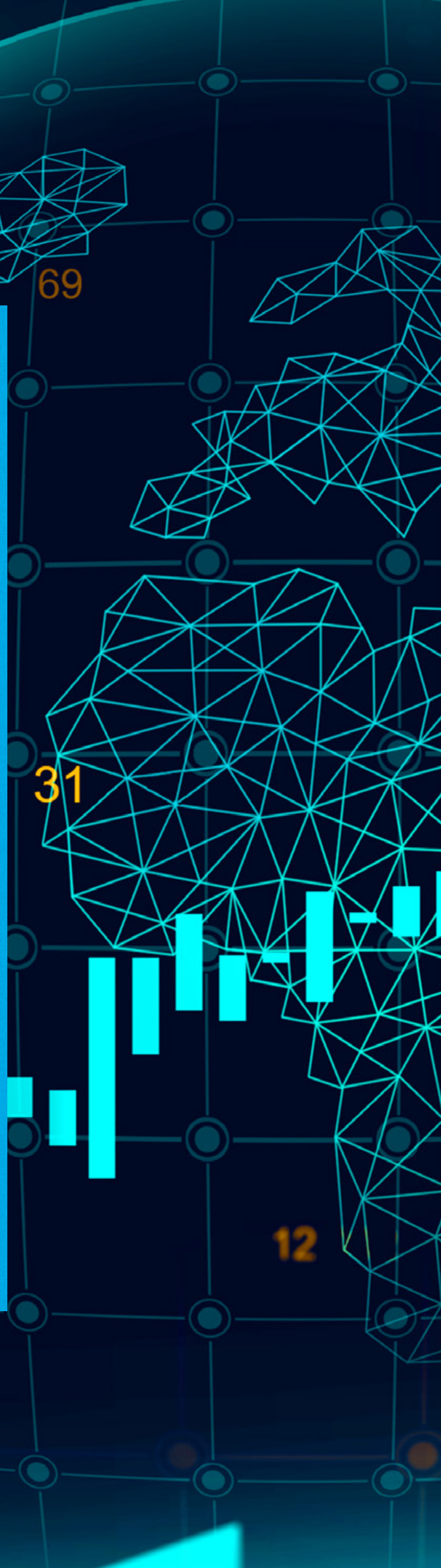
The Development Effectiveness of the Use of *Doing Business* Indicators, Fiscal Years 2010–20

An Independent Evaluation



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Abbreviations

AS	advisory services
CPE	Country Program Evaluation
CPSD	Country Private Sector Diagnostic
DB	*Doing Business*
DEC	Development Economics Vice Presidency
DWCP	dealing with construction permits
EoDB	ease of doing business
FY	fiscal year
IEG	Independent Evaluation Group
IFC	International Finance Corporation
M&E	monitoring and evaluation
SLR	structured literature review
SME	small and medium enterprise
UNCITRAL	United Nations Commission on International Trade Law

All dollar amounts are US dollars unless otherwise indicated.

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Nadia Paola Ramirez Abarca led the portfolio analysis and coordinated the analyst team, which included Ayooluwa Olusola Adewole, Mariana Calderon Cerbon, Regina Legarreta, Victor Malca, Anna Mortara, Ozlem Onerci, Nathaniel Russell, and Rasec Niembro Urista. Case study authors included Amitava Banerjee, Andrew Stone, Anjali Kumar, Anna Mortara, Ayooluwa Adewole, Jingwen Zhen, Nadia Ramirez, Paul Holden, Rasec Urista, Regina Legarreta, and Riad al Khouri, with Emily Harwitt and Mujtaba Basij Rasikh. Deep dives studies were authored by Ayooluwa Adewole (getting credit), Paul Holden (starting a business), Regina Legarreta and Anna Mortara (paying taxes), Andrew Stone (trading across borders), and Rasec Urista (dealing with construction permits), as well as Ana Belen Barbeito (International Finance Corporation advisory services) and Melvin Vaz (Project Performance Assessment Reports). Giuseppe Iarossi (with Silvia Espinosa) and Anqing Shi authored statistical and econometric analytic inputs. Paul Fenton-Villar authored the structured literature review. Harsh Anuj worked with the team to produce the supervised machine learning inputs, and Ariya Hagh provided quality control on the econometrics. Emelda Cudilla provided administrative support and formatted the report.

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Cover Note

This note details the chronology of steps in this evaluation's production before the decision by the World Bank Group's management on September 16, 2021, to discontinue its *Doing Business* (*DB*) flagship report. It also presents a summary of the lessons drawn from the evaluation that are relevant to the design of any future approach to assessing the business and investment climate.

Chronology

In June 2020, the Committee on Development Effectiveness of the Board of Executive Directors the Bank Group asked the Independent Evaluation Group (IEG) to evaluate the *DB* indicators, including the Ease of Doing Business country rankings, to "assess the way that *DB* aligns with the Bank Group's mandate and a viable development framework for client countries."

In September 2020, IEG produced an Approach Paper defining a focus on the assessment of *DB*'s strategic relevance and effectiveness for client countries' reform priorities and to the Bank Group's strategic agenda using IEG's mandated lens of development effectiveness. It acknowledged parallel work being undertaken by the Bank Group's Group Internal Audit and Development Economics Vice Presidency. The three bodies consulted and exchanged information to assure complementarity.

In March 2021, IEG began producing an Issues Paper for internal and management review that was submitted to the Committee on Development Effectiveness on June 29, 2021. It identified six lines of inquiry for the main *DB* evaluation.

On September 8, 2021, after internal and peer reviews, IEG produced a draft final report and shared it, in line with IEG–Bank Group protocol, with Bank Group management for their factual review and comment. On September 16, 2021, Bank Group management announced its decision to discontinue the *DB* report and released an external audit carried out by the law firm WilmerHale.

On September 20, 2021, the World Bank released the Development Economics External Panel Review final report.

From Recommendations to Lessons

The September 16, 2021, Bank Group's management statement said, "Going forward, we will be working on a new approach to assessing the business and investment climate." In this context and given the use of multiple other global indicators in reforms, the learning from this evaluation report is highly relevant.

The following generalized lessons can be drawn from IEG's evaluation report:

Lesson 1: Recognizing the powerful motivational effect of reform indicators, especially those that facilitate country rankings, this evaluation notes the limitations in the coverage and guidance offered by any single indicator set on its own and advocates integrating them with complementary analytic tools and indicators.

Lesson 2: Recognizing the granularity and specificity of individual reforms in any given country context, the findings from this evaluation suggest that it is better to avoid using business regulatory or similar global indicators as explicit reform objectives or monitoring indicators in Bank Group projects and country strategies focused on improving the business environment. This does not preclude the use of primary data to agreed targets that track and measure critical Bank Group institutional commitments.

Lesson 3: Global indicators coverage and specifications are improved if, at regular and predictable intervals, they are updated to reflect learning from research and field experience to (i) improve links to important development outcomes; (ii) strengthen relevance to the experience of the subject of coverage; and (iii) adapt to technological changes in the areas covered by the indicators.

Lesson 4: The DB experience indicates the need for mechanisms and safeguards to assure the accuracy and validity of Bank Group global indicator–based reports and related communications, using robust and transparent standards of evidence.

The ultimate outcome sought with this set of lessons is to build on the many good practices observed during this evaluation; to assure that any new approach using evidence-based global indicators considers their substantial power to motivate and engage client countries in business environment reform; and to ensure they are used in a balanced and accurate manner that guides the choice of reform priorities with the greatest development benefits for their socioeconomic situation.

Overview

The Committee on Development Effectiveness requested that the Independent Evaluation Group (IEG) assess the effectiveness of using *Doing Business* (*DB*) and its strategic relevance to countries' reform priorities and the World Bank Group's development agenda. It parallels work by the Bank Group's Group Internal Audit Vice Presidency on process and data integrity (World Bank 2020) and an external expert review commissioned by the Development Economics Vice Presidency focused on methodology.

Since 2003, the Bank Group's annual *DB* report and indicators have aimed at providing objective annual measures of business regulations and their enforcement across most of the world's economies.

Motivation, Scope, and Objectives

DB indicators are considered a guide to the legal and regulatory framework for a country's small and medium enterprises (SMEs). Their design covers the assumed key elements of a prototypical SME business life cycle, from start-up through operation to exit.

Reporting annually, *DB* has expanded over time from five initial indicators covering 133 countries in *DB2004* to 12 indicators covering 190 countries in DB2020 (figure O.1).

An overall ease of doing business score and ranking aggregates the scores for 10 areas, which it claims assesses "the absolute level of regulatory performance and how it improves over time" (World Bank 2019a, 19) by "benchmarking 190 economies to the regulatory best practice" (iii).

DB's stated aims are to (i) "motivate reforms through country benchmarking"; (ii) "inform the design of reforms"; (iii) "enrich international initiatives on development effectiveness"; and (iv) "inform theory" (World Bank 2003a, ix).

Figure O.1. *Doing Business* Indicator Expansion over Time

DB2004	*DB2005*	*DB2006*	*DB2010*	*DB2020*
1. Starting a business 2. (Employing workers) 3. Enforcing contracts 4. Getting credit 5. Resolving insolvency	6. Registering property	7. Protecting minority investors 8. Paying taxes 9. Trading across borders 10. Dealing with constructions permits	11. Getting electricity	12. (Contracting with the government)

Source: Independent Evaluation Group.

Note: Indicators in parentheses are not included in the composite ease of doing business index. *DB* = *Doing Business*.

Influence and Controversy

DB is highly influential: it is one of the Bank Group's most widely read publications and most used set of indicators on business regulation.

Country governments use *DB* in their developmental strategies and programs. The Bank Group uses *DB* in (i) country strategy and policy dialogue; (ii) operations (both financing and advisory); and (iii) research and global knowledge sharing. Researchers use *DB* to assess the relationship of legal and regulatory conditions to various reform outcomes, to develop new indicators, and to test and critique the indicators.

DB is also one of the Bank Group's highly controversial undertakings. It has been the subject of multiple reviews since its inception. Controversies have arisen surrounding its methodology, accuracy, and potential biases and the way *DB* indicators are used in shaping and assessing country policy reforms.

Methodology

This evaluation assesses the relevance of *DB* ("doing the right things") and its effectiveness ("doing things right") in motivating countries to reform their legal and regulatory environment for business and identifying areas for reform. It uses a combination of standard evaluation methods and newer ones to gather and triangulate evidence at multiple levels: global research, country experience, and project performance. Its scope, methods, and lines of inquiry were established in a prior Approach Paper (World Bank 2021b) and Issues Paper (World Bank 2022).

The Relevance of *Doing Business:* Is It "Doing the Right Things"?

DB is part of Bank Group efforts to produce reliable, relevant, and comparable data and analysis on private sector development; to promote job creation, economic productivity, and gender equality; and to encourage and guide social and economic reforms promoting an efficient and fair business environment.

Every year, since 2003, the *DB* team within the Global Indicators Group of the Development Economics Vice Presidency issues its flagship *DB* report. *DB* has actively promoted competition among countries, celebrating up through the 2020 edition "top reformers": countries achieving the largest number of measured reforms.

Country Reforms

DB's ranking encourages competition among countries and motivates governments to consider reforms. It is often a first point of engagement between country leaders and the Bank Group on addressing legal and regulatory constraints to businesses. Bank Group client countries have made substantial efforts to design and implement reforms measured by *DB*, often creating or empowering coordinating agencies to lead the reform agenda. Among the most common have been reforms to starting a business; paying taxes; getting credit; registering property; and trading across borders. *DB*-informed targets and reforms can feed into national development strategies and leadership initiatives.

In many countries, governments create or empower coordinating agencies explicitly focused on the *DB* reform agenda. In multiple countries, the agencies and capacities created or empowered to pursue *DB* reforms later turn to a broader or deeper agenda of business environment reform, creating a "spillover effect."

Although countries are often motivated by *DB*, other analytic tools, indicators, and expertise are also mobilized to guide and deepen reforms. In many cases, reform momentum and capacity instigated by *DB* are applied to additional reform subjects. For example, “national”-level reforms, although often initially pursued in leading cities captured by *DB*, are frequently extended to subnational levels.

However, several country case studies reveal serious limitations to the *DB* indicators and agenda in capturing business environment reform priorities. In particular, the relevance of the *DB* agenda is weak in countries where structural or institutional factors act as binding constraints. In other countries, it is uncertain whether the domestic SME focus of the *DB* agenda is the real focus of the reform efforts.

Over time, the *DB* agenda can lose its relevance when (i) non-*DB* constraints become binding after early *DB* reforms; (ii) pending *DB* reforms prove less tractable; or (iii) a *DB* indicator does not adapt to changes in the underlying business process or technology.

Business Areas

The overall ease of doing business score serves as a general index of the regulatory environment. The ordering of reform priorities using *DB* indicators shows a relatively strong match to that of enterprise surveys within common areas of coverage.

However, *DB* indicators do not effectively capture the real conditions experienced by businesses within the business area they cover. This is generally attributed to shortcomings in the defined topical coverage of the indicators and in the representativeness of the base case scenario.

Lack of substantive coverage can limit the extent to which the *DB* indicators can (or should) guide country reforms or reflect reform progress. The characteristics describing the *DB* “base case scenario” are not always consistent with those experienced by the typical domestic SME.

World Bank Group Activities

DB indicators are used in Bank Group country strategies, assessments, and projects; in Bank Group client countries' plans and reforms; and in academic research. *DB* is the most popular source of business environment information but not the only one, even among Bank Group products.

DB is used in country strategies to identify reform needs and to motivate future operations in priority areas. Many World Bank country strategies make substantial references to *DB* or propose a *DB*-related work program or both.

DB also informs a substantial share of the Bank Group's projects that provide financing, advice, or technical assistance to client countries on the business environment. This *DB*-informed portfolio consisted of 676 projects representing $15.5 billion in commitments during fiscal years 2010–20.[1] Informed by *DB*, the World Bank provided lending support to 97 countries and World Bank or International Finance Corporation advisory services and analytics to 126 countries during the same period.

Within the *DB*-informed portfolio, the most popular reform interventions addressed trading across borders (28 percent), ease of doing business (27 percent), and starting a business (25 percent). Project objectives focused most on improving a law or regulation (27 percent), reengineering a process (16 percent), building capacity and training (15 percent), and conducting a diagnostic (13 percent).

DB rankings are clearly motivational, facilitating Bank Group engagement with client countries on the business environment. However, *DB* indicators also have some notable inconsistencies with other Bank Group and global indicators. Many experts find the *DB* indicators more useful to initiate a country engagement than as explicit objectives and monitoring tools due to limited relevance and granularity.

Research and Evolution

Academics have found great utility in the *DB* indicators, producing thousands of articles examining the reform areas covered by the indicators and often using them to test hypotheses or construct new indexes. In several areas, there are no comparable annually updated data available for so many countries.

The evaluation team found an extensive body of research literature that uses or focuses on *DB* indicators. A review of *DB*'s own database from 100 top academic journals indicates that research has concentrated in a few areas, with disproportionate attention to starting a business, trading across borders, and protecting minority investors. IEG's structured literature review points to similar clustering and gaps in methodologically rigorous research.

