competitive advantage from the perspective of the company’s clients, considering customer satisfaction and the potential for substitution. This applied to both investment and restructuring decisions.

A more strategic approach consists of establishing risk-acceptance criteria for each subsector and assessing projects in terms of deviations from these criteria. Some comparator organizations use target market (TM) risk-acceptance criteria (RAC) to spell out the “ideal” projects for the organization—for example, in terms of size, minimum sponsor expertise in the sector, collateral coverage, maximum tenor for first and for repeat investments. TM-RACs could also be an effective way to incorporate lessons learned into origination, by periodically revising TM-RACs on the basis of performance.

- 3.10 Some projects had sales that were highly concentrated in a few clients or served clients whose behavior was highly correlated. Companies that relied on a few large clients, suffered from high volatility. A similar situation faced project-based companies, such as those selling professional services, when projects finished or were unexpectedly terminated by clients. These companies also suffered from low bargaining power and declining margins with their large buyers. In a few cases, these concentration – and correlation – levels were not clearly disclosed in project approval documents.

3.11 In retrospect, most problem projects lacked a reliable business strategy. Problem projects often had unrealistic assumptions regarding market prospects or claimed what turned out to be unsubstantiated competitive advantages. They also tended to underestimate the difficulties of introducing new business models or products, and the intensity of the competitive response from entrenched players seeking to fend off new entrants. Others – usually new ventures – wrongly assumed that their recent exponential growth could be sustained over time.

B. Venue

3.12 Venue risks – including sociopolitical and regulatory issues as well as climate and natural disaster events – were also a cause of impairment for about half of problem projects. Infrastructure projects and projects generating a large share of local employment were particularly exposed to the attention of the public sector and civil society organizations. When problems loomed, there was a tendency to protect users, consumers, and workers by shifting regulations and allowing the revision of contractual obligations. Some projects located in lower-income areas were exposed to deteriorating citizen security situations. Finally, projects that relied on biological processes or that had facilities in vulnerable geographical locations suffered from climate change and natural disasters.

3.13 Public interest, coupled with social pressure, affected the projects' sociopolitical and regulatory environment, making them problematic. In sensitive sectors such as water supply, it has proven very difficult to work without sovereign guarantees, especially when the institutional framework could not guarantee sustainable tariffs. Labor and environmental organizations related to projects can sometimes change their initial conditions, especially when projects are visible targets—for example, a large employer in a country or region. In addition, some concession projects whose terms seemed to have unfairly allocated risks and benefits, suffered stress – for example, legal disputes – until they were finally renegotiated. Overall, recoveries were high, likely because IDBG was often able to leverage its influence to help rebalance regulatory issues.

Box 3.3. Key insights: Sociopolitical and regulatory environment

IDBG did better when it was able to involve potentially affected parties, even if they were seemingly external to the projects. Efforts to reach consensus and buy-in need to proactively involve regulators, local communities, and potentially affected workers. Comparators try to find

mechanisms, additional to the minimum project safeguards, to more fully involve parties, such as local communities, through ongoing consultations, regulators through roundtables, or workers through profit-sharing plans.

Metrics of exposure to regulatory, social, and citizen security risks could be systematized and proper mitigation measures put in place. Projects exposed to these risks share certain characteristics, so IDBG could create – and with further experience, refine – indices correlated with these risks. For example, if a project employs a large number of workers, labor risk is inherent to it. Similarly, if the main productive assets of a project are located in a high-crime area, its operation needs to account for higher costs and the liquidation value of assets must be discounted.

- 3.14 Deteriorating citizen security conditions were high barriers to project success, as well as to the fair valuation of assets in the event of liquidation. Citizen security affected projects in both the productive and service sectors, such as health. Projects that continued regardless of deteriorating conditions usually involved changes in control to investors who were willing – and had the tolerance – to endure them. One project was burdened by the activities of criminal gangs that demanded protection payments, in another project the main executive of the sponsor company was assassinated, and another suffered the death of a company security guard trying to protect company assets.
- 3.17 Climate change and natural disasters significantly affected projects that depended on natural resources. Changes in air and water temperature brought about by climate change significantly affected yields and created insurmountable challenges for a handful of projects relying on biological production, such as fisheries. Several of them were also hit by diseases and predatory species, which were more prevalent under these changed weather conditions. Other projects were ruined by significant natural disasters because they lacked sufficient insurance coverage – as is often the case in LAC, because of the generally high cost of insurance.

Box 3.4. Key insights: Climate and natural disasters

Metrics for exposure to climate and natural disaster risks could be put in place and risks mitigated, including by facilitating access to insurance.

Common factors that have made projects more prone to climate risks are emerging. IDBG could create a climate change exposure index to assess and mitigate risks. Insurance could be one of the tools, but LAC markets usually price insurance outside the reach of smaller companies. IDBG could consider engaging a preferred reinsurer to pool and help cover some common project risks, including climate-related risks.

C. Partners

3.16 The shortcomings of partners—critical project stakeholders, such as sponsors, operators, and contractors—were a cause of impairment in about half of problem projects. About one in six projects had at least one partner whose character – including reputation, integrity, transparency, involvement, and commitment – turned out to be detrimental. Weaknesses in partners’ capabilities were even more frequently an issue: projects suffered from partners’ insufficient track record, relevant experience, or financial strength. Poor capabilities were associated with better recoveries, while character issues were associated with low recoveries.

Box 3.5. Key insights: Partner character

Issues of character were rarely salvageable, so their assessment is essential. Any indication of past or present misconduct must be clearly disclosed and addressed immediately. There needs to be a clear identification of parties whose character is not up to IDBG standards. The past practice of trusting agents to do a reputational background check for some smaller operations presents risks, as their standards may not be as strict as IDBG’s.