DB indicators have evolved, including the introduction of new indicators and revisions to the methodology of existing ones. Changes of indicators are a necessary way to reflect learning and evidence about their relevance. Yet even with such positive changes, additional modifications should be incorporated into future revisions of the indicators to enhance their relevance to country reforms. Each change bears a cost, so it matters how they are introduced. However, if such changes are infrequent and well communicated, they can serve to enhance the value of the *DB* indicator set.

The Effectiveness of *Doing Business*: Is It "Doing Things Right"?

Activities informed by *DB* vary markedly in terms of the degree to which they yield intended objectives and results—their immediate and intermediate outcomes. The evaluation examined evidence of effectiveness from several sources: research (academic and professional literature), *DB* report claims, country reform experience, and Bank Group activity (country strategies and projects informed by *DB*).

Research Evidence

IEG's desk review of literature collected from leading journals shows limited replicated evidence of the relationship of areas covered by *DB* to outcomes; more evidence confirmed by a single finding; some areas of contradictory evidence in the literature; and some gaps. IEG's structured literature review applied rigorous criteria limiting methodology and scope to confirm several relationships between laws or regulations tracked by *DB* and significant development outcomes, while raising some cautions and pointing to gaps. For example, the structured literature review found no rigorous empirical support for outcomes linked to the *DB* measures of dealing with construction permits, or getting electricity. It also raises some cautions about unintended consequences of reforms measured by *DB*.

Doing Business Report Claims

Doing Business reports make numerous claims linking reforms tracked by its indicators to outcomes, led by job creation and economic growth. The claims frequently associate the *DB* reform agenda with the Bank Group's institutional twin goals of ending extreme poverty and promoting shared prosperity.

Although some of the claims contained in *DB* reports meet a high standard of evidence, most claims do not meet such standards, which can create a reputational risk to the Bank Group. Only a minority of those claims can be confirmed through *DB*'s literature database, and only a very small minority of those claims have been either replicated or confirmed using a rigorous methodology.

Country Reforms Experience

Although many countries, donors, and even Bank Group projects use movement in indicators as an outcome measure, such movements are inconsistently linked to both reform implementation and economic outcomes. Some countries show little increase in investment, employment, or productivity after a positive movement in indicators.

Overall, IEG finds a mixed picture of the links between indicators and outcomes. Deep dives carried out for five *DB* indicators (starting a business, getting credit, trading across borders, dealing with construction permits, paying taxes) found mixed effectiveness in specific indicator areas. IEG's own econometric analysis suggests that it is difficult to find significant, systematic relationships between changes in *DB* indicators and measurable outcomes, such as gross domestic product growth, employment, foreign direct investment, trade, or labor productivity.

World Bank Group Activity Experience

Evidence from IEG-evaluated country strategies indicates that, of those that proposed a *DB*-related work program, 74 percent achieved or mostly achieved the *DB* corresponding objectives. However, only 45 percent also showed improvements in *DB* indicators. In some countries, limited impact is tied to failure to address binding constraints. IEG's 10 case studies show both strong movement of *DB* indicators and tenuous links to measurable development outcomes.

The *DB*-informed project portfolio is generally successful in achieving stated project objectives. Success rates are lower in 3 of 12 specific indicator areas requiring deep institutional reforms: enforcing contracts, registering property, and resolving insolvency. Although client commitment and capacity are important external factors of project success, most success factors are internal and largely within the Bank Group's own control; these include analytic work, client engagement and follow-up, effective coordination, and monitoring and evaluation.

Improving the Use of *Doing Business* in Country Reforms

DB indicators are most relevant to motivating countries to reform their legal and regulatory environment for business and pointing to areas for reform within each indicator's coverage area. They are best used in conjunction with complementary analysis and indicators that assure limited development resources are focused on binding constraints. *DB* indicators are less relevant as project-level objectives or success metrics.

Given limited country reform bandwidth and resources, it is vital to contextualize the strongly motivating messages of *DB* rankings with complementary sources of information to guide country reform priorities.

Recommendation 1. In line with much existing practice, the Bank Group should continue to use *DB* to motivate client engagement and to assist in reform focus within its menu of regulatory areas–but only where the priority and nature of reforms are confirmed by complementary analytics.

Although the available evidence on the benefits of improving conditions measured by *DB* is mostly positive for development outcomes, strong evidence is limited by indicator area and type of reform.

Recommendation 2. Consistent with good practice, the Bank Group should avoid using *DB* indicators as explicit reform objectives or monitoring indicators in projects and country strategies and, where their use is unavoidable, should not use *DB* as primary indicators of reform progress.

DB indicators currently suffer from inadequate feedback loops between research and field experience, and between their design and application. Given its influence, it is desirable for the *DB* approach to capture a fuller range of regulatory, legal, and institutional conditions that influence the life cycle of enterprises.

Recommendation 3. The Bank Group should update *DB* indicator areas and definitions at regular and predictable intervals to reflect learning from research and field experience to improve links to important development outcomes, strengthen relevance to the experience of domestic SMEs and adapt to technological changes in the areas covered by the indicators.

DB reports have made many claims for the benefits of measured reforms that go beyond rigorous or replicated evidence.

Recommendation 4. The Bank Group should strengthen the accuracy and validity of *DB* claims in *DB* reports and related communications in line with robust evidence.

The ultimate outcome sought with this set of recommendations is to build on the many good practices observed in the course of this evaluation. In doing so, the Bank Group could ensure the *DB* indicators maintain their substantial power of motivating and engaging client countries in business environment reform in a manner that guides clients to prioritize the reforms with the greatest development benefits for their socioeconomic situation, based on a balanced and accurate consideration of evidence.

[1] The portfolio includes projects that use *Doing Business* in their Board documents to justify the project, have one or more *DB* indicators in either their objectives or monitoring indicators, or are intended specifically to inform *DB* indicators.

Management Response

Management of the World Bank thanks the Independent Evaluation Group for sharing the report, *The Development Effectiveness of the Use of Doing Business Indicators, Fiscal Years 2010–20*, along with the cover note. Management notes that this evaluation was substantially completed before management took its decision—on September 16, 2021—to discontinue the *Doing Business* report. The World Bank Group will actively continue its work to advance the role of the private sector in development and will work through multiple channels to help governments design a business environment that supports this objective. Since mid-2020, the Bank Group has undertaken several reviews and audits of the *Doing Business* report and its methodology, process, and governance. Independent Evaluation Group's findings, and the findings of other reviews and audits, will be taken into consideration as management develops new approaches to assessing the business and investment climate to inform its support for private sector development.

International Finance Corporation Management Response

The management of the International Finance Corporation (IFC) welcomes the Independent Evaluation Group's evaluation of the *Doing Business* report and its summary of the lessons drawn from this experience for the World Bank Group. As users of the indicators, IFC has also benefited from the evaluation and has identified a few lessons for its future application and use of global data sets:

» Global indicator data sets can be very good door-openers for the discussion on key policy issues. These cross-country comparisons offer very useful information and incentives for governments. IFC management welcomes the investment in building such data sets, despite the limitations they may carry.

» For IFC, it is important to ensure that the teams using these data sets are fully aware of the limitations in scope, as they apply, and ensure that planned activities are set within the broader context of the World Bank Group country strategies and the upstream and investment climate focus of the activities.

- Teams will also be selective in using the relevant indicators from these datasets as monitoring and evaluation indicators.

Report to the Board from the Committee on Development Effectiveness

The Committee on Development Effectiveness met to consider the report by the Independent Evaluation Group (IEG) *The Development Effectiveness of the Use of Doing Business Indicators, Fiscal Years 2010–20*, the World Bank management response, and the International Finance Corporation management response.

The committee commended IEG for the comprehensive evaluation and appreciated IEG's commitment to review and correct any facts or misrepresentations in the draft before its public disclosure. IEG noted the implications of its findings and recommendations for new business environment indicators, including strongly connecting the design of new indicators and diagnostics to research and country experience, using new indicators alongside complementary analysis to help inform well-designed and comprehensive reforms focused on binding constraints rather than as ends of themselves, and ensuring that claims linking reforms captured by the indicators are validated by robust evidence. Members noted that although the *Doing Business* (DB) flagship report has been discontinued, enabling a business environment remains a relevant task for the World Bank and the International Finance Corporation. Important lessons could be drawn from the rich and high-quality analysis to shape the strategic focus and design of the new approach, including connecting policy advice more strongly to research and data and deploying appropriate safeguards to assure accuracy and validity of indicators, focusing on statutory regulations along with their actual implementation. Therefore, they encouraged management to deploy appropriate mechanisms and safeguards to assure the accuracy and validity of global indicator-based reports using robust and transparent standards of evidence and that indicators should be considered and interpreted along with complementary diagnostics and analytics, updated periodically and tailored to country contexts. Members stressed that the evaluation's findings and lessons on the creation and use of indicators were still timely and should thus be used to shape the strategic focus and design of the World Bank's new approach to global indicators on business reform and investment climate.

Given that the *DB* was one of the Bank Group's most widely read publications and most used set of indicators on business regulations to motivate clients to engage in business environment reforms, members and nonmembers reiterated that the process of designing a successor to the *DB* should be comprehensive and stressed the need for management to consult the Board of Executive Directors and client countries. They highlighted that the original objectives of the *DB* remain relevant and encouraged management to incorporate in the new approach the positive features found in the evaluation as well as IEG's conclusions and the conclusions of other recent evaluations on the *DB*, in particular on validity, relevance, and the need to focus more on binding constraints, sustainability, and issues such as working conditions. Members acknowledged that the engagement with the Board on the new approach would begin with the informal meeting scheduled on January 18, 2022.

Members agreed that movements in indicators should be interpreted carefully and encouraged management to ensure that country strategies, policies, and development agendas reported reform implementation accurately. They suggested that complementary sources of data, as well as analytical guidance, should be used to validate the relevance of the reform topics. Acknowledging that the *DB* indicators had had strong weight on legal information (according to statutory laws and regulations), management reassured members that the new approach would seek for better balance with actual indicators, including surveys in the field, for a better match between regulations and business practice.

1 | Introduction: *Doing Business* and Country Reforms

Highlights

Since 2003, the annual *Doing Business* (*DB*) report and indicators have aimed at providing objective measures of business regulations and their enforcement as they affect small and medium enterprises across most of the world's economies.

DB is highly influential. It is one of the World Bank Group's most widely read publications and offers the most used set of indicators on business regulation.

Country governments use *DB* in their developmental strategies and programs. The Bank Group uses *DB* widely, including in (i) country strategy and policy dialogue; (ii) operations (financing and advisory); and (iii) research and knowledge sharing. Researchers use *DB* to examine the relationship of conditions it measures to reform outcomes.

DB is highly controversial, having been the subject of multiple past reviews that revealed limitations in the indicators' methodology, accuracy, potential biases, and the way they are used in shaping and assessing country policy reforms.

Background and Context

The Committee on Development Effectiveness of the World Bank Group Board of Executive Directors requested that the Independent Evaluation Group (IEG) carry out an independent evaluation of *Doing Business* (*DB*) to assess *DB*'s strategic relevance and effectiveness to client countries' reform priorities and to the Bank Group's strategic agenda. This evaluation considers how *DB* is used to guide business environment reforms—both those supported by the Bank Group and those undertaken without its support. It focuses on the influence of *DB* on country reforms through IEG's mandated lens of development effectiveness. It parallels work by the Bank Group's Group Internal Audit Vice Presidency on process and data integrity and an external expert review commissioned by the Development Economics Vice Presidency (DEC) unit focused on methodology. IEG, DEC, and the Group Internal Audit Vice Presidency shared approaches and early findings during the life span of this work. An Issues Paper reviewed existing evidence to identify key issues about the use and influence of *DB* indicators and their relevance to country policy reforms (World Bank 2022).

Since 2003, the annual *DB* report and indicators have aimed at providing objective annual measures of a set of business regulations and their enforcement across most of the world's economies.[1] From the start, *DB* was designed with an ambitious set of stated aims, intending to capture "the efficiency and strength of laws, regulations and institutions relevant to domestic small and medium-size companies throughout their life cycle."[2]

DB indicators are presented as a guide to the legal and regulatory framework for small and medium enterprises (SMEs), intending to cover the key elements of a prototypical business life cycle from start-up to operation to exit. *DB* has expanded over time from 5 initial indicators covering 133 countries in *DB2004* to 12 indicators (10 of which feed an overall ease of doing business [EoDB] index) reported annually and covering 190 countries in *DB2020* (box 1.1). From the start, *DB* intended to:

i. Mobilize demand for reform of the business regulatory environment;

ii. Inform the design of reforms (*DB* wanted to target "what needs to be changed" and disseminate "the experience of countries that perform well according to the indicators"; World Bank 2003a, ix);

iii. Enrich international initiatives on development effectiveness. "[R]ecognizing that aid works best in good institutional environments," *DB* aimed at explicitly allowing donors to base aid on "good-quality data that can be influenced directly by policy reform" (World Bank 2003a, x); and

iv. Inform theory (*DB* intended to inform the field of "regulatory economics" by facilitating "tests of existing theories" and contributing to "the empirical foundation for new theoretical work on the relation between regulation and development; World Bank 2003a, x).

Influence

DB is recognized as highly influential in business regulatory reform worldwide, and it is the most used set of indicators on business regulation. Its reports are among the Bank Group's most widely read publications,[3] its website among those the most visited. Among global indicators of the business environment, it has been estimated to hold a 65 percent market share.[4] As elaborated in chapter 2, many country governments use *DB* in their developmental strategies and programs.

The Bank Group uses *DB* widely, including in (i) country strategy and policy dialogue, (ii) operations (both financing and advisory), and (iii) research and global knowledge sharing. Its indicators are also widely used and analyzed in the academic literature. In addition, they are a component of many other influential indexes, including the World Economic Forum's Global Competitiveness Index, the Heritage Foundation Index of Economic Freedom, and the Fraser Institute Economic Freedom Index. Further, *DB* has also been influential as an approach to indicators (box 1.1), generating spin-offs like subnational *DB*; *Women, Business, and the Law*; and *Enabling the Business of Agriculture*.

Box 1.1. What Are the *Doing Business* Indicators?

Doing Business (*DB*) is presented as a guide to the legal and regulatory framework for small and medium enterprises. The annual *DB* has expanded over time from initially reporting on 5 indicators covering 133 countries in *DB2004* to reporting on 12 indicators (10 of which feed an overall ease of doing business [EoDB] index) covering 190 countries in *DB2020* (figure B1.1.1).

Figure B1.1.1. Evolution of *Doing Business* Indicators

DB2004	*DB2005*	*DB2006*	*DB2010*	*DB2020*
1. Starting a business 2. (Employing workers) 3. Enforcing contracts 4. Getting credit 5. Resolving insolvency	6. Registering property	7. Protecting minority investors 8. Paying taxes 9. Trading across borders 10. Dealing with constructions permits	11. Getting electricity	12. (Contracting with the government)

Source: Independent Evaluation Group.

Note: Indicators in parentheses are not included in the composite ease of doing business index. *DB* = *Doing Business*.

The indicators are intended to cover the key elements of a prototypical business life cycle from start-up to operation to exit. *DB* also provides an overall EoDB score and ranking by aggregating the scores for 10 areas, which it claims assesses "the absolute level of regulatory performance over time" (World Bank 2019a, 19) by "benchmark[ing] economies with respect to regulatory best practice" (World Bank 2019a, 77). The methodology collects data from informed experts who are generally intermediaries for businesses in dealing with a given area of regulation or law, such as lawyers, accountants, or freight forwarders. It uses standardized case "scenarios" to enhance country comparability. Case scenarios generally apply to a country's largest or two largest business cities (in countries with over 100 million people, since 2015). Some cases are otherwise limited. For example, dealing with construction permits looks only at procedures associated with a warehouse of specified characteristics. The use of case scenarios and intermediary informants has contributed to the ability of *DB*, until *DB2020*,

(continued)

Box 1.1. What Are the *Doing Business* Indicators?

to publish 17 annual volumes covering an expanding majority of countries within a budget acceptable to the Bank Group. The indicators themselves have evolved over time, with some experiencing multiple revisions to methodology or components and the introduction of new indicators.

The *DB* indicators are composed of a mix of three different types of subindicators. The first type, "less is better" indicators, measure time, cost, procedures, or documents required for regulatory compliance. The second type measures the "presence of a feature," which can be legal, regulatory, or institutional. The third type measures "outputs or outcomes" of processes that are observed in practice. Among the EoDB indexed indicators, "less is more" indicators constitute 62.5 percent of total weight in the EoDB score, "presence of a feature" indicators constitute 25.6 percent, and "output or outcome" measures constitute 11.9 percent of the score.

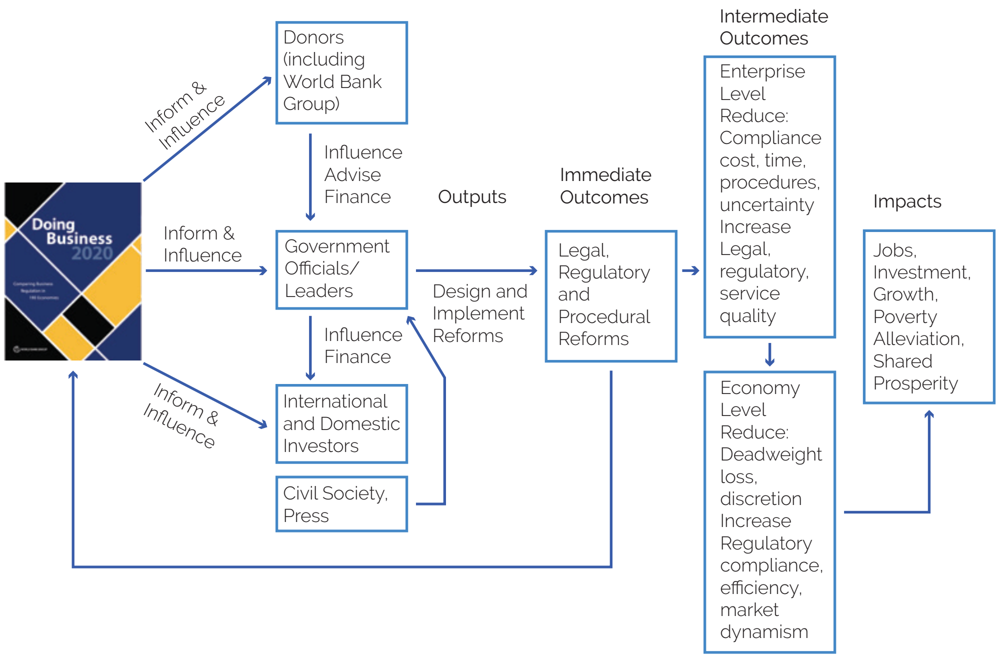
Source: World Bank 2009, 2010, 2011, 2012, 2013, 2014a, 2015a, 2016c, 2017b, 2018b, 2019a.

The use of the indicators is intended to link to positive development outcomes through the information and influence of the indicators on multiple key actors, leading to beneficial country reforms and development outcomes. The implicit theory of change for this evaluation reflects this hypothesized influence model (figure 1.1). Channels of influence range from direct influence on government leaders to indirect influence through donors, investors, civil society, and the press.

Country governments also use *DB* in their development strategies and programs. Many governments establish explicit targets for progressing in their *DB* ranking, and many more incorporate reforms associated with improvements in *DB* scores into their development plans. Some of these targets are included in the World Bank's Country Partnership Frameworks. From *DB2010* through *DB2020*, *DB* tracked 2,960 positive, country-level business regulatory reforms across 184 economies (of 190 measured). *DB* has explicitly encouraged competition among countries on measured reforms, celebrating top reformers.

The Bank Group uses *DB* widely. *DB* indicators are used in country strategies and policy dialogue to describe business-enabling conditions in a country, or to motivate future operations in priority areas identified in Country Partnership Frameworks, for example, or in diagnosing private sector development limitations in Country Private Sector Diagnostics (CPSDs). *DB* is also used sometimes to justify Bank Group lending operations or advisory services, to influence their design, to target certain projects, or to assess the progress of some projects against agreed reform objectives. For example, IEG estimates that, during the fiscal year (FY)10–20 evaluation period, about 64 percent of country strategies and 676 Bank Group projects were informed by *DB* indicators. Finally, the Bank Group also uses *DB* indicators for research and to share global knowledge.

Figure 1.1. How *Doing Business* Influences Actions Leading to Development Outcomes



Source: Independent Evaluation Group; *Doing Business* website (https://www.doingbusiness.org/en/doingbusiness); review of World Bank Group literature; Kelley and Simmons 2020.

Researchers use *DB* to study the outcomes of regulatory design, burden, and reform. *DB* reports that think tanks and research organizations use the indicators "both for the development of new indexes and to produce research papers" (World Bank 2016, 21) regarding the relationship of business regulation to economic outcomes. In several areas, there are no comparable annually updated data for so many countries. Although *DB*'s relevance to research is hard to quantify, the *DB* team itself collected over 400 articles from 100 leading journals of relevance to *DB*, and IEG's own structured literature review (SLR) found close to 1,900 articles of potential relevance based on search terms and a review of abstracts relevant to 10 *DB* indicator areas. *DB2019* reported that there have been "more than 3,400 research articles discussing how regulation in the areas measured by *Doing Business* influence[s] economic outcomes" published in peer-reviewed academic journals, 1,360 of those published in the top 100 journals, and another 9,450 "published as working papers, books, reports, dissertations or research notes"(World Bank 2018b, 32).

Controversy

DB stands out as one of the Bank Group's controversial undertakings. Controversies arose concerning the indicators' methodology, accuracy, and potential biases and the way they are used in shaping and assessing country policy reforms. The Bank Group and IEG have reviewed *DB* several times in the past, largely to respond to such criticisms. Past reviews recommended continuation of the indicators but also identified flaws and recommended modification of their design, collection, or application (table 1.1).

Table 1.1. Findings of Past Evaluations and Reviews of *Doing Business*

Positive Findings	Negative Findings
Influence and use	**Limitations of scope and coverage**
» "The *DB* indicators have motivated policy makers to discuss and consider business regulation issues. Its active dissemination in easy-to-understand language permits widespread press coverage and generates interest from businesses, nongovernmental organizations (NGOs), and senior policy makers" (World Bank 2008, xvi). » *DB* is "transformational, as it fundamentally changed the way the quality of the business environment is measured, and it catalyzed actions to address constraints" (World Bank 2016d, 8). » *DB* is "influential" and "widely used" and, although controversial, attracting "unrivaled media and high-level attention" (World Bank 2018f, 7–8).	» With significant exceptions, *DB* indicators focus on the compliance costs of business regulations—time, money, or procedural steps—where less regulation is better. Exceptions include the extent of protection of property, the protection of minority shareholder rights, an index of building quality control and the range of assets that can be used as collateral. It was proposed that the Bank Group develop "separate measures (...) to capture a wider range of benefits and costs (social, economic, and environmental) if existing regulations are changed" (World Bank 2015b, xl; 2019b). » On paying taxes, IEG and the Independent Review Panel recommended excluding the tax rate from the indicator, stating that it was more a matter of public policy than compliance burden (World Bank 2008; *Doing Business* Report Independent Review Panel 2013).

(continued)

Positive Findings	Negative Findings
Usefulness to guide or monitor reforms	**Limits in tracking reform or monitoring impact**
» "Within the limits of the *Doing Business* indicators, most investment climate interventions produce positive intermediate outcomes in terms of improvement in time, number of procedures, and cost" (World Bank 2015b, 67). » IEG finds a positive link between the World Bank Group's support for trade facilitation reform and improved *Doing Business* trade indicators (World Bank 2019b)	» *Doing Business* indicators track the incidence of reforms but not the quality or impact of reforms. IEG recommended that the World Bank Group trace country-level impacts of *DB* reforms (World Bank 2008). » The Independent Review Panel criticized *DB*'s implied claim that the reforms it promotes cause economic development and growth, stating "correlations do not justify a causal interpretation" (*Doing Business* Report Independent Review Panel 2013, 2).
Value meriting retention	**Questions on aggregation**
» The Independent Panel Review recommended that "the *Doing Business* report be retained as an annual flagship report" (*Doing Business* Report Independent Review Panel 2013, 4). » The ease of doing business indicators "are one of the World Bank's most important contributions to research and public policy" (Morck and Shou 2018, 3)	» The Independent Review Panel found that aggregating rankings across topics is challenging because it explicitly or implicitly involves a value judgment of what is "better" for doing business and how much better it is. It also found that "small revisions or inaccuracies in primary data can significantly change a country's rankings" (*Doing Business* Report Independent Review Panel 2013, 3). It recommended that the World Bank publish the *DB* report without the overall aggregate rankings (that is, without the ease of doing business ranking).
	Discontinuities
	» "Frequent methodology changes reduce the value of the indicators to researchers, policy makers and the media" (Morck and Shou 2018, 1); "The World Bank may wish to minimize methodology changes except to fix confirmed problems with existing methodology" (Morck and Shou 2018, 2).

Sources: Doing Business Report Independent Review Panel 2013; Morck and Shou 2018; World Bank 2008, 2015b, 2016d, 2019b.

Note: DB = *Doing Business*; IEG = Independent Evaluation Group.

Evaluation Approach

To evaluate the use of *DB* and its relationship to country reforms, IEG first developed an Approach Paper detailing the objective, scope, and proposed evaluation methods. Several lines of inquiry were later identified in an Issues Paper (World Bank forthcoming; appendix A). This evaluation used several standard and some relatively new evaluative methods to gather information and triangulate evidence at the global, country, and project levels (appendix A). Innovations included employing supervised machine learning to support the identification of projects for the portfolio review and analysis (appendix B) and the identification of impact-related claims made within the *DB* reports (appendix J). Using a Bank Group *DB*-informed portfolio and *DB*-tracked reforms, the evaluation team developed statistical and econometric analyses (appendix H) to explore project and country outcomes. Because of the focus on country reforms, the team undertook 10 country case studies covering countries of diverse characteristics in terms of region, income level, fragility, level of engagement with the Bank Group, and number of *DB*-influenced reforms (appendix C). The team also developed five indicator area deep dives (appendix D). Due to the COVID-19 pandemic, almost all fieldwork for both case studies and deep dives was conducted virtually. The literature review included both *DB*'s own bibliography and a rigorous SLR (appendixes E and F). The team also reviewed country strategies (appendix G) as well as Project Performance Assessment Reports and International Finance Corporation (IFC) advisory services (AS; appendix I).

[1] *Doing Business* (*DB*) came out of a strong focus on the investment climate in the early 2000s. In a 2002 volume, World Bank chief economist Nicholas Stern stated: "The central challenge in reaping greater benefits from globalization lies in improving the investment climate—that is, in providing sound regulation of industry, including the promotion of competition; in overcoming bureaucratic delay and inefficiency; in fighting corruption; and in improving the quality of infrastructure. While the investment climate is clearly important for large, formal sector firms, it is just as important—if not more so—for small and medium-size enterprises, the informal sector, agricultural productivity, and the generation of off-farm employment. For these reasons, the investment climate is itself a key issue for poverty reduction" (Stern 2002, 52). This focus led to a strong drive for a systematic approach to diagnostics and results measurement in the area of investment climate to help "clients understand investment climate conditions in their country in comparative light and induce … action to build a sound policy and institutional environment for investment" (World Bank 2003b, 2). Even at its year of inception, *DB* was acknowledged to be "a cost-effective way to assess certain dimensions of the investment climate" focusing on "constraints faced by businesses (such as basic incorporation procedures)" that could be "captured effectively and inexpensively by interviewing relevant experts" (World Bank 2003b, 4).

[2] "Global Indicators Group" page of Doing Business website, under heading "Doing Business," https://www.doingbusiness.org/en/about-us/global-indicators.

[3] Each report not only updates the national indicators but also highlights an issue of interest, in some way related to *DB*. Each volume reports on trends, highlights top reformers and model reforms, and cites evidence for the importance of *DB* overall and for the importance of the individual indicators and reform areas covered. With titles like *Smarter Regulations for Small and Medium Enterprises* (World Bank 2012) and *Reforming to Create Jobs* (World Bank 2017b), they make a case for the *DB* agenda.

[4] Doshi, Kelley, and Simmons 2019; Besley 2015; Haidar 2012, attributed to Harvard Berkman Center, "Media Cloud Database," 2017.

2 | The Relevance of *Doing Business*: Is It "Doing the Right Things"?

Highlights

Doing Business's (*DB*'s) ranking encourages competition among countries and motivates governments to consider reforms. *DB* has often been a first point of engagement of client countries in addressing legal and regulatory constraints to businesses.

Motivated by *DB*, many client countries have launched reform initiatives, with coordinating agencies leading the reform agenda. In several countries, those agencies have later pursued broader or deeper reforms not captured by the *DB* indicators (spillover effects).

Although *DB* rankings facilitate World Bank Group engagement related to the business environment, lack of granularity limits the indicators' ability to monitor and evaluate reforms. *DB* indicators are perceived to be more useful for initial policy dialogue and engagement than as explicit objectives and monitoring tools.

DB indicators have serious limitations in capturing binding business environment constraints. The ability of specific individual indicators to reflect the specific business areas they cover is also limited.

The relevance of *DB* indicators can be constrained by unaddressed structural and institutional reform priorities, methodologies, and assumptions divorced from the reality faced by local small and medium enterprises.

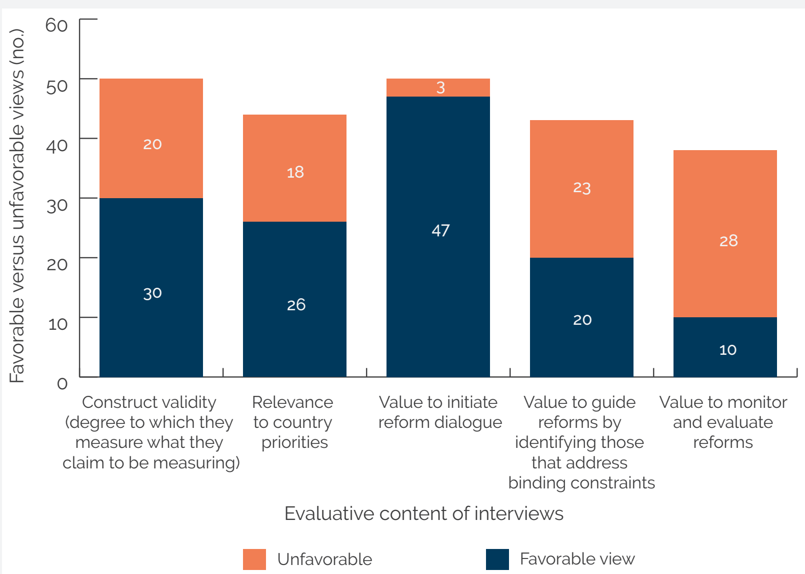
DB indicators have notable inconsistencies with other Bank Group and global indicators.