It is also desirable to systematically include references from local sources. MDBs usually adopt a transaction-by-transaction model that – unlike relationship models – relies on institutional memory. MDBs often consider separate transactions with the same partner, e.g., a large international sponsor. In this case there needs to be some memory about the partner’s observed character.

3.17 Sponsors’ character and reputation issues, including their adherence to proper business practices, surfaced in some problem projects. For the most part, the issues related to conduct that was not connected to the IDBG project. Good character was even more essential to businesses that relied on the trust of third-party investors, shareholders, or large clients; these businesses suffered capital flight from investors and contract terminations from key clients or vendors. For a few small projects, the old IIC used local agents to select and screen them, but they were ineffective in accurately assessing the partners’ character.

3.18 In a few projects, IDBG clients engaged in borderline ethical tactics that later backfired. In about a dozen – mostly small – projects there were indications of practices by client companies or sponsors that were designed to evade or work around legal requirements or commitments. Even somewhat

“accepted” practices—such as lowballing and frequent contract renegotiations or aggressive accounting to obtain tax or favorable exchange rate advantages—have proven to be a red flag, as projects later spiraled down into problems. In fact, recoveries from projects whose sponsors had engaged in these “aggressive” practices were close to zero.

Box 3.6. Key insights: Capabilities

Key partners form the “ecosystem” that sustains the projects, so their health needs to be assessed and monitored. When heavy reliance is being placed on the overall standing of a key partner, IDBG needs to have a consolidated view of its corporate group. This is especially important when there are signs that problems could develop with unrelated components of the group that may ultimately affect a partner. IDBG needs to use all reasonably available methods to monitor partners—for example, stock market quotes for publicly traded partners.

IDBG’s ability to anticipate problems with partners was linked to better recoveries. In terms of expertise, it is important to test the sponsor by going beyond circumstantial connections to the industry. When capabilities are the problematic factor, it is always easier to identify and take remedial actions at the appraisal stage or in the beginning of the project. If a sponsor lacks the required experience, a strategic partner with experience is necessary. Fast action on replacing partners, although more difficult, was also associated with better outcomes.

- 3.19 Character issues significantly jeopardized recoveries, unless acted upon immediately. Unlike other problems, character issues—for example, fraudulent misrepresentation or conduct—proved not to be salvageable. Any sign leading to mistrust needs to be acted upon immediately. It is important to scrutinize partners’ character both before and during implementation. For example, family companies, for which decisions may involve multiple people with potentially diverging interests, changed their “character” over time. By contrast, good-character partners faced challenges, but it was still worthwhile for IDBG to stay on. IDBG was paid in full by good sponsors, despite problems with projects.
- 3.20 About one-third of problem projects were affected by weaknesses in partners’ execution capabilities. Some sponsors, operators, or contractors lacked the capabilities required by the project. For example, in one case the shortfall was in management capabilities to address a specific competitive challenge: a price war in the telecommunications sector. Being controlled by a telecommunications equipment manufacturer did not sufficiently qualify this operator.

3.21 Partners' lack of financial strength was also an issue for more than a third of problem projects. When assessing financial strength, it was not enough for a prospective partner to be large. What counted the most was the relative financial importance of the project to the partner and whether the failure of the project would affect the partner's sustainability. When the partner was also a critical provider of technology, its survival was key to the continuous operation of the project and needed to be systematically monitored.

D. Rigidities

3.22 Rigidities that prevented projects from adapting to evolving conditions were also a cause of impairment for about half of problem projects. Some problem projects had made difficult-to-adapt operational decisions that later hampered their viability—for example, major design and construction choices, selection of key technology, scale of plant and equipment, dependence on key suppliers, or exposure to substandard production inputs. Others suffered from rigidities linked to suboptimal capital commitments by initial shareholders, who were later unable to invest further or had built-in restrictions to avoid being diluted by new investors.

Box 3.7. Key insights: Operational rigidities

Critical decisions, such as those related to construction, technology, or inputs, need to be assessed on the basis of IDBG's own sector expertise. Newer or riskier sectors in which IDBG relied heavily on external consultants—for example, oil and gas, textiles, or geothermal energy – were more prone to problems. In fact, the estimates of some reputable consultants soon proved wrong.

IDBG also needs to extend its analysis to the market dynamics for key inputs, including suppliers' bargaining power. At least 3 of 21 projects affected by increasing input or operating costs were able to pursue alternatives. For example, a fishery that experienced higher costs from the few fish-oil-based feed suppliers decreased input prices by substituting soy-based feeds.

Key operational benchmarks need to be closely monitored to trigger prompt corrective action. Deep sector expertise needs to extend to the monitoring of projects, particularly regarding key benchmarks such as asset utilization or unit production costs. Benchmarks should be predefined in comparison with local and global competitors, so the projects' performance against acceptable ranges can serve as the basis for triggering remedial actions.

- 3.23 Construction and technology issues affected about 28% of problem projects, but usually posed an existential threat. Faulty construction choices and technology selection proved extremely difficult to address. Large greenfield projects in infrastructure were particularly prone to this risk, as clients usually sought IDBG support specifically to mitigate it. Construction estimates in problem projects were often overly optimistic and relied too heavily on assessments by interested parties or consultants linked to them. Better-performing projects were able to rapidly incorporate new information to correct past errors.
- 3.24 About one-third of the problem projects suffered higher production costs because of low capacity utilization or issues with production inputs. Many of the problem projects that invested heavily in new or expanded production capacity tended to need a fairly high – usually above 80% – utilization of this capacity to be able to service their debt. Other projects were heavily dependent on one or a few key productive inputs, often provided by suppliers with stronger bargaining power. And problem projects relying on natural resources frequently faced quality or availability issues, such as weaker-than-expected wind regimes or lower availability of fish supplies.
- 3.25 Almost two thirds of problem projects suffered capital deficits, and most sponsors were initially slow to inject additional resources. Only about 10% of problem projects benefited seamlessly from additional capital contributions by their initial shareholders. Others faced deteriorating patterns, usually in the form of downward financial spirals brought about by slowing sales, shrinking margins, longer collection terms from clients, and demands for immediate payment by vendors. In this context, financing lines also tended to dry up as creditors sought to accelerate repayments. However, capital was obtained over time and recoveries ended up being fairly high for most projects.
- 3.26 Problem projects lacked mechanisms requiring sponsors to contribute fresh capital when necessary, or to prompt others to do so. Problems were exacerbated by shareholding structures, where one shareholder (or a small group of shareholders) controlled the project but lacked the capacity to further support it. In most cases, controlling shareholders resisted dilution by delaying capital raising. In one extreme case, sponsors of a microfinance institution had covenanted to restrict ownership transfers to a certain class of potential investors (foreigners). Even local regulation upheld that restriction, and it was lifted too late to save the institution.