DB is part of Bank Group efforts to produce reliable, relevant, and comparable data and analysis on private sector development. The ultimate objective is to promote job creation, economic productivity, and gender equality and to encourage and guide social and economic reforms promoting an efficient and fair business environment. Each year, the *DB* team within the Global Indicators Group of the DEC of the World Bank issues its annual flagship *DB* report. Claims to relevance (box 2.1)[1] depend in part on the proven link of *DB*-inspired reforms to positive outcomes for private sector development, employment, productivity, and other beneficial outcomes examined in the next chapter on effectiveness.

Box 2.1. Views of World Bank Group Expert Practitioners

In IEG interviews with World Bank Group practitioners and managers, views expressed are overwhelmingly favorable with regard to the use of *Doing Business (DB)* to initiate dialogue and most views are positive as to *DB*'s relevance to country priorities (figure B2.1.1). 60 percent of views expressed in interviews identify indicators as validly measuring their business area, while 40 percent do not. Fewer than half of expressed views are favorable regarding *DB* as a guide for identifying binding constraints, and only 26 percent suggest *DB* indicators are a good way to monitor or evaluate reforms.

Figure B2.1.1. Experts' Views of Doing Business Expressed in Semi-structured Interviews



Source: Independent Evaluation Group.

Note: Interviews were performed with 20 World Bank Group expert practitioners.

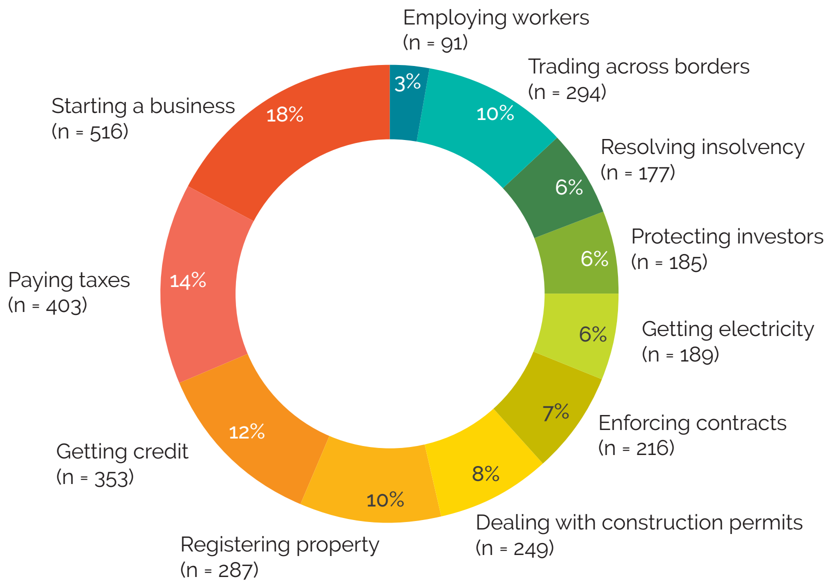
Since 2003, *DB* has become a key resource for Bank Group work on the investment climate, for client country reforms, and for research. IEG's review suggests the *DB* indicators have tracked thousands of reforms in client countries. In FY10–20, they were used to inform approximately 64 percent of Bank Group country strategies and were used in an estimated 676 projects with interventions worth $15.5 billion in commitments. They also informed a large number of research articles.

Client Country Reforms and Development Goals

Client countries have made dedicated, substantial efforts to design and implement reforms measured by *DB*. Since 2010, *DB* has tracked 2,960 business regulatory positive, national reforms across 184 economies. Each year between 110 and 140 countries are reported to have introduced positive reforms. Among the most common have been reforms to starting a business, paying taxes, getting credit, registering property, and trading across borders (figure 2.1). Based on a 20 percent stratified random sample, the most popular types of reforms recorded have been improvements to business laws and regulations (23 percent), reengineering of processes (22 percent), automation or introduction of electronic systems (20 percent), reductions of fees or rates (16 percent), and establishment or reform of agencies (6 percent).

Although reforms across income levels were similar, upper-middle- and high-income countries were more likely to introduce electronic or automated systems, whereas low-income countries were more likely to improve laws or regulations or reengineer business regulation processes. For example, *DB2018* documented that Kuwait introduced online business registration, while Mozambique reduced the time to get an electricity connection by consolidating procedures (World Bank 2017b). Fragility, conflict, and violence countries are also more likely to focus on improving laws or regulations, but they disproportionately focus on reducing fees and rates. For example, *DB2019* reported that Papua New Guinea improved legal protection of minority investors, while Burundi, Myanmar, and Afghanistan reduced fees associated with starting a business (World Bank 2018b).

Figure 2.1. Positive National Reforms Tracked by *DB2010–DB2020*



Source: Doing Business reform database 2020.

Note: Includes only positive reforms, excludes subnational reforms.

DB has actively promoted competition among countries, celebrating "top reformers"—the countries achieving the largest number of measured reforms—up through the 2020 edition. Many countries have responded with initiatives to improve their ranking: Indonesia strives to be in the top 40 countries for "ease of doing business" (EoDB), Morocco to be in the top 50, and the Russian Federation to be in the top 20; Rwanda continually drives to be recognized among the top reformers. During the evaluation period (FY10–20; in declining frequency), Rwanda, Kazakhstan, Indonesia, the United Arab Emirates, India, Ukraine, Azerbaijan, Russia, Uzbekistan, Armenia, Brunei Darussalam, Kenya, and Morocco were credited with the highest total number of positive national reforms.

DB-informed targets and reforms feed into national development strategies and leadership initiatives. Rwanda's first Economic Development and Poverty Reduction Strategy (2008–12; Rwanda Ministry of Finance and Economic Planning 2007) cites a specific *DB* indicator, and its second strategy (2013–18) cites a key accomplishment of the first plan: "the continued reforms in the *Doing Business* environment has laid the foundations for Rwanda to develop into a top investment and trade destination within Africa" (Rwanda 2013, 19). In May 2012, newly reelected Russian president Vladimir Putin approved the so-called "May decrees," ordering government to increase Russia's ranking in the World Bank's EoDB index from 120th place in 2011 to 50th place in 2015 and 20th place in 2018 (Presidential Decree No. 596). In Indonesia, *DB* strongly influenced national development planning, with President Joko Widodo in 2017 affirming his intention for Indonesia to jump to 40th place in the EoDB ranking and instructing ministries to draft detailed plans to achieve it. India and Morocco both set explicit targets to be among the top 50 countries (by EoDB rank) in the world.

DB has been a first point of engagement with business environment reform for multiple countries, with reforms of legal and regulatory aspects of their business environments. IEG's 2016 report on transformational engagements found *DB* to be transformational in ways other business environment diagnostics, including enterprise surveys, were not, in part because "it catalyzed actions to address constraints" (World Bank 2016d, 22). It found that "[e] ngagements with clients through the global Doing Business appear to have found traction with clients far more frequently than country engagements through [survey-based investment climate assessments]" (22). Interviews with Bank Group expert practitioners and managers suggest this is the area where *DB* indicators have the greatest value—"opening the door."

Even some countries initially critical of *DB*, such as India, China, or Morocco, have over time embraced its approach and agenda. Typically, a low ranking in the overall EoDB index or in individual indicators can capture the attention of government leadership and stimulate a request to the Bank Group for an engagement, often beginning with a *DB* reform memorandum (box 2.2) or matrix.[2] The memo lays out an agenda of changes to laws, regulations, procedures, and institutions that would improve a country's *DB* score in specific indicator areas. Of 10 case study countries covered in this evaluation, 8 had *DB* reform memos prepared and others had a reform matrix.

Box 2.2. *Doing Business* Reform Memorandums

The Independent Evaluation Group reviewed 10 *Doing Business* (*DB*) reform memorandums (appendix C, addendum) delivered to governments for countries featured in the Independent Evaluation Group's case or desk studies. Although the memos contained many useful, practical recommendations and tools to help improve *DB* indicator scores, the recommendations rarely drew from other sources or frameworks. They therefore risked missing overall challenges in each country's business environment and even within each *DB* area of focus. In multiple cases, the best practice examples used were not tailored to the recipient's stage of development or capacity.

Source: Independent Evaluation Group, review of 10 *Doing Business* reform memorandums..

Even in countries with small portfolios of *DB*-informed Bank Group operations, interaction with the Bank Group can lead to reforms. For example, both the United Arab Emirates and Russia, two countries with limited Bank Group *DB*-informed portfolios but a high level of reform activity, benefited from *DB* reform memos. The reform memo is often followed by technical assistance or financing support from the Bank Group, sometimes from other donors, and sometimes (especially for wealthier countries) from the government itself. The United Arab Emirates and Russia were both clients of World Bank reimbursable advisory services. Several governments also hired private consultants to support reform design and implementation efforts; high-income countries may use existing capacity.

The dual role of the Bank Group as generator of indicators and supporter of reforms to improve indicators has raised questions of a conflict of interest. IEG did not find this to be a common perception of clients and stakeholders (box 2.3).

Box 2.3. The Perception of World Bank Group Conflict of Interest between Indicator Generation and Operational Work

A recurrent theme emerging from Independent Evaluation Group (IEG) interviews with World Bank Group experts and operational staff was a concern about conflict of interest. Clearly, the recent suspension of *Doing Business* and new safeguards agreed to after a Group Internal Audit Vice Presidency audit reflect concerns that the interest in generating operations or pleasing clients has the potential to conflict with the interest in generating impartial data. A general perception of conflict of interest could challenge the credibility of the indicators or pose reputational risk to the Bank Group.

Although concern for or perception of conflict of interest was reflected in multiple Bank Group interviews, IEG did not encounter it in interviewing country counterparts and stakeholders for its case studies, even in response to explicit questions on the topic. (It is not clear whether the virtual online interview format affects interviewees' candor or perception of confidentiality.) Several clients were clearly motivated to seek engagement with the Bank Group by a perception that the Bank Group knew how to improve their *DB* scores. In countries with reimbursable advisory services, there was an implicit potential for clients to "pull the plug" on financing if indicators did not move as intended. Yet, although the potential for conflict of interest is real, IEG did not find it to negatively influence client and stakeholder perceptions of the reputation of the Bank Group.

Source: Independent Evaluation Group.

In most cases, governments create or empower coordinating agencies explicitly focused on the *DB* reform agenda. Typically, such agencies use *DB* indicators to help elaborate an initial agenda, to set explicit targets, to spur coordination and consultation, and to monitor and then publicize progress. In Morocco, for example, CNEA (Comité National de l'Environnement des Affaires; National Business Environment Committee) was formed in late 2010 as a specialized coordinating agency reporting to the prime minister. CNEA used *DB* indicators as a focus for reforms, to initiate areas of reform, as a clear basis to coordinate activities of diverse agencies, as metrics and monitoring indicators for reform, as the subject of public-private dialogue, and as a way to communicate to foreign investors and donors Morocco's reform success. In Rwanda, a *DB* unit within the Rwanda Development

Board (established in 2008) prepared an action plan on a yearly basis to be approved by a National Business Steering Committee. The unit designed and monitored *DB*-related reforms, managed development funds, organized working groups, advised agencies, and communicated with the private sector. The steering committee oversaw implementation of reforms at the cabinet level, coordinating relevant ministries and institutions. In addition, a Parliament Economic Committee reviewed *DB*-related laws and could fast-track priority measures. By contrast, in 2017, Chinese authorities used the powerful Ministry of Finance to coordinate reforms both nationally and in Beijing and Shanghai (box 2.4).

Box 2.4. *Doing Business* Reform: Traction in China

The *Doing Business* (*DB*) indicators found strong traction in China from 2017 onward. Beyond the interest in achieving rank improvement, a deeper appreciation grew of *DB*'s value as a diagnostic and benchmarking tool that would help cities in China assess their own performance and identify areas for change. The Ministry of Finance mobilized staff at the highest levels in Beijing and Shanghai, and city-wide reform plans were formulated using *DB* reform recommendations. The civil service developed a detailed knowledge of the indicators and their limitations. Both the International Finance Corporation and World Bank engaged in supporting reforms. The International Finance Corporation began early, through access to finance work greatly enhancing credit information. World Bank reimbursable advisory services (RAS) supported work on the insolvency framework. Another RAS project focused on Shanghai, seeking to improve construction permitting and trading across borders, while a Beijing-focused RAS project supported reform of construction permitting and property registration. The National Development and Reform Commission began exploring possible Chinese indicators and application outside the principal cities. Relevant areas were identified but use of formal indicators was not yet evident at the time of the case study.

Source: Independent Evaluation Group

In many countries, the agencies and capacities created or empowered to pursue *DB* reforms later turn to a broader or deeper agenda of business environment reform, creating a "spillover effect." Given *DB*'s strong role observed as a "door opener" for reform activities, it is not surprising that the open door can lead to reforms not captured by the *DB* indicators. Such spillover benefits can occur through a deepening of reforms within legal and regulatory areas covered by *DB*, a broadening of reforms to other aspects of the business environment, or a geographic broadening of *DB* reforms subnationally to cities or localities not captured in the *DB* indicators. Clearly, where there are limits to *DB*'s approach to identifying reform priorities or guiding and measuring reforms, such spillovers may not be entirely positive.

Although countries are often motivated by *DB*, other analytic tools, indicators, and expertise are often mobilized to guide and deepen reforms. Eight of IEG's 10 case studies explicitly identified the use of such augmentation (box 2.5). Sometimes other indicators—such as enterprise surveys, the World Economic Forum's *Global Competitiveness Report* indicators, or the Organisation for Economic Co-operation and Development regulatory indicators—were used, but often frameworks and tools specific to a reform area (such as the Tax Administration Diagnostic Assessment Tool) were applied. IEG's review of IFC AS projects notes that teams often find *DB* indicators ill-suited to guide and monitor projects, and in many cases, teams conducted their own diagnostic surveys or used other tools to generate more specific and tailored guidance and benchmarks. Bank Group projects on secured transactions (covered by "getting credit") often draw on the 2007 United Nations Commission on International Trade Law (UNCITRAL) legislative guide on secured transactions, the 2016 UNCITRAL Model Law, the United Nations Convention on Assignments of Receivables Accounts, in Internal Trade, or the Insolvency and Creditor Rights Standard developed by the World Bank and UNCITRAL.

The reform momentum and capacity instigated by *DB* are often applied to additional topics. In Morocco, the CNEA in recent years has added new issues to its agenda, applying both the coordinative capacity and indicators-based reform approach to additional areas and to subnational governments not included in the first round of reforms. Under its reform process, Indonesia approved its Omnibus Law modifying over 70 laws linked to easing the policy burden on business, extending well beyond what was covered by the *DB* indicators alone.[3] In 2019, Indonesia's head of the Ministry of National Development Planning announced a transition to e-bureaucracy to support the ease of doing business, again extending beyond measures explicitly captured by the indicators. Not all countries show such spillover benefits—for example, in Afghanistan, the agenda remained focused on *DB*.

Box 2.5. Colombia: Broadening the Evidence Base for Reform, Fiscal Years 2010–20

Colombia's regulatory reform objectives were informed by *Doing Business* (*DB*) and complemented by other analytical work. *DB*'s scope was too narrow to identify reform priorities by itself and was used in combination with other tools and sources of data. The government of Colombia regularly monitors three indicator reports along with sector-specific data and research: *Doing Business*, the World Economic Forum's *Global Competitiveness Report*, and the International Institute for Management Development's *World Competitiveness Yearbook*. Colombia used *DB* data as supporting evidence for its business environment diagnoses and, in some cases, to point to areas in need of reform. To complement *DB* data, the government of Colombia closely monitors the World Economic Forum's *Global Competitiveness Report* series, referencing the reports in national development plans and utilizing their insights related to the government of Colombia's overall competitiveness strategy beyond legal and regulatory aspects. The Organisation for Economic Co-operation and Development has also been a trusted adviser, providing information on best practices and benchmark data on both general competitiveness and productivity issues and on regulatory reform. It closely advised Colombia's reforms to the regulatory process and produced regulatory reviews in the context of Colombia's accession to Organisation for Economic Co-operation and Development. The World Bank's own support to reform through development policy loans and advisory services was based in broader analysis than *DB*, reflected in policy notes, working papers, and the Systematic Country Diagnostic.

Source: Independent Evaluation Group.

National-level reforms, although often initially pursued in one or two leading cities captured by *DB*, are frequently extended to subnational levels. India developed its own subnational indicator system inspired by *DB* to encourage and reward reform competition among its states to make it easier and quicker for businesses to operate. From 2014, the government of India introduced the Business Reform Action Plan, overseen by the Department of Industrial Policy and Promotion. The Russian government developed key performance indicators inspired by *DB*, then introduced a subnational program of key performance indicators to encourage virtuous competition among provincial governors. The program was coordinated by a national nongovernmental organization, the Agency for Strategic Initiatives, which also generated standards to guide regional policy makers on how to improve the regional business environment and attract investment. In Morocco, the measured progress of *DB* reforms at the national level, combined with a national strategy of decentralization, spawned support for subnational indicators and reforms extending to the Marrakesh region and beyond.

Several country case studies revealed serious limitations to the *DB* indicators and agenda in capturing business environment reform priorities. In no case study did IEG find that the problem areas identified by *DB* were directly inconsistent with national development plans and objectives, but in many cases, they were not development priorities. In the cases of fragility, conflict, and violence countries, such as Afghanistan and the Democratic Republic of Congo, political stability and risk of conflict weighed heavily on businesses and constrained any potential supply response to regulatory reforms. In many other countries, including Morocco and Jordan, the lack of a level playing field for domestic SMEs meant that *DB* failed to capture the substantial disadvantages imposed on SMEs through advantages granted to favored foreign or domestic investors through tax advantages, access to special economic zones, preferential access to land or credit, or explicit subsidies. In several countries, state ownership also limited private sector opportunity in multiple sectors. In multiple countries, the presence of corruption, large informal sectors, or state capture weakened the relevance of *DB* indicators to binding business constraints. For example, in one country, despite a thorough streamlining of dealing with construction permits (DWCP), businesses reported that, at the end of the process, approval still required a meeting with an official who expected a bribe.

The relevance of the *DB* agenda is weaker in countries where structural or institutional factors act as binding constraints. For example, Rwanda could not address the disadvantages of being small or landlocked through *DB* reforms. Further, its 2019 CPSD pointed to a host of binding constraints more pressing than the *DB* agenda, including low skills (human capital), limited access to and high cost of energy, high transport and information and communication technology costs, restricted access to land, and an unlevel playing field for competition. In India, critical aspects of binding constraints cited by stakeholders or revealed in enterprise surveys lay outside the *DB* agenda, ranging from weak infrastructure to land and labor constraints. In Jordan, key constraints included massive unemployment and poverty, as well as income disparity and gender inequality. In China, a host of issues ranging from inefficient bureaucracy to bank debt figured among leading constraints cited by stakeholders and experts interviewed but mostly missed by the *DB* agenda.

In some countries, it is not clear whether the domestic SME focus of the *DB* agenda was the real focus of the reform efforts. In Jordan and Afghanistan, the reforms were being pursued largely with an audience of donors and potential foreign investors in mind. With some indicators, like protecting minority investors, it is not clear how well the base case assumptions map to the typical domestic SME, although the indicator may well resonate with a foreign investor. Rwanda pursued an improved external reputation to attract foreign investment, in part through the publicity of being a recurrent top reformer. Russia sought to burnish its international image while also aiming to improve the domestic business environment. Although appealing to additional audiences—whether domestic voters, foreign donors, or international investors—may be considered a benefit of *DB* reforms, it can also inspire strategic behavior, pursuing reforms that move indicators without yielding tangible benefits to domestic SMEs. How client countries use the indicators depends on their motivation and their capacity.

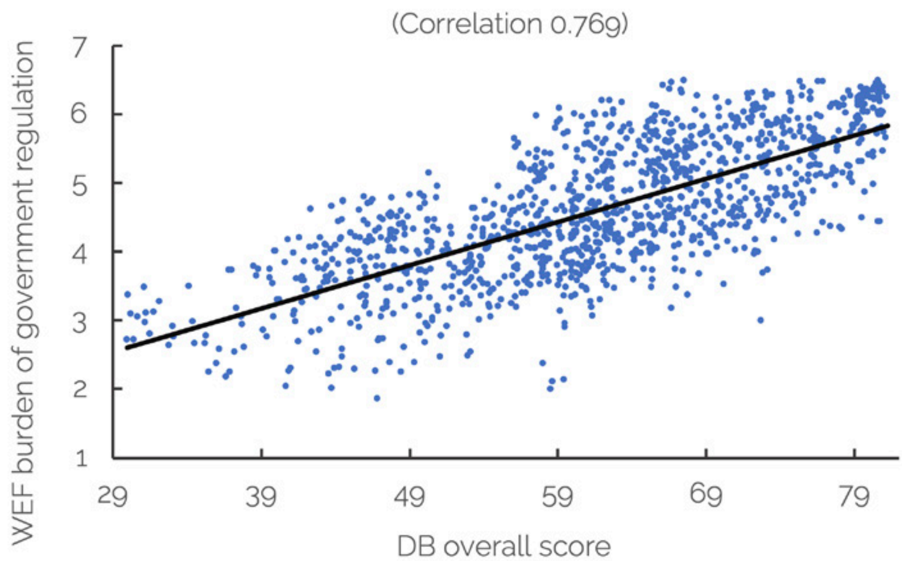
Over time, the *DB* agenda can lose its relevance for several reasons, when (i) non-*DB* constraints become binding after early *DB* reforms, (ii) pending *DB* reforms prove less tractable, and (iii) a *DB* indicator does not adapt to changes in the underlying business process or technology. First, over time, active reformers may have addressed the most pressing constraints measured by *DB* and move on to other policy priorities. This may explain why top 10 EoDB countries like New Zealand, Denmark, and the United States show a rate of one or fewer reforms per year from FY10 to FY20. Second, within each policy area, as the more tractable areas are addressed, the remaining *DB* agenda may rest with longer-term or politically more difficult reforms. India, like many other countries, progressed first on relatively easy procedural simplification in starting a business, paying taxes, trading across borders, and DWCP, which reduced the time and the costs involved. Reforms in more difficult areas involve legal processes, such as resolving insolvency, registering property, and enforcing contracts. Indicative of the long-term nature of these challenges, despite important reforms to improve its insolvency framework, business associations reported the persistence of slow, cumbersome, and inefficient resolution in court. Despite serious effort to improve its insolvency framework, business associations reported the persistence of slow, cumbersome, and inefficient resolution in court. Third, where *DB* indicators are not adapted, the reform agenda may shift away from them as the underlying technology or nature of the business area evolves. For example, progress in e-government may invalidate traditional measurements of number of procedures or assumptions about the time taken by each step in such contexts as starting a business and paying taxes. In getting credit, advances in use of big data and the emergence of digital financial services can reduce the relevance of existing credit information indicators.

Business Area Relevance of *Doing Business* Indicators

The overall EoDB score serves as a general index of the overall regulatory environment. A low EoDB score corresponds generally to other indicators of administrative burden or weak regulatory quality. For example, statistical analysis shows a high correlation (77 percent) between the EoDB score and the World Economic Forum's survey-based indicator of the burden of public administrative requirements perceived by business managers (figure 2.2).

The ordering of reform priorities using *DB* indicators and business enterprise surveys shows some alignment. Within the areas *DB* measures, IEG considered statistical evidence comparing the ordering of priorities indicated by *DB* scores to the ordering of priorities indicated by businesses responses to enterprise surveys. The IEG analysis matched four overlapping categories between *DB* and enterprise survey responses by country and year, namely tax administration, trade regulations, access to electricity, and access to finance. Based on 95 observations, the analysis found a perfect match in the ordering of priorities in 28 percent of cases, a close match (with only one single position difference in rank) in 41 percent of cases, and a mismatch of rankings in the remaining 31 percent of ratings. Differences in methodology and among the firms sampled in surveys versus those described in the *DB* base case assumptions may explain some of this deviation, but it points to the value of using multiple sources of evidence to guide reform priorities.

Figure 2.2. Correlation between the *Doing Business* Ease of *Doing Business* Overall Score and the World Economic Forum Burden of Regulation Indicator



Source: Independent Evaluation Group, statistical analysis of Doing Business indicators.

Note: DB = *Doing Business*; WEF = World Economic Forum.

DB indicators do not capture well the real conditions experienced by businesses within each area covered by an indicator.[4] IEG notes a low correlation between *DB* scores and how firms operating within countries report their experience. Regarding the DWCP indicator, there is only a 23 percent correlation between the *DB* measure of time to get a construction permit and the experience reported by firms in surveys. For the getting an electricity connection indicator, this correlation is only 10 percent. For both indicators, the *DB* indicators tend to overestimate time compared with actual firm experience. Regarding the time to import indicator, there is only a 42 percent correlation with firm experiences reported in surveys despite improved methodology since *DB2016*, an underestimate. Regarding the time to export indicator, the correlation of *DB* to enterprise survey responses is 35 percent, with *DB* again underestimating relative to survey responses.

Table 2.1. Correlations and Over- or Underestimating *DB* versus Enterprise Surveys

DB Indicator	Corresponding ES Indicator	Correlation Coefficient (%)	Over or Underestimate
Time to get a construction permit	Time to get a construction permit	23	Overestimate
Time to import (*DB16–20* methodology)	Time to import	42	Underestimate
Time to export (*DB16–20* methodology)	Time to export	35	Underestimate
Time to import (*DB06–15* methodology)	Time to import	25	Overestimate
Time to export (*DB06–15* methodology)	Time to export	23	Overestimate
Days to get electricity connection	Days to obtain electrical connection	10	Overestimate

Source: Independent Evaluation Group, statistical analysis of DB and enterprise survey data.

Note: DB = *Doing Business*; ES = enterprise survey, various years–DB data matched to timing of enterprise surveys..

Within each indicator area, there are limitations to how the indicator applies to conditions faced by businesses in the field.[5] IEG conducted five deep dive studies to review the most reformed indicator areas. They show strengths and limitations of the relevance of each indicator set to the business area it covers. The dives considered information from several sources: two literature reviews, a portfolio review, country case studies, and interviews with experts and practitioners. The latter give *DB* substantial credit for drawing attention to administrative burdens on firms and launching discussions about its individual policy areas.

Limitations in *DB* indicators are generally attributed to shortcomings in their defined topical coverage and in the representativeness of the base case scenario.[6] Given its challenging task of collecting data for 190 countries every year, *DB* has stylized or simplified its coverage of certain areas. This involves the use of base case scenarios, intended to enhance comparability between countries, and coverage of only one or two cities. The reliance on intermediaries (for example, lawyers, accountants, freight forwarders) greatly streamlines data collection relative to surveys. Yet these measures can constrain the representativeness of reported data.

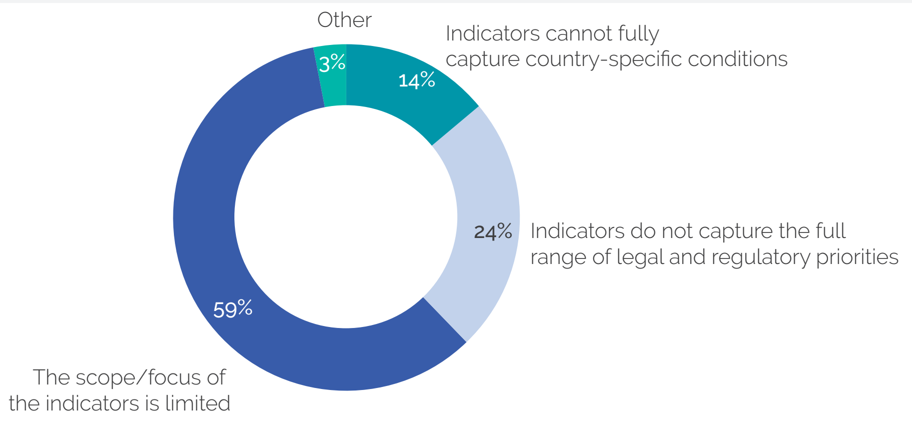
Lack of substantive coverage can limit the extent to which the indicators can (or should) guide reforms or reflect reform progress. *DB* reports caution readers on a few of the limits to the indicators (box 2.6). One issue is the detail and granularity of indicators, which are by necessity simplified. *DB* can be a crude instrument for monitoring reform measures, often crediting reform on issuance of a law or regulation before implementation, or failing to recognize certain important reforms. Questions on granularity and comprehensiveness raise the concern that indicators as reform metrics can leave important things out in individual areas. For example, a World Bank expert on insolvency noted that, although the indicator had improved to cover 13 or 14 legal subindicators, clients really would need at least 25 to have the granularity needed for understanding and guidance on the issue.

The characteristics describing the *DB* base case scenario are not always consistent with those experienced by the typical domestic SME. To understand relevance issues more clearly, IEG conducted detailed "deep dives" to examine five *DB* indicators that were the most popular areas of reform. These deep dives found inconsistencies between specifications of the base case scenario and the typical domestic SME. One challenge is that the scenario behind some indicators describing a prototypical firm or transaction could not be the same one used for the scenarios underlying other indicators. For example, the firm for starting a business must not engage in international trade, so would never encounter a trading across borders situation. That same firm (with five partners) would not qualify for the scenario in protecting minority investors. The findings on relevance from these deep dives are summarized in table 2.2. More details can be found in appendix D.

Box 2.6. Caveats in *Doing Business* Reports, 2010–20

The Independent Evaluation Group found 87 caveats in *Doing Business* reports alerting readers about some limitations of the indicators. Three types dominated: the limited scope of the indicators, the limited extent to which indicators capture the full range of legal and regulatory priorities, and the limited ability of indicators to capture country-specific conditions (figure B2.6.1).