Box 3.8. Key insights: Ownership and financial structure

Use the leverage afforded by the interest of clients in closing the transactions to try to structure preset triggers requiring sponsors to contribute additional capital if needed. At the time of structuring – when IDBG has the highest negotiating power and clients are keen to demonstrate how unlikely it is for their projects to go wrong – try to introduce objective triggers to have sponsors commit additional capital according to predefined performance ratios.

Thoroughly assess ownership and financial support rigidities. Besides operational rigidities – which are normally addressed in due diligence – the shareholding structure and ex-ante expectations of key partners can restrict adapting quickly. Several problem projects were controlled by individuals or families. Many undertook significant expansion plans with borrowed resources, but they usually resisted the idea of relinquishing control if projects faced unexpected difficulties. This led to impasses that only served to further deteriorate the projects' prospects.

Consider working with sponsors to pre-identify alternative investors who are willing and able to contribute additional capital if needed. In some cases, initial sponsors were committed but had become unable or unwilling to contribute additional resources. If feasible, have a predefined Plan B to get capital from alternative investors by introducing covenants requiring existing sponsors to bring along other willing and able investors that are acceptable to IDBG.

E. Incentives

- 3.27 Misalignment of incentives among key stakeholders was a cause of impairment in about a third of problem projects. Some problem projects had weaknesses that prevented the proper alignment of interests among sponsors, lenders, and other key stakeholders—for example, weak governance allowing controlling shareholders to prioritize their interests over those of the project. The use of collateral to create incentives for participants to avoid a liquidation scenario also had significant weaknesses in some problem projects: borrowers succeeded in pledging less value in collateral, and they had an expectation that it would be generally difficult for IDBG to collect on it.
- 3.28 External project stakeholders' self-interest made estimates less reliable. The approval of most problem projects relied heavily on assumptions provided by the clients themselves. Consultants were often paid either directly or indirectly by clients to back up project assumptions. While this is common practice, the

consultants' repeat business depending on favorable assessments may create the wrong incentives. Similarly, appraisers of collateral were sometimes paid in proportion to appraised values. At times, project sponsors sought to bring IDBG in to prop up their positions, but left gaps in their disclosure of material information.

3.29 Even IDBG's internal interest in ramping up business coincided with an under-identification of risks in the problem project portfolio.²⁰ Over the last 10 years, IDBG doubled its NSG business. OVE's retrospective analysis shows that IDBG had risk identification gaps mainly in three categories: venue, partners and rigidities. When these risks were identified at approval, they had proper mitigation measures and monitoring. By contrast, other risks were identified more often – market and incentives – but their monitoring and mitigation tended to be less systematic (Table 3.3).

TABLE 3.3. IDENTIFICATION, MITIGATION AND MONITORING OF CAUSES OF PROBLEMS

Causes of problems	Identification	Mitigation	Monitored
Market	40%	19%	19%
Venue	21%	15%	18%
Partners	19%	15%	13%
Rigidities	23%	19%	13%
Incentives	42%	30%	23%

Source: OVE, based on qualitative project analysis.

3.30 Aligning project stakeholders' interests along the life of projects has been a challenge. At approval, sponsors' interest is to minimize outlays, while IDBG's is to maximize their commitments. As projects faced unexpected problems, parties often had divergent positions over the allocation of costs. Similarly, other lenders often pushed for prompt repayment if conditions turned, despite the effect on projects.

3.31 Some sponsors showed a declining interest in the long-term success of projects. Sponsors that were primarily financially motivated and did not have a long-term interest in the sectors tended to provide less support to projects because they could not capture any additional upside, either in terms of learning or in maintaining a reputation in a sector. Investment funds are often an example of these financially-driven sponsors. Similarly, sponsors that were publicly traded had more to lose in terms of market value from remaining associated with losing projects.

²⁰ The identification analysis, done within the problem project portfolio, did not include an assessment of the non-problematic NSG portfolio. Problem projects may have a lower performance regarding risk identification, mitigation, and monitoring than the average portfolio.

Box 3.9. Key insights: Interests and governance**IDBG needs to track the accuracy and consistency of estimates.**

There needs to be a systematic ex-post assessment of the accuracy of past estimates and of the consistency of the same key variables across projects (e.g., wind regimes in an area). Also, MDBs need to expand the sources from which they draw estimates, to include not only their own staff and external consultants, but also comparable institutions.

Use this track record to promote sounder estimates.

Data on the accuracy of past estimates should not only improve IDBG's sector knowledge, but should also serve as a basis for selecting consultants for future projects. Some organizations keep records of consultants' accuracy in specific areas of expertise and consider this factor in awarding them new business, ensuring that hiring decisions are not driven by the client.

Monitor stakeholders' incentives and establish clear rules and responsibilities to keep alignment over time.