Figure B2.6.1. Caveats in *Doing Business* Reports



Source: Independent Evaluation Group, analysis of *Doing Business* 2010–20 reports (World Bank 2009, 2010, 2011, 2012, 2013, 2014a, 2015a, 2016c, 2017b, 2018b, 2019a), and supervised machine learning.

Table 2.2. Key Findings on Relevance from *Doing Business* Indicator Deep Dives

DB Indicator	Summary Findings
Starting a business	» A strong motivator for reform of business registration, the indicator doesn't capture key elements of the framework for start-up of new businesses. » The indicator does not capture qualitative features such as: (i) whether the legal framework allows for a wide variety of legal forms appropriate to the nature of the business; (ii) some important qualities of the business registry itself—for example, is it electronic, backed up, up to date (and free from "ghost" companies), and populated with full information on owners and directors (including gender), the structure of businesses, and their age; (iii) the clarity of the framework of laws and regulations for business operation and governance. » The base case scenario does not describe a typical firm considering formalization, given characteristics specified such as having five married partners all of the same gender.
Getting credit	» The indicator measures two key elements of a country's financial infrastructure: the legal rights of borrowers and lenders, and the availability of credit information about firms and individuals. » Within its area of coverage, experts point to the limited scope of the indicator relative to what is covered by guidance from the United Nations Commission on International Trade Law on secured transactions. » The indicator does not capture a host of other factors (including imperfections in the banking and financial sector) that can impede the supply of credit to businesses.
Trading across borders	» The indicator benefits from broad coverage and comparability across countries as well as annual reporting. It is useful in pointing to cases where trade facilitation is problematic (World Bank 2019b). » Client countries find the indicator motivating, often using it as a goal, and find the subindicators generally concrete and thus easy to understand. » The indicator measures only compliance costs, ignoring whether trade regulations are achieving their policy objectives. » The base case scenario focuses on only one good (export or import) going from one point of origin to one destination. This makes the indicator highly sensitive to changes affecting the specific case, but not necessarily representative as a national indicator.

(continued)

DB Indicator	Summary Findings
Dealing with construction permits	» The indicator is seen as one of the most complex *DB* measures since many agencies from different government levels get involved. » The current indicator reflects a reform in *DB2016* that added a building quality control index (composed of six subindexes). » There remain concerns about the indicator's inattention to issues of fire safety, use of nonconventional (potentially hazardous) materials for construction, country geological conditions, and informal construction. » The specifications of the base case scenario are so limiting that they may not apply to many real situations in the field.
Paying taxes	» The indicator has several components: a "tax payments" subindicator; a "time" subindicator that estimates the time it takes a firm to "prepare, file, and pay" all of its taxes; a "total tax and contribution rate" subindicator that tracks the amount of taxes and mandatory contributions borne by the business; and the "post-filing index" subindicator (added in *DB2017*), including time to comply with several requirements (for example, time to complete VAT refund collection). » Experts find that the administrative component provides a simple and complete account of the administrative burden on firms. Although it is not detailed enough to guide the design of reforms, it is helpful in drawing attention to the compliance costs of taxes. » Many experts find the "tax policy" side of the indicator focusing on tax rates deviates from the focus on business compliance costs into public policy. » The subindicator on "total tax and contribution rate" is seen as a weak guide to policy because it rewards lower tax rates, lacking any basis in fiscal, economic, or social policy and any adaptation to different national policy priorities. » Overall, the primary value of the "paying taxes" indicator is seen as calling attention to tax compliance burden, but its utility to guide reforms is seen as extremely limited. » Nonetheless, discussions with country officials indicate that dialogue on paying taxes can be valuable and expose and connect them to good practices in reforming countries.

Source: IEG Deep Dives – see appendix D..

Note: DB = *Doing Business;* VAT = value-added tax.

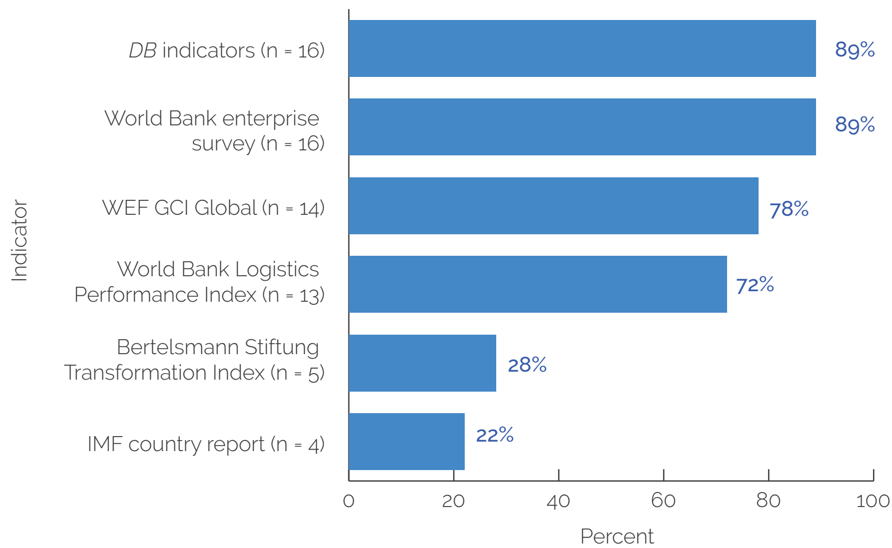
World Bank Group Country Strategy and Operations

The Bank Group uses *DB* in country strategies to identify reform needs and to motivate future operations in priority areas. Bank Group expert practitioners find near universal appreciation of the relevance and value of *DB* indicators to initiate reform dialogue. Most responses favored the relevance of the indicators to country priorities. Yet there was an almost even division of positive and negative responses on the value of the indicators to correctly identify binding constraints. And the preponderance of views weighed against the use of *DB* indicators to monitor and evaluate reforms.

Many World Bank country strategies make substantial references to *DB* or propose a *DB*-related work program or both. IEG examined 61 country strategy documents with corresponding IEG reviews and found that 64 percent of the strategies substantially referenced *DB* or proposed a *DB*-related work program. These strategies forecast planned interventions including improving business laws and regulations (38 percent), streamlining procedures (34 percent), using electronic or automated systems (15 percent), and conducting diagnostics (11 percent). Examples include policy development and regulatory streamlining in the Philippines (World Bank 2019d); policy dialogue and advice in Mexico (World Bank 2018d); and policy and project support in Rwanda (World Bank 2019c). The World Bank's own assessment of the quality of countries' policy and institutional frameworks uses *DB* indicators as inputs to inform its coverage of the business regulatory environment (starting a business, resolving insolvency, registering property, protecting minority investors [shareholder rights], and DWCP); nontariff trade measures (trading across borders); property rights (enforcing contracts); and efficiency of revenue mobilization (paying taxes).

DB is the most popular source of business environment information but not the only one, even among Bank Group products. IEG reviewed 18 CPSDs, the Bank Group's current comprehensive private sector development analytics produced jointly by IFC and the World Bank. It found that the CPSDs incorporate *DB* indicators as a leading input in a way that can be quite independent from and integrated with information from other Bank Group and global indicators and evidence sets (figure 2.3). IEG's review of 50 evaluated IFC AS projects found that many use other primary indicators, including some standard AS indicators designed to produce data more focused on the scope, depth, and timing of the engagement, and more granular and aligned with project objectives.

Figure 2.3. Indicators Used as Measures of Business Environment Constraints in Country Private Sector Diagnostics



Source: Independent Evaluation Group.

Note: DB = *Doing Business;* GCI = Global Competitiveness Index; IMF = International Monetary Fund; WEF = World Economic Forum.

DB informs a substantial share of the Bank Group's projects providing financing, advice, and technical assistance to client countries on the business environment. This *DB*-informed portfolio consists of 676 projects representing $15.5 billion in commitments during FY10–20 (table 2.3). It includes projects that (i) use *DB* in their Board documents to justify the project, or (ii) have one or more *DB* indicators in either their objectives, or (iii) have one or more DB indicators as monitoring indicators, or (iv) are intended specifically to inform *DB* indicators. The *DB*-informed portfolio constitutes approximately 28 percent of the 2,445 projects dealing with the business environment and approximately 3 percent of 22,761 Bank Group projects (figure 2.4).

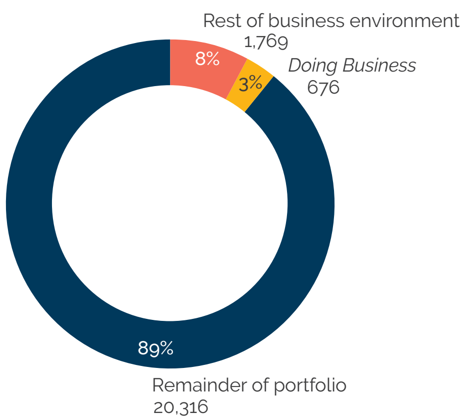
Table 2.3. Summary of *Doing Business*–Informed Portfolio, Approved in Fiscal Years 2010–20 (projection)

Institution	Projects (no.)	Projects (%)	Interventions (no.)	Interventions (%)	Commitments (US$, millions)	Commitments (%)
World Bank lending	269	40	517	43	14,853	96
Subtotal	269	40	517	43	14,853	96
World Bank ASA	165	24	173	14	379	2
World Bank RAS	58	9	81	7	20	0
IFC AS	184	27	428	36	287	2
Subtotal	407	60	682	57	686	4
Total	676	100	1,199	100	15,539	100

Source: Independent Evaluation Group, portfolio review analysis assisted by supervised machine learning.

Note: Projected based on population and sample sizes. Volume/commitment/funds managed were identified or estimated according to what was allocated to *Doing Business*–related interventions. If not explicitly stated, it was estimated based on the number of components, subcomponents, or activities. Consultations with World Bank Group resulted in exclusion of some projects. ASA = advisory services and analytics; IFC AS = International Finance Corporation advisory services; RAS = reimbursable advisory services.

Figure 2.4. Share of *Doing Business*–Informed Projects in World Bank Group Portfolio, Fiscal Years 2010–20



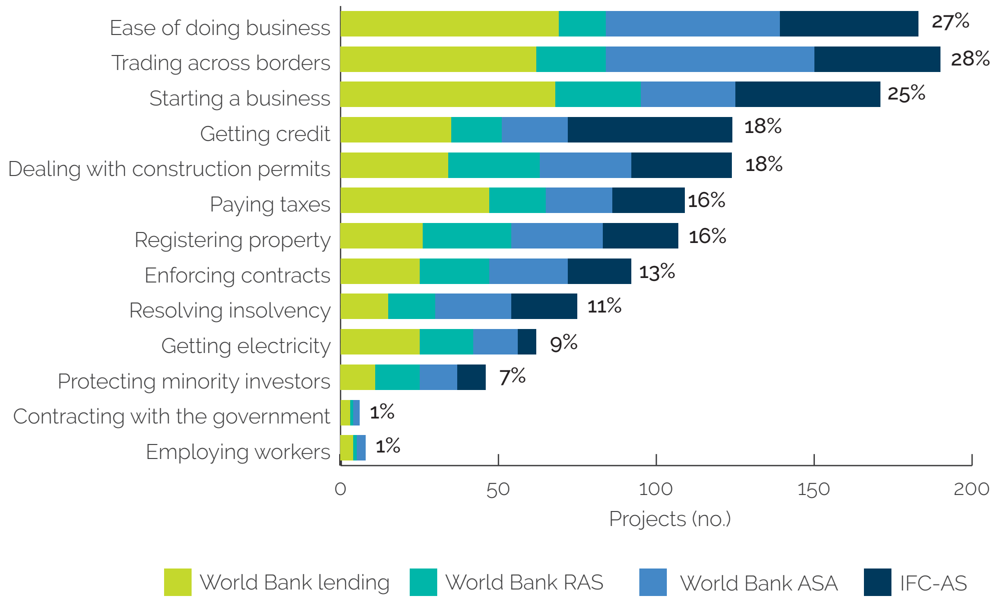
Source: Independent Evaluation Group, portfolio review..

The World Bank provided lending support that is informed by *DB* to 97 countries, and the World Bank and IFC together provided advisory services and analytics informed by *DB* to 126 countries. In total, 136 countries were supported by *DB*-informed operations. By income level, 29 percent of projects were delivered to low-income countries, 38 percent to lower-middle-income countries, 25 percent to upper-middle-income countries, and 8 percent to high-income countries. Reimbursable advisory services figured prominently in services delivered to high- and upper-middle-income countries. Regionally, Sub-Saharan Africa was the region with the highest number of approved projects (34 percent), while Middle East and North Africa had the highest average in lending projects per country (4.5), and South Asia had the highest average per country in advisory projects (4.8). Regional projects, mostly in Sub-Saharan Africa and Latin America and the Caribbean, constituted 7 percent of the estimated portfolio.

Within the *DB*-informed portfolio, besides general support to improve the EoDB (27 percent), the most popular reform interventions focused on a selection of business areas covered by the indicators. They include trading across borders (28 percent), starting a business (25 percent), getting credit (18 percent), and DWCP (18 percent), with paying taxes and registering property close behind (figure 2.5). Of the identified projects, 47 percent use *DB* indicators as justification, 29 percent use them to measure reform progress, and 15 percent use them in project objectives. Tanzania's First Business Environment for Jobs development policy operation (FY16) exemplified *DB* indicators as objectives, aiming to reduce business start-up time from 26 to 10 days and procedures from 9 to 3 days.

Project objectives in the *DB*-informed portfolio focused most often on improving a law or regulation (27 percent), reengineering a process (16 percent), building capacity and training (15 percent), and conducting a diagnostic (13 percent). Turkey's Second Restoring Equitable Growth and Employment Programmatic Development Policy Loan (P123073; FY11), for example, helped government to adopt a new commercial code enhancing protection of minority shareholders. The IFC AS Georgia Investment Climate Project (599537; FY14) assisted Georgia to streamline regulations and procedures (including through e-government) related to trade, enforcement of contracts, and insolvency. The IFC AS Afghanistan Business Enabling Project (602848; FY18) provided training and capacity building to Afghan agencies including peer-to-peer learning.

Figure 2.5. Projected *Doing Business*–Informed Portfolio FY10–20 by Indicator Area and World Bank Group Institution (number and percent of *DB*-informed projects)



Source: Independent Evaluation Group, portfolio review analysis.

Note: Projected based on population and sample sizes. Results were multiplied by a factor of 226/107 for World Bank lending projects, and 789/452 for World Bank ASA projects. Where a project or component specified an indicator it would work on, it was included under that indicator. Projects are counted more than once if supporting more than one business area. Projects with components that do not identify a specific indicator or that discuss reform in multiple indicator areas without a specific allocation of project resources to each were categorized as "ease of doing business." ASA = advisory services and analytics; IFC-AS = International Finance Corporation advisory services; RAS= reimbursable advisory services.

DB most often informs projects as a project rationale (48 percent of projects) but also serves as a project indicator (29 percent) or project objective (15 percent; appendix A). Given that some projects use *DB* in more than one way, overall 42 percent (287 of 676) of projects use it as either an indicator or objective or both. The use of *DB* as a project indicator declined somewhat between FY00–05 and FY06–10, whereas the use of *DB* as a project objective slightly increased over the same period. A few projects seek to generate or inform *DB* indicators (13 percent).

Research

Academics and other researchers have found great utility in having time series of *DB* indicator data updated annually, covering most countries in the world in the areas of regulatory policy covered by the indicators, and it is fertile subject matter for research. The 2018 external audit concludes that the ease of doing business indicators "are one of the World Bank's most important contributions to research and public policy" (Morck and Shou 2018, 3). *DB* reports that think tanks and research organizations use the indicators "both for the development of new indexes and to produce research papers" regarding the relationship of business regulation to economic outcomes (World Bank 2016c, 21). Business indicators inform or are used in a large amount of research. In several areas, there are no comparable annually updated data available for so many countries.

The evaluation team found an extensive body of research literature that uses or focuses on *DB* indicators and the business areas they track. The *DB* team shared a database of more than 400 articles of relevance to *DB* from 100 leading journals. IEG's SLR found close to 1,900 articles of potential relevance based on search terms and a review of abstracts in 10 *DB* indicator areas. *DB2019* reported "more than 3,400 research articles discussing how regulation in the areas measured by *Doing Business* influence[s] economic outcomes" published in peer-reviewed academic journals, 1,360 of those published in the top 100 journals, and another 9,450 "published as working papers, books, reports, dissertations or research notes" (World Bank 2018b, 32). Doshi, Kelley, and Simmons (2019, 30) point to a significant literature in "critical legal research as well as statistical studies" critiquing the validity of *DB* indicators, identifying "methodological, substantive and conceptual problems with relying on the EoDB indicators for assessing the business environment."

A review of *DB*'s own database from 100 top academic journals indicates that research has concentrated in a few areas, with disproportionate attention to starting a business, trading across borders, and protecting minority investors. IEG's SLR shows a concentration of rigorous articles about starting a business and trading across borders, with resolving insolvency and getting credit also proving popular. Conversely, getting electricity and registering property have not been widely treated in rigorous studies of outcomes (appendix F).

Doing Business Indicators over Time

The *DB* indicators have evolved, including the introduction of new indicators and revisions to the methodology of existing ones. Indicator changes are necessary to reflect learning and evidence about their relevance and effectiveness. Given the many limitations noted above, many experts would like to see further changes. A series of changes from *DB2015* through *DB2017* updated all of the indicators, and many of the updates won praise from subject experts. For example, tax experts appreciated the addition of postfiling requirements. Experts on construction regulation appreciated the addition of a building quality index. IEG acknowledged the validity of eliminating the documents subindicators from trading across borders (World Bank 2019b). In addition, IEG recommended the expansion of indicators to include unrepresented elements of the regulatory environment, such as environmental and competition regulation (World Bank 2015b).

Evidence from this evaluation suggests that additional modifications should be incorporated into future revisions of the indicators to enhance their relevance to country reforms. These modifications can refine the indicators to (i) better capture legal and regulatory attributes with developmental consequence, (ii) better attune to conditions experienced by local businesses, and (iii) adapt to procedural or technological innovations or evolution that alter the nature of what is being measured. The complementary work of DEC's expert panel can help inform this process.

Each *DB* indicator change is not without cost, so it matters how such changes are introduced. Academic users can be among the most affected when valued time series are disrupted by changes in methodology. *DB* can limit (and sometimes has limited) this effect by making available indicators using the old methodology for a period after transitions. Client countries are affected when progress toward targets rooted in one methodology are not rewarded under a new one. Any disruption in the continuity of time series data can affect both client and project targets based on former indicator construction. Evidence suggests that distress increases if client counterparts do not feel consulted or forewarned. If such changes are infrequent and well communicated, they can serve to enhance the value of the *DB* indicator set. Not all observers agree, and the 2018 external audit recommended that the World

Bank “minimize methodology changes except to fix confirmed problems with existing methodology” (Morck and Shue 2018, 2).

[1] The Organisation for Economic Co-operation and Development DAC Network on Development Evaluation defines the evaluation criterion relevance as the answer to the question, "Is the intervention [or program or policy] doing the right thing?" To assess it, evaluators explore "how clearly an intervention's goals and implementation are aligned with beneficiary and stakeholder needs, and the priorities underpinning the intervention. It investigates if target stakeholders view the intervention as useful and valuable" (OECD 2021).

[2] As noted in the "influence model" theory of change, a low country ranking may come to the attention of leadership through multiple channels, including donors, foreign or domestic investors, the press, or civil society.

[3] The Omnibus Law, discussed in appendix C, had some limitations, including the weakening of environmental screening.

[4] An additional difference with enterprise surveys is geographic coverage—typical enterprise surveys cover more cities or regions than does *DB*.

[5] Chapter 3 addresses the extent of evidence on individual indicators' links to outcomes.

[6] This evaluation does not attempt to generate advice on the design and methodology of individual indicators. That is being explored in greater detail in parallel work commissioned by the World Bank's Development Economics Vice Presidency.

3 | The Effectiveness of *Doing Business*: Is It "Doing Things Right"?

Highlights

Doing Business (*DB*) reports make many claims linking reforms measured by its indicators to outcomes, such as job creation and economic growth. Only a minority of these claims can be confirmed through articles published in leading journals, and a smaller share have been replicated or confirmed through a rigorous methodology. Weakly evidenced claims can create a reputational risk for the World Bank Group and its Development Economics Vice Presidency.

Although many countries and Bank Group projects use movement in *DB* indicators as an outcome measure, such movements are inconsistently linked either to reform implementation or to economic outcomes, such as increased investment, employment, or productivity. The Independent Evaluation Group's country case studies show both strong movement of *DB* indicators and tenuous links to measurable development outcomes.

Three-quarters of evaluated country strategies with *DB* objectives mostly or wholly achieved those objectives, but only 45 percent also showed improvements in *DB* indicators. In some countries, impact was limited by a failure to address binding constraints.

The Bank Group *DB*-informed project portfolio is generally successful in achieving project objectives but less so in three areas that require deep institutional reforms (enforcing contracts, registering property, and resolving insolvency). Although client commitment and capacity are important, most factors of success—including complementary analytic work, client engagement and follow-up, effective coordination, and monitoring and evaluation—are largely within the Bank Group's control.

Bank Group project experience shows that effective practices include a focus on binding constraints; use of a strong interagency coordination unit; timely availability of expertise; long-term, comprehensive engagements; public-private dialogue; client capacity building and knowledge sharing; and peer-to-peer learning.

This chapter examines the extent to which activities informed by DB are yielding intended objectives and results—their immediate and intermediate outcomes. This evaluation is ultimately concerned with the development effectiveness of how *DB* is used by client countries and the Bank Group—the extent to which program, policy, and project reforms achieve their objectives and results, systemically and for specific beneficiary groups. A key question concerns how much benefit an improvement measured by *DB* yields in terms of actual results and development outcomes such as increased growth, investment, business entry, productivity, or employment.

Research Evidence

IEG's desk-based review of literature identified by the *DB* team finds significant associations of what *DB* indicators measure with outcomes but does not establish causation. The desk review took stock of evidence on *DB* effectiveness based on a database of 426 articles from 100 leading journals. The database was organized by indicator. Some areas had abundant coverage (starting a business, protecting minority investors, and trading across borders), but many others had much lighter coverage (for example, DWCP and getting electricity). The desk review did not assess the methodological rigor of each article but did consider whether the article shed light on the relationship between what a *DB* indicator measures and an outcome, thus limiting its reporting to 75 articles of strong relevance. Findings confirmed by multiple articles were considered to have "strong evidence" (box 3.1). Where the findings of two or more articles contradicted each other, the evidence was classified as "mixed." On this basis, very few findings were confirmed by multiple articles.

IEG conducted a second rigorous SLR, which found that although there is a reasonable depth of coverage of some indicators, others have sparse evidence causally linking outcomes to reforms tracked by *DB*. To capture a broader body of literature and understand rigorously established relationships between *DB*-related action and outcome, the SLR followed methodological criteria consistent with norms established by leading practitioners of systematic reviews (appendix F) to identify studies in English meeting its inclusion criteria for populations, interventions, comparison groups, outcomes, and study designs. The SLR cast its net broadly, initially identifying

9,221 studies from multiple data sources that pertained to the 10 indexed *DB* indicator areas. After applying the filters for inclusion, the SLR identified 103 studies of relevant reforms meeting its criteria, including that allocation to intervention and control groups was random, and selection bias had been addressed by design (figure 3.1).

Box 3.1. Four *Doing Business* Outcome Findings Evidenced by Multiple Articles Published in Leading Journals

Starting a business: Higher entry costs or more steps or documents are associated with less firm creation, growth, or profitability.

Getting credit: Stronger legal rights are associated with more lending, more financial activity, or lower interest rates.

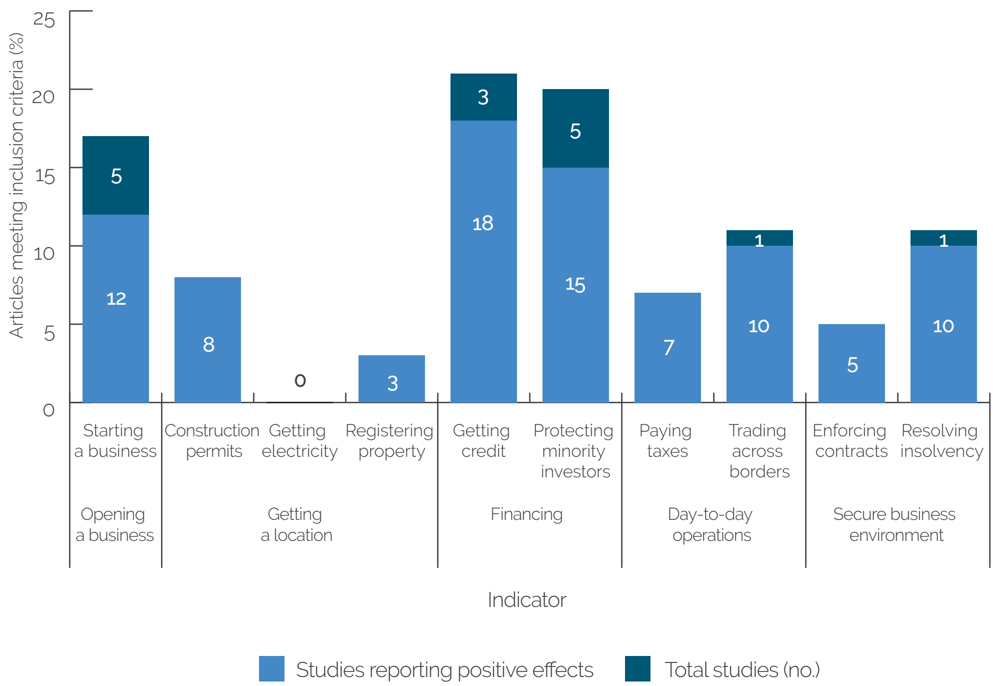
Paying taxes: Higher tax rates constrain entrepreneurship (rate of business creation) and investment rate.

Trading across borders: Better trade facilitation as measured by Doing Business shows a correlation with increased trade flows.

Source: Independent Evaluation Group, desk review of *Doing Business* literature database..

The SLR confirms several of the relationships between the laws or regulations tracked by *DB* and significant development outcomes, while also raising some cautions and identifying gaps. In general, research findings do not necessarily use *DB*'s definition or base case to measure critical phenomena. For example, there is evidence that low business entry costs encourage firm entry or formalization and growth, but not all findings are connected to *DB*'s specific formulation of entry. Sparse evidence confirms that the accessibility of land services and the process of transferring property is positively related to increased activity in commercial rental and property markets and access to credit. Mixed evidence generally confirms (with considerable nuance) a relationship of improved credit information and more expansive collateral laws to increased credit to private firms. Evidence supports the relationship of tax administration reforms to enhanced tax compliance and reduced business perceptions of tax administration as a constraint. Evidence supports a positive relationship between trade facilitation reforms and trade flows. Evidence on contract enforcement supports a general relationship of improved contract enforcement and judicial efficiency to broader outcomes such as investment, productivity, and profits; yet this evidence does not link to the specific good practices advocated in *DB*. Evidence on insolvency supports the idea that improvements in the efficiency of insolvency can lower the cost of borrowing and enhance private firm access to credit.

Figure 3.1. Rigorous Studies of Outcomes Identified by Structured Literature Review Relating to Indexed *Doing Business* Indicators



Source: Independent Evaluation Group, structured literature review.

The SLR did not find empirical evidence supporting outcomes linked to the *DB* measures of DWCP (construction permits) or of getting electricity, and it raises some cautions about unintended consequences of reforms encouraged by *DB*. The cautions arise from findings in the literature on the potential for (i) gender and environmental consequences of simplified business entry; (ii) "getting credit" reforms to increase the exclusion of some borrowers; (iii) protection of minority shareholder rights to increase the cost of equity, debt, and audit fees; (iv) efficiency/ quality trade-offs in judicial efficiency; and (v) insolvency reforms to promote capital intensity with potential labor market effects. On trade facilitation, there is a lack of robust evidence about the implications of reforms for other public objectives (for example, public health, safety, the environment, and reducing informality).

Effectiveness Claims Made in *Doing Business* Reports

DB reports frequently associate the *DB* reform agenda with the Bank Group's institutional twin goals of ending extreme poverty and promoting shared prosperity. The association of *DB* reforms with reduced poverty and enhanced prosperity can be found in even the earliest *DB* report but was quite explicit in *DB2019*, in which then–World Bank president Jim Young Kim stated: "The reforms that the report inspires will help people reach their aspirations; drive inclusive, sustainable economic growth; and bring us one step closer to ending poverty on the face of the earth" (World Bank 2018b, v). Earlier, in *DB2017*, the World Bank's then chief economist stated, in relation to the twin goals, "*Doing Business* helps us make progress on one crucial strategy for meeting these goals—offering market opportunities to everyone" (World Bank 2016c, vii). *DB2010* (and others) linked its measured reforms with the ability of people with lower incomes to find jobs and escape poverty.

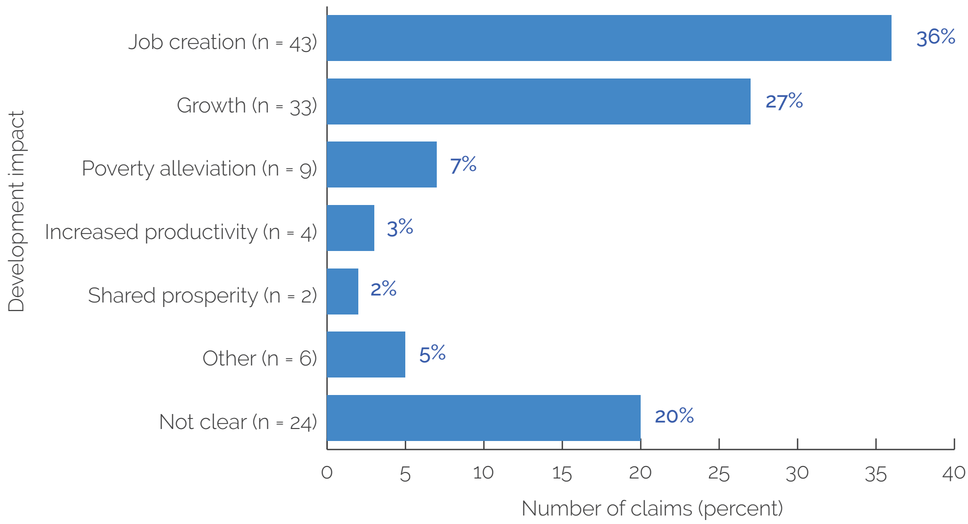
IEG finds that *DB* reports make claims that improving the legal and regulatory conditions for businesses as summarized by *DB*'s general index will benefit a variety of development outcomes. To better understand claims for explicit links of reforms tracked by *DB* with development outcomes, IEG used supervised machine learning and human review to identify claims about outcomes in *DB* reports issued from 2010 to 2020. This review identified 89 affirmative claims linking improvements in what the *DB* indicators measure to better development outcomes (or, conversely, worse *DB*-tracked conditions with worse development outcomes). Of these, 23 (26 percent) concerned the general association of improvements in *DB* areas (including the overarching EoDB indicator and distance to frontier) with improvements in outcomes. Like the claims in the previous paragraph, such claims do not map a reform path, but focus instead on outcome claims.