IDBG did better with sponsors whose long-term interest is more likely to depend on the projects' success. As part of supervision, MDBs are advised to track key stakeholders' evolving interests to promptly detect and address any divergence. Recommended rule-based tools include staggered IDBG disbursements against milestones, incentives for sponsors to show their commitment by contributing additional capital, or clear rules to capitalize sponsors' financing in the event of distress.

Ensure strong corporate governance and proactively manage related-party transactions.

MDBs sometimes fail to accurately assess the potential for conflicts between shareholders and the interests of the project company. With individuals or families as sponsors, it is advisable that loan covenants address governance and management issues, including milestones for enforcement. In addition, related-party transactions need to be disclosed beforehand and their fairness independently assessed.

3.32 Other sponsors operated under a weak corporate governance that failed to protect the best interests of about half (48%) of the problem project companies. Family-owned companies and companies owned by a small number of individuals often lacked professional and independent boards, which meant that the controlling shareholders' interest prevailed over the company's. Weak corporate governance also jeopardized management succession plans and allowed the presence of unrestrained managers who were unaccustomed to the guidance of independent boards. The presence of governance issues was associated with some of the lowest recovery levels.

- 3.33 In some cases, weak corporate governance allowed the companies to engage in potentially unfair related-party transactions. Some project companies with weak corporate governance leased buildings, purchased inputs, or sold outputs to shareholders or companies that they controlled. These transactions were material to the project companies, and there was no independent check on their market-based nature. Something similar occurred with the projects involving cooperatives, which routinely engaged in transactions with their member-owners who individually sought to obtain the highest prices for their inputs, to the clear detriment of the project company that had borrowed from IDBG.
- 3.34 In more than half (51%) of the problem projects, the collateral pledged was insufficient to strengthen repayment incentives. The appraisal of collateral tended to overestimate its value—for example, assuming a resale of assets as part of a going concern, rather than liquidated separately; ignoring the specialized nature of assets that reduced the potential pool of buyers; overlooking the high correlation between the prices of assets and the performance of the sectors in which they are employed; and not considering the deterioration in asset values due to perishability or lack of proper maintenance. In some cases, IDBG’s leverage was weakened because security interest laid over assets other than those most critical to the company. This tended to happen when other lenders had prior rights or when IDBG’s participation was small. Other projects had third party sureties, that in several cases were an order of magnitude lower than IDBG’s exposure.²¹
- 3.35 In smaller projects, it was hard to convey a credible threat of enforcing the pledged collateral. Local legal regimes often made enforcement lengthy, costly, and uncertain. Some classes of collateral – such as the primary residences of small business owners, working tools, and coastal property in some countries – have special legal protections that prevent their repossession. In infrastructure and labor-intensive sectors, social and political pressure often hampered collateral enforceability. Accessing assets for appraisal and repossession was also challenging in areas with poor citizen security. Unperfected collateral also hindered enforceability. Finally, the absence of collateral, which the old IIC attempted for a short time with very small FINPYME projects, led to several problem projects.

²¹ In early 2000 the IIC prepared guidance for the establishment of collateral. Since then, IIC has also begun estimating liquidation values more systematically, with small FINPYME projects being the exception.

Box 3.10. Key insights: Collateral

Repayment incentives are driven by how central the collateral is to the company. To better align incentives, collateral coverage needs to be large and realistically estimated. The accuracy of collateral realized value versus project-approval estimates needs to be tracked so IDBG can learn from the divergences. In general, IDBG needs to secure a first-place security interest on key productive assets whose repossession would significantly disrupt the project companies. Failure to gain this interest needs to be properly justified and mitigated.

Collateral enforceability needs to be credible and uncorrelated with project success. IDBG did worse when it relaxed collateral requirements at approval, or in the face of rapidly deteriorating circumstances. It did better when it anticipated problems and worked with local counsel to aggressively pursue its rights, regardless of costs. For small projects, IDBG could consider taking a first-degree security on conservatively appraised real estate, liens on accounts in safe offshore jurisdictions, or third-party bonds. IDBG could also consider negotiating an umbrella reinsurance policy and require its clients to use it.

3.36 The usefulness of collateral was undermined by the frequently high correlation of its value with project success. Some sponsors – particularly those of small projects – had their assets fully tied to the projects. Other projects controlled by solid individual shareholders had difficulties because IDBG could not secure guarantees attaching specific sponsor assets like real estate. Projects with publicly traded sponsors tended to amplify the effects of bad news, deteriorating their value as project guarantors. Finally, most projects lacked proper bond and insurance coverage from third parties, partly because of the relatively high cost of such coverage in LAC.



04

Lessons on Managing Problem Projects

4.1 This chapter examines the managing of problem projects. Experts in the field of recovery in MDBs claim that the processes used to identify and resolve problem projects need to adhere to a set of principles. The same applies to the division of labor between key areas linked to problem projects, including the portfolio management unit (PTM) and the SAT. In addition, comparators have tried to tackle the challenge of learning from past problems in ways that merit exploring.²² In contrast with the previous chapters, which were based on IDBG's past performance, this chapter relies on potentially useful insights from experts within and outside the IDBG and also draws on a manual on best practices in workouts.²³ In keeping with a forward-looking approach, the chapter serves as a checklist of issues relevant for IDB Invest to consider adopting or reinforcing, given that its current practices are often already aligned with them.

A. Identification

- 4.2 Early warning on problems is considered key to better outcomes. At IDB Invest the recognition of warning signs relies mostly on Portfolio Management (PTM), and, exceptionally, on Credit Risk Management. Projects experiencing – or likely to experience – problems are added to “Radar” or “Watch lists”, depending on the severity of problems.²⁴ The PTM determines the problems' seriousness and its ability to solve them, and in interaction with the Credit Risk Officer decides how to best protect IDBG's interests.²⁵ Projects are reviewed quarterly and aggregated into a Radar-Watch List Report sent to the Board for information.
- 4.3 Good practices call for emphasizing the supervision function. Comparators highlight the importance of developing institutional specialization, leading to a deep sector or client expertise that extends to the supervision function. Comparators like DEG objectively predefine red-flag, key operational ratios by sector and apply them periodically to all the portfolio. They

22 IDB Invest is a member of a SAT cooperation group – the Special Operations Seminar (SOS) – that includes among others multilateral (IFC, EBRD, European Investment Bank, Asian Development Bank, African Development Bank) as well as European bilateral development finance institutions (like DEG from Germany, Swedfund from Sweden, FMO from The Netherlands, and Proparco from France).