Of 66 remaining claims pertaining to a specific indicator area of *DB*, most (51 percent) did not reference the immediate outcome of the claim, leaving the causal links to the described outcome or impact undefined. Of those that did define an immediate outcome, they were most commonly in the categories of reducing the cost of doing business, followed by streamlining of procedures and reducing days to complete procedures. The overwhelming majority of all the 89 claims identified (68) did refer to intermediate outcomes, led by an increase in business entry (33 percent of claims), an increase in investment (30 percent), or an increase in formality (20 percent).

IEG also identified within the 89 claims 97 asserted links associating *DB*-related reforms with identifiable development impacts, led by job creation and economic growth (figure 3.2).[1] As an example, *DB2015* states that "research provides strong evidence that reforms making it easier to start a business are associated with more firm creation, which in turn is strongly associated with job creation and economic growth" (World Bank 2014a, 33). Impact claims of increased job creation were most commonly associated with intermediate outcome claims to increased business entry, formality, and investment. Impact claims of economic growth were mostly linked to intermediate outcome claims regarding increased business entry, with a minority also related to claims about increased formality and investment.

Although some of the claims contained in *DB* reports meet a high standard of evidence, most claims do not, which can create a reputational risk to the Bank Group. IEG found that only 13 percent of articles cited as evidence used robust methods and study designs meeting the criteria of the SLR, and 10 percent of results cited had been replicated in multiple articles in *DB*'s own literature database.[2] If claims for evidence of outcome made in the report are not held to a consistent and high standard, or if they are cited selectively only to support the case for reform, the risk is that the *DB* report, DEC, and the Bank Group may be increasingly regarded as advocates more than as trustworthy interpreters of evidence (box 3.2). Although the standards need not be as rigorous as those used in IEG's SLR, the principle is that transparent and systematic reporting of the available evidence with attention to nuance and complexity is necessary to guard against potential bias, oversimplification, overgeneralization, and reputational risk.

Figure 3.2. Claims Linking *Doing Business*–Related Reforms to Development Impacts



Source: Independent Evaluation Group, analysis of DB reports 2010–20.

Note: Bar labels denote percent of all claims..

Box 3.2. Comparing the *Doing Business 2020* Literature Review with the Independent Evaluation Group Structured Literature Review

The second chapter of *Doing Business* (*DB*) *2020* presents a literature review citing 53 articles that together cover all *DB* areas and were published between 2013 and 2019. Of the articles, 90.5 percent supported the arguments of *DB* by confirming the relevance of the *DB* reforms' agenda or finding that positive results associated with specific undertaken reforms were consistent with what *DB* indicators reward. (The Independent Evaluation Group's structured literature review [SLR] found that 85 percent of rigorous articles are associated with positive benefits of reforms in terms of an economic or development outcome.) Nevertheless, these articles mostly did not meet the criteria of the Independent Evaluation Group's SLR. Of 35 articles overlapping with the coverage of the SLR, only 4 were included. These four related to the relationship of customs delays to export volume, of contract enforcement to entrepreneurship among individuals with higher levels of education, of credit information to loan defaults, and of the improved legal rights of creditors to lending activity and credit terms.

Source: Independent Evaluation Group, desk review of *Doing Business 2020* (World Bank 2019a).

Country Reforms

Although many countries, donors, and Bank Group projects use movement in *DB* indicators as an outcome measure, such movements are inconsistently linked both to reform implementation and to economic outcomes. A review of IEG's 10 case studies reveals strong movement of *DB* indicators in most countries but tenuous links to measurable development outcomes. Some countries show little increase in investment, employment, or productivity. Overall, IEG finds a mixed picture of indicators' links to country outcomes (appendix C):

- In Morocco, despite both an improvement in ranking from 128th of 183 countries in EoDB in 2010 to 53rd of 190 countries in EoDB in 2020, and the utility of the indicators in setting concrete targets, a key World Bank economic expert interviewed observed "the impact gap between advances in [*DB*] rank and growth, employment and productivity. … Growth slowed. Job growth slowed." Nor did investment clearly respond to improved indicators. A World Bank private sector development expert interviewed by IEG observed, "We don't see a correlation between movement up in the [*DB*] ranking and the daily life of enterprises."
- In India (which moved from 133rd in *DB2010* to 63rd in *DB2020*), business groups and foreign investors interviewed stated that they did not feel the benefits of strong movements in the *DB* indicators. One complaint was that the scope of *DB* reforms did not address a number of binding constraints, ranging from input markets (land, labor) to bureaucracy to constrained competition.
- For Rwanda, which moved from 67th in *DB2010* to 38th in *DB2020*, the persistent structural constraints cited in the Country Program Evaluation (CPE) explained why, despite many measured reforms, gross domestic product per capita had not responded as intended and the Vision 2020 objective of becoming a middle-income country was not achieved (World Bank 2019c). Persistent structural constraints narrowly concentrated the benefits of economic growth and major *DB* achievements. They included a "complex political economy environment … limiting fair competition and effective implementation of regulatory reforms … with companies closely affiliated with

the government, the ruling party, and the military playing a dominant role in the private sector" (World Bank 2019c, 3). As a result, despite reforms, there was limited development of manufacturing, diversification of exports, and development of financial and services sectors. This disconnect was apparent in access to credit, where there were seven recorded *DB* reforms and where Rwanda rose to the rank of fourth in the world. A 2019 enterprise survey indicated that only 12 percent of firms reported having bank financing for investment (14 percent for working capital), and access to finance was the most cited leading constraint.

» In China, which moved from 89th in *DB2010* to 31st in *DB2020*, analytic efforts were unable to capture the economic impact of remarkable progress in *DB*-related reforms. Donors, foreign investors and experts interviewed indicated that the *DB* agenda did not capture some key business environment challenges, ranging from issues in the judiciary system to intellectual property rights and competition to difficulties with the financial system. World Bank concluded it was time to move the agenda forward to business environment challenges beyond the *DB* agenda. It also emphasized the need to strengthen access to data, and feedback from the private sector.

» In the Democratic Republic of Congo, where EoDB rank was 182nd of 183 in 2010 and 183rd of 190 in 2020, lackluster overall performance was attributed to "negative reforms" for which some *DB* indicators showed a worsening of conditions, as well as to a communication deficit between the government and private sector on implementation of reforms, changes in the *DB* methodology during the case study period, and the failure of *DB* ratings to reward "complementary reforms." Between *DB2010* and *DB2020*, the Democratic Republic of Congo was credited with 27 positive reforms and 8 negative reforms.

» In Jordan, which moved from 100th to 75th in EoDB, the case study found it hard to identify direct economic benefits of the *DB*-informed reforms. Cited factors include Jordan's susceptibility to regional shocks, macroeconomic policies, and the nature of economic growth, which, in turn, has not been in labor-intensive sectors. The study found that although *DB*-informed projects target areas that need to be reformed, reforms in some cases improved ranking without addressing the private sectors' needs.

» Russia moved from 120th in EoDB in 2010 to 28th in EoDB in 2020, yet the case study found that movement of *DB* indicators was not informative on intermediate outcomes and impacts of reforms. Even though Russia moved from 182nd of 183 countries in *DB2010* to 26th of 190 countries in *DB2020* for DWCP, some indicators of constraints increased in business surveys. Bank staff pointed to a host of priorities outside even the expanded regulatory agenda growing out of *DB*, including SMEs' ability to engage with global value chains, competition (antimonopoly) regulation, investment promotion, and more.

Similarly, IEG's deep dives found mixed effectiveness in specific indicator areas (table 3.1). Except for the paying taxes subindicator on tax rates, the reforms encouraged by *DB*-related activities were beneficial. At the same time, benefits could be limited when the reforms focused only on what was captured by the indicator and the base case scenario rather than addressing the broader regulatory area.

Table 3.1. Key Findings on Effectiveness from *Doing Business* Indicator Deep Dives

DB Indicator	Summary Findings
Starting a business	» Country experiences in reforms are decidedly mixed given the many constraints to entry and disincentives to formalization. » There is general empirical support in the literature for reducing the cost and complexity of business entry, but many countries experience only short-term or limited benefits from reforms. » For informal firms, there is evidence that the cost of registration alone may not tip the decision to formalize, unless it is accompanied by additional incentives such as simplified or reduced taxation or enhanced access to finance and land (World Bank 2013b).

(continued)

DB Indicator	Summary Findings
Getting credit	» Useful in focusing reforms on movable collateral and credit information. » Deeper reforms take time. Where client countries focused on carrying out quick reforms to improve *DB* rankings, it overshadowed the long duration of time needed to set up adequate credit infrastructure. In Morocco, collateral law and registry reforms took nine years. It takes up to two years to set up a credit registry, and it is recommended to collect at least two years' worth of data before launch. » The outcome of reforms depends heavily on whether there are other factors limiting credit, such as heavy presence of the state, weak competition, other distortions in credit markets, or demand-side factors constraining the flow of credit-worthy projects.
Trading across borders	» The trade facilitation features captured by this indicator are linked to trade flows. » By focusing only on a single export and single import at the largest port in the largest business city in most countries, the trading across borders indicator is less effective at capturing implementation progress in trade facilitation reform. » A lack of granularity means many reforms may not be picked up. For example, over the evaluation period, thorough trade reform in the Lao People's Democratic Republic yielded only two recorded trading across borders reforms in *DB*.
Dealing with construction permits	» In several countries, DWCP has proven to be a useful starting point for conversations about construction regulation. » Because important aspects (including corruption and informality) are missed, reforms are often not experienced as improvements by firms. » There is a risk that countries focus only on improving their DWCP ranking rather than overcoming persistent industry obstacles. » In China and the Russian Federation, it led to successful reform efforts. Those experiences indicate that considerable supplemental analysis, expertise, and local understanding at the municipal level must be mobilized to successfully introduce reforms.

(continued)

DB Indicator	Summary Findings
Paying taxes	» This indicator focused countries more on tax policy (rates) than on compliance costs, with 60 percent of tracked reforms in this area. » Of *DB*-tracked country reforms on tax rates, 46 percent were "negative": tax payment burden increased. By contrast, the tax administration component tracked reforms that were 95 percent positive. » The base case scenario can miss the actual regime under which many firms operate. Most small and medium enterprises do not make ceramic flowerpots. » The hypothetical company in question does not qualify for any investment incentives or any benefits aside from those relating to its age or size. Yet in many countries, corporate tax codes abound in incentives, exceptions, and special provisions that can vary by sector, locality, and more. And the assumptions may miss important reforms: for example, when Colombia introduced a simplified regime for micro and small enterprises (SIMPLE) benefiting most small and medium enterprises, "paying taxes" did not count it as a positive reform.

Source: Independent Evaluation Group; World Bank 2013b.

Note: DB = *Doing Business*; DWCP = dealing with construction permits.

IEG's exploratory econometric analysis suggests that it is difficult to find significant, systematic relationships between changes in *DB* indicators and measurable outcomes such as gross domestic product growth, employment, foreign direct investment, trade, or labor productivity. The econometric exercise tested the attribution of economic outcomes to movements of *DB* indicators. Many apparent correlations vanish when control variables are introduced. There is a high sensitivity to which variables were included (with an implicit sensitivity to omitted variables) and to small changes in model specification. For example, although one model specification showed a significant relationship between the protection of minority investors indicator and foreign direct investment, another showed no significance. In some cases, *DB* indicators bore a counterintuitive but significant negative relationship with some outcome variables (for example, a negative relationship between resolving insolvency and employment, and between registering property and employment). Simple before-and-after analysis does not control for a host of explanatory factors, yet it can also be hard to specify a control group required to apply a more rigorous difference-in-difference technique. For these reasons, IEG is not offering its own econometric treatment of these relationships, deferring instead to the literature.

World Bank Group Country Strategies

An examination of a sample of IEG's CPEs and reviews of Completion and Learning Report Reviews shows both the power and limits of the use of *DB* in country strategies.[3] IEG's review of a sample of IEG-evaluated country strategies indicates that, of 38 that proposed a *DB*-related work program, 74 percent of them achieved or mostly achieved the corresponding *DB* objectives. The highest success rate was achieved in low-income countries (86 percent), followed by lower-middle-income countries (79 percent), and then upper-middle-income countries (64 percent). By region, although Latin America and the Caribbean, Sub-Saharan Africa, and Europe and Central Asia saw more than 75 percent of their relevant interventions achieve their objectives, this rate fell to 67 percent in South Asia, 50 percent in Middle East and North Africa, and 33 percent in East Asia and Pacific.

However, achievement of project or country program objectives often does not translate into improvements in *DB* indicators. Although *DB* indicators are the most popular source used in country strategy documents to show progress on the business environment, they do not always prove responsive to the reforms being supported. Despite the 74 percent success rate of *DB*-informed country strategies in achieving their business environment reform objectives, only 45 percent also showed improvements in *DB* indicators.

A wide range of country experiences link *DB*-related reforms with improved business environments and sought-after economic benefits, but they also reveal mixed evidence about the effectiveness of *DB*-led reforms and the extent to which actual economic progress is achieved:

» *DB*'s direct influence was evident in the Philippines. With IFC support, the country enacted a law known as the Ease of Doing Business and Efficient Government Service Delivery Act of 2018, which aimed to reduce processing time, cut bureaucratic red tape, and eliminate corrupt practices. Romania's

Completion and Learning Report Review cites *DB*-inspired reforms as evidence of an improved business environment.

- Some other countries achieved desired *DB*-related reforms but without evident economic benefits. The Mexico CPE notes that *DB*-informed national and subnational initiatives seem linked to "a trend improvement" in the EoDB as well as to other reforms, including in competition policy (IEG 2018, xii). (Nonetheless, the country suffered from persistent low total factor productivity.) In Mauritius, *DB* reports and investment climate assessments were found to be "instrumental in highlighting areas of weakness and strength in the regulatory environment" and defining reform priorities. Mauritius improved its *DB* ranking yet "[d]espite this progress, there remain areas of weakness in the regulatory environment" such that reforms "have not resulted in a surge in business registrations" (IEG 2016, 32–33).

- Despite a focus on improving *DB* standing, some countries slipped back in *DB* ranking. In Bhutan, a 2017 performance and learning review found that "While Bhutan's 2017 *Doing Business* ranking is the highest among South Asian countries, its drop in ranking from 71 to 73 (out of 190 countries) suggests that continued