23 Corporate and SME Workouts: A Manual of Best Practice. IFC (2011).

24 “Radar” projects are those which are developing signs of financial distress but IDBG expects them to correct themselves over the next 12 months. “Watch List” projects are those that have experienced structural dislocations that are not expected to be able to correct themselves and may eventually lead to impairment. Besides these flagging classifications, projects are periodically risk-rated, but at IDB Invest the deterioration of risk ratings does not automatically bring a project into any of the flagging categories.

25 The PTM officer periodically reviews newspapers, sector reports, and other relevant information sources, and may also discuss the transaction and the sector with the IDBG Country Office staff, as needed.

also proactively manage portfolio risk by anticipating cross-cutting issues that may affect certain types of projects.²⁶ Other MDBs seek ways to have a closer, ongoing engagement with clients—for example, through concurrent advisory services. Finally, interviewees emphasize that investing in prevention – by both PTM and SAT – usually yields high returns.

- 4.4 Unlike IDBG, some comparators keep projects with the originating units—a practice that has pros and cons. At IDB Invest, the investment officer (IO) who led the transaction at the approval stage – along with the credit officer – continues to support the transaction, but, except for FINPYME (very small projects) and equity transactions, primary responsibility is transferred to the portfolio management unit. At IFC, projects were at one point kept by the IOs to leverage their expertise. But this meant that only very time-consuming projects were transferred to SAT, as IOs often “hid” problems to preserve their reputations and client relationships.
- 4.5 Waivers, amendments, and consents (WACs) also provide an opportunity to anticipate problems and have, in some cases, avoided further losses. Unlike corporate loans, project finance usually provides many opportunities to catch problems early, because it often involves approving disbursements and WACs. WACs are the responsibility of PTM, but SAT participates informally. It is important to be strict with WACs. For example, a recent problem project requested numerous WACs, but eventually IDBG did not agree to some of them, so the company prepaid. A year later, it filed for bankruptcy. In a large corporate loan, IDBG had a revolving line but after disbursing half of it there was a one-notch downgrade in the company’s rating. IDBG refused to grant a WAC, stopped disbursements, and the client chose to repay in full. About six months later the client filed for bankruptcy.
- 4.6 Some comparators set strict criteria to reduce discretion in the transfer of projects. Determining when to transfer projects to SAT can be a sensitive issue because of internal incentives, but it is critical to the success of recovery efforts. For example, commercial banks are by regulation required to use objective criteria and act at the earliest signs of difficulty, often with aggressive provisioning and write-offs. MDBs are not governed by the same regulatory framework, but the underlying rationale for using objective transfer criteria still applies.

²⁶ IDB Invest has also been working in this area, by periodically constructing stress tests to assess the sensitivity of the portfolio to certain cross-cutting variables, like oil prices or global interest rates.

- 4.7 IDBG and comparators include the possibility of reversal to avoid creating the perception that once an asset is transferred, it is impossible to fix. At IDB Invest and comparators, a reverse transfer protocol allows sending back projects that have good performance for 12 months. This helps motivate the timely involvement of SAT in trying to fix problems and helps focus scarce SAT resources on the remaining, more problematic projects. For example, at IDBG SAT returned about 5% of projects to PTM during the period covered by this review.
- 4.8 Transfer to SAT is typically accompanied by an early diagnosis of the causes that had led to the problem and the estimated probability of different recovery scenarios. At IDB Invest, soon after a project is transferred, PTM produces a comprehensive Impairment Report. At the old IIC the report was called FAS114 (after the name of the accounting standard) and was prepared by SAT with support from PTM and Risk; in IDB it was prepared jointly by portfolio and special assets and approved by Management. These reports attempt to identify the causes of impairment, describe recent events and parties, and set out recovery scenarios with estimated probabilities of occurrence. Similar reports are produced by all comparator organizations. Some of them, like EBRD, have gone a step further by asking the originating departments to fill out a standardized questionnaire, so they could also provide their opinion as to what risks caused the problems. This information is aggregated over time to provide statistics, in a way similar to what OVE did for this evaluation.
- 4.9 Setting an early recovery strategy is also important for better results. It is important to clearly divide projects based on sponsors' character, immediately moving to disassociate from "bad clients." As to problem projects with "good clients," the two key variables that usually define the most likely recovery strategy are the viability of the project and adequacy of its security. This leads to different recovery strategies that will impact on the possibility of survival of the distressed entity.²⁷
- 4.10 Strategies - including whether it makes sense for SAT to lead the efforts - should take into account past recovery costs. To leverage scarce SAT resources, triage is needed, dividing projects into three categories: requiring immediate attention, expected loss, or can wait. Depending on this classification and the expected cost-benefit, a decision needs to be made as to who is best placed to lead the recovery efforts. In addition to full handling by SAT, the options include letting PTM handle recovery efforts (usually for small projects),

²⁷ SAT follows the practice of setting an early recovery strategy, as indicated in Chapter IV, section C of the Operations Manual.

outsourcing recovery to third-party collection firms (usually on a contingent basis, for expected-loss projects for which there are low reputational risks), and having SAT continue working on an advisory capacity (for can-wait projects).

- 4.11 It is important to adhere to accepted recovery principles, and to focus restructuring proposals on justifying any departure from them. Principles include (i) fair burden-sharing among stakeholders; (ii) not throwing good money after bad; (iii) not giving anything without receiving something in return; (iv) being prepared and willing to litigate to the last consequences; (v) encouraging good-faith payments to IDBG; among others.²⁸
- 4.12 Finally, IDB working together as a group can also have important advantages, particularly if it leverages its local presence. For a large problem project in urban transport, IDB created an *ad-hoc* management committee that met every week to work on the project. The IDB Country Representative participated in those meetings and had a central role in involving the government to ensure the project's viability. With this approach, this problem project was prepaid in less than a year. Since the merge-out, the involvement of IDB's Country Representatives has substantially increased, helping, for example, with client assessments. In parallel, IDB Invest's supervision is also building up its local presence.

B. Resolution

- 4.13 Addressing problem projects falls mostly on SAT, and to a lesser extent PTM, with the division of labor varying across organizations. According to IDB Invest's Operations Manual, PTM manages loan modifications and rescheduling to accommodate temporary financial distress, while SAT handles more significant restructurings, workouts, and the enforcement of security rights. While IDB Invest transfers all problem projects to SAT, some organizations keep small problem projects in PTMs, justifying this on a cost-benefit basis.
- 4.14 SAT interacts with special committees to maximize recovery while preserving development impact. At IIC, a SAT was created in early 1997, along with a Special Operations Committee.²⁹ In late 1999, the IIC Board of Directors established an Ad-Hoc Special Committee for Impaired Projects as an agile communication channel. Although the Special Committee

²⁸ IDB Invest agrees to accepted recovery principles as described in Section 5.6 of the CII/GN-146-14.

²⁹ Later folded into the Credit Committee, prompted by a rise in problems after the Tequila Crisis in 1995.

was a consultative, not a decision-making, body, it allowed Management to keep the Board informed, discuss workout actions, and seek guidance.³⁰ These arrangements were kept at IDB Invest and are similar to comparators' arrangements.

- 4.15 Delegation authorities are essential for SAT's fast response. A Special Jeopardy Procedure, created at IIC in 1996, has since been adopted by IDB Invest. The procedure delegates certain decisions to Management. Authorization levels for restructurings vary across institutions, with IDB Invest being generally conservative. All development finance institutions surveyed have established various levels of delegated authorities with respect to dealing with problem projects. Board involvement in SAT activities is normally kept limited, given the often time-sensitive nature of this work, although most development finance institutions have full reporting after closing.
- 4.16 The organizational location of SAT also varies, but most MDBs try to create checks and balances by placing it in the Risk Department. At IDB Invest, SAT reports to the Risk Management Department, and its budget is not separately disclosed. It has a Division Chief, five staff members, and a variable number of consultants. It benefits from the Legal Department's support. At organizations like EBRD, there is also dotted line reporting to the Investment Department. SCF's main reporting was to the business, but it also had a dotted reporting line to Risk. According to interviewees, this created a conflict of interest, particularly for smaller projects for which there were sometimes diverging opinions as to how patient to be with clients. At the old IIC, the equivalent of SAT reported to the Portfolio Department, again creating potential conflicts of interest.
- 4.17 At IDBG, SAT is involved mainly by taking over problem projects and resolving them on a case-by-case basis. At IDBG – and for the majority of problem projects at comparators – there is a full transfer of project management to SAT. This serves as a clear signal to clients that the MDB is taking a collections approach. Upon transfer, client relationship aspects and the potential for repeat business take a clear back seat to recovery efforts. Workout does not follow a preset sequence, but is rather a transactional exercise, very similar to investment banking: every workout is potentially different.
- 4.18 At comparators – and to some extent at IDBG – SAT also acts in supporting roles. At IFC and EBRD – and to a lesser extent at IDBG – SAT also takes roles that fall short of a full transfer. SAT acts in an advisory capacity when problems are still containable, or for smaller projects for which full SAT involvement would not be

³⁰ If a Board decision is required, issues may be referred to the Committee of the Whole.

cost-efficient. SAT can also share responsibility in joint ventures with PTM or sector and regional departments—generally when industry expertise, organizational memory, or geographic proximity are key issues. SAT can also be summoned to “SWAT teams” to provide a rapid diagnosis of selected markets and make strategic recommendations about the MDB’s portfolio.³¹

- 4.19 SAT staffing levels need to accommodate cyclical demand. SAT officers usually cannot handle more than 3-4 projects at a time, although the workload for small projects can be up to three times higher: the time required varies depending on each project’s demands and assumes adequate back-office support. SAT officers’ work does not end when projects are restructured, as the restructured projects usually need close monitoring. About 5-10% of restructured IDBG projects fell into problems again. Experts advise keeping a smaller core of experienced staff and outsourcing senior staff – from other departments or external consultants – as needed, given the cyclical nature of problem project intakes and resolutions.³²
- 4.20 The overriding consideration is to maintain the reputation of SAT as professional and uniquely qualified to add value in a crisis. Workout officers need to combine financial acumen, legal sensitivity, and interpersonal, negotiation, and presentation skills. At IFC, the SAT was at one time “the place to be” in terms of career growth. When junior staff are incorporated into SAT, there needs to be proper senior management, given the high stakes involved. SAT is, however, an invaluable training ground for investment staff, and some MDBs maintain rotation programs to take advantage of that aspect.
- 4.21 Dedicated internal support to SAT is highly advisable. At IDB Invest and comparators, a senior SAT counsel oversees litigation and liaises with local counsel, reporting to the Legal Department. Back-office and systems support are also critical. Problem portfolios can be very challenging to monitor, often involving multiple parties. Negotiated solutions depend on timely access to accurate information and often require transfers of funds and assets on very short notice. Comparators customarily rely on an experienced SAT administrative liaison to expedite these flows.
- 4.22 Comparators endow their SATs with jeopardy accounts to cover emergency costs associated with workouts. Comparators indicate that jeopardy accounts to cover emergency expenses and other costs associated with recovery enhance SAT’s

31 IDB Invest has been involving SAT more at the early stages of project approval to bring in experiences from problem projects, and sometimes in a supporting role (e.g., early meetings with problem clients).

32 For example, by December 2017 IDBG resolved two large projects (or about 13% of SAT portfolio) and three other small projects.

effectiveness. These funds can be used for urgent asset preservation activities, such as hiring security guards or maintaining electrical supply to avoid inventory deterioration. A project's jeopardy account is generally set up at the time of transfer to SAT, with a modest initial ceiling that can be increased if required.

4.23 At least one MDB (IFC) has gone further and established a jeopardy facility, delegating to SAT authority to invest fresh funds in distressed projects. IFC initially asked the Board for a US\$50 million facility, which has now been raised to US\$250 million.³³ The facility has been used sparingly, and mainly to buy out other creditors' claims. However, even if not used, it has negotiating value by creating new recovery options, which include providing emergency working capital, preserving access to critical assets being auctioned off by other creditors, or regaining control of companies, if essential.

C. Learning

4.24 MDBs need to widen the participation in the production of lessons. The production of lessons is an institution-wide task. SAT tends to take the lead in extracting and disseminating lessons from problem projects. IDB Invest and other MDBs dedicate some of their SAT senior officers' time to gather and disseminate lessons. Involving other areas is usually a challenge. At IDBG, IOs tended to know little about what had happened to their own projects, cutting off potential learning. By contrast, Risk Officers accompany projects from origination until full repayment.

4.25 A greater challenge is ensuring that lessons are used for the benefit of future projects. At IFC projects "follow" IOs and managers along their career making them eligible for Long-term performance awards.³⁴ This creates incentives for them to use lessons, while enhancing accountability. DEG is exploring tracking department-level profit and loss metrics to generate similar incentives. Staff rotation programs can also help staff use lessons learned in previous roles. Management could explore what is the best approach for IDB Invest, considering its organizational culture.

³³ After the 2008 crisis, IFC also launched a Debt and Asset Recovery Program to invest in distressed portfolios (two-thirds) and single distressed assets (one-third). Key program partners are financial institutions, specialized distressed asset investment funds, and operational providers, e.g., servicers.

³⁴ Performance considers both developmental and financial results measured 5-8 years after closing.

4.26 Measuring SAT performance is key to identifying lessons to better resolve problem projects, but MDBs face challenges in this area. Most MDBs view their SATs as cost centers relying on relatively simple measures of efficiency: number of resolutions, cash recovered, provisions reversed, revenue or recoveries per employee, and adherence to budget. To identify what worked, SAT needs also to be able to measure its effect on the MDB's bottom line, from both a financial and a developmental standpoint.³⁵ Many SATs – including at IDB Invest – currently lack a proper management information system to derive these metrics. This could also be used by SAT to report to the Board at least annually on past performance and – although a difficult task – on projected results for the upcoming years.³⁶

4.27 IDB Invest is making progress towards generating and sharing useful lessons. In 2017, IDB Invest's SAT launched its "Mountain of Knowledge" (MOK) initiative to document and share useful experiences. It has so far compiled 159 lessons from 26 problem projects in 13 countries. MOK is an evolving tool, but to date most lessons (68%) have fallen under incentives, with an emphasis on the project resolution stage. "Partner" and "market issues" follow, with about 10% each, while the "venue" and "rigidities" areas have very few lessons. SAT has also been giving regular presentations on thematic areas, including aquaculture, cooperatives, clean energy, and energy distribution. Interviewees across IDB Invest acknowledged and appreciated a significant increase in SAT's knowledge activities. They noted that lessons are also being learned in other areas of the business, such as PTM, but that there is not yet a unique central repository of lessons or a portfolio view of the incidence and importance of lessons.

4.28 IDB Invest is looking into instituting mechanisms to continuously feed lessons into the appraisal, structuring, and supervision of projects. For example, at SCF the project team of the most complex projects frequently included a PTM staff. In addition, PTM was always part of the Quality and Risk Review and the Pre-closing Committee of new projects. IDB Invest routinely involves PTM and occasionally SAT in the approval of new projects.³⁷ SAT is expected to bring lessons both from past IDBG

³⁵ Some MDBs have considered making asset recovery a profit center to better measure the value-added from their workout activities. However, in the absence of an intra-company market to allocate assets efficiently, the agreed price at which assets are transferred to SAT is difficult to validate.

³⁶ At IDB Invest, Management prepares quarterly reports to the Board, including the status of the problem project portfolio, and SAT has quarterly bilateral meetings and open conversations with Board members.

³⁷ For example, in a few projects SAT was invited to participate without a vote in the eligibility committee of projects for which it could bring useful lessons. The head of SAT is a member of the quarterly Portfolio Supervision Committee, so SAT gets involved in the discussion of potential problem projects.

projects and from other MDBs, obtained by their participation in joint workouts and at SAT collaboration groups. At DEG, the Head of SAT participates in the weekly Concept and Principle Committee that vets all new operations – an arrangement similar to the one at the old IIC.

4.29 Comparators suggest that training –including to the Board – plays a key role in creating a common understanding of lessons and promoting a learning culture. Comparators’ training includes a framework for categorizing project lessons, an overview of early warning signals, triage of problem projects, commonly accepted restructuring principles, and workout strategies. Decisions can then be framed in terms of adherence to these generally accepted principles. Although each situation is to be resolved case by case and there needs to be flexibility, divergences from the principles can be systematically discussed and form the basis for decisions, including those of the Board. SAT has been advancing in engaging the Board along these lines.³⁸

³⁸ SAT recently increased its interactions with the Board through quarterly reports on the status of the problem project portfolio, the inclusion of SAT’s lessons learned in Board proposals, and the discussion of lessons with the *Ad Hoc* committee of the Board in the context of specific problem projects.



05

Conclusions and Recommendations

A. Conclusions

- 5.1 At IDBG, problem projects were a minority within a predominantly sound portfolio, but considering that problem projects are inevitable for any MDB working directly with the private sector, OVE found that IDBG managed to keep losses low, in line with comparators. IDBG showed a clear determination to pursue recoveries. This contributed to high recoveries, resulting in losses about ten times lower than those of LAC commercial banks. Recovery efforts were conducted preserving the operation of about three quarters of clients, without significant adverse effects on IDBG's reputation, and with credit rating agencies and cofinanciers keeping a positive view on IDBG's ability to collect.
- 5.2 Despite the low losses, learning from problem projects is important. IDB Invest has made significant progress – including recently introducing a system to capture lessons – but there still is no systematic way to track what caused problems and what works to better resolve them. Methodological issues – including the small pool of problem projects within a predominantly sound NSG portfolio – make definite determinations difficult, but a continuous focus on using problem projects to distill insights and working hypotheses can reduce this knowledge gap and inform future operations.
- 5.3 This learning would be even more important in the future, as IDB Invest plans to grow in sectors with historically higher probabilities of default. OVE found that larger infrastructure projects, often involving project finance, had a higher probability of default but much better recoveries, while the opposite was true for smaller projects. Operations with financial intermediaries had the lowest probability of default. IDB Invest has now set out to grow investments in infrastructure, while reducing the share with financial intermediaries—a change that has potential implications for the prevalence of problems in the future portfolio. On the other hand, IDB Invest's lower emphasis on direct investments in SMEs is likely to lower the number of problem projects in the future.
- 5.4 OVE grouped the causes of problems into five, non-exclusive categories - **market, venue, partners, rigidities, and incentives** - but found no silver bullet for avoiding or resolving problem projects, thus OVE suggests that IDBG build on its progress to continue fostering an organizational culture that views problems as learning opportunities. Findings point to the need to continue reinforcing all stages of the project lifecycle, starting from a learning system that effectively informs future projects, and continuing with the ongoing testing of potential improvements

in the structuring and supervision of all projects, and in the resolution of problem projects. On this basis, OVE offers two recommendations: one on learning and the other on processes.

B. Recommendations

5.5 Recommendation 1 - Learning: Optimize learning from problem projects by promoting the production and use of lessons. IDB Invest should keep enriching its recently introduced knowledge repository (MOK) and *ad hoc* presentations, reinforcing incentives to ensure the production and use of lessons. Regarding the production of lessons, IDB Invest should continue dedicating a portion of senior SAT staff time to drawing lessons relevant to IDB Invest's portfolio and considering it in performance evaluations. It could also consider more systematically capturing in the MOK lessons generated by the portfolio management (PTM), risk, and origination departments, so that all lessons are captured in a central repository. IDB Invest should also continue its collaboration with external comparators that have a larger number of projects. As to the use of lessons, IDB Invest should find ways to continue strengthening incentives. The practices of comparators could be useful provided that they fit IDB Invest organizational culture. For example, some comparators leverage SAT as a training ground by strengthening staff rotation programs with PTM and origination departments, as well as enhancing learning by further involving SAT and PTM in project teams for complex projects. DEG is considering tracking profit and loss metrics for origination departments to further motivate them to seek out lessons. IFC introduced a long-term performance component in the compensation of staff and managers, which tracks all projects along their careers. Most comparators emphasize the importance of training all the parties involved - including the Board - on lessons learned.

5.6 Recommendation 2 - Processes: Explore and test the most promising working hypotheses on how to improve practices along the project cycle.

- **Structuring: Explore the potential for standardizing project structuring tools and criteria on the basis of past performance.** IDB Invest could consider further standardizing Target-Market Risk-Acceptance-Criteria - at least for the main lines of business - so it could base future approvals on justifying the rationale for any deviations from them. This evaluation suggests increasing the focus on factors like market concentration, partner character, operational rigidities, and governance aspects, that despite being already part of IDB Invest's due diligence, still appeared as frequent problem

causes. IDB Invest could also institutionalize the participation of SAT in the first concept approval committee for new operations, at least in areas with high past impairments. Another area that could enhance structuring is building a track record of the accuracy of internal and external forecasts, for example, by specialized consultants. Over time, this should help reduce forecasting errors and ensure the consistency of estimates of the same variables across projects.

- **Supervision: Further support the supervision role by clearly defining project performance criteria and reinforcing the ongoing collaboration with SAT and origination departments.** OVE suggests that IDB Invest further support PTM in the timely detection of problems by providing it with a clearer definition of key performance indicators by sector. These indicators go beyond what is required in financial covenants and focus on the business or project, allowing a practitioner to tell whether there are signs of deterioration. For example, in the hotel industry, average occupancy rates and average revenue per available room would serve this purpose. These key indicators could be applied periodically to the whole portfolio to help detect early warnings on any potential issue and help reduce discretion in the transfer of projects to SAT. SAT could also continue being involved in an early advisory role for specific projects, as well as in proactively devising mitigation measures in sectors or countries. Finally, IDB Invest should continue running portfolio stress tests to highlight problem project concentration and client-specific patterns.
- **Resolution: Continue developing project resolution capabilities by further empowering SAT and periodically assessing its performance.** As IDB Invest grows, there will likely be pressure on SAT's resources. To enhance SAT's ability to perform its mission, IDB Invest could consider granting it greater delegated authority in line with the new profile of operations. In exchange, SAT should periodically report on critical metrics, including problem project recovery costs, their financial and developmental effects, and the projected implications for the overall portfolio. SAT should strive to be able to explain its recovery strategies in terms of clear resolution principles, so that internal and Board approvals can be justified in terms of any needed divergence from these principles.

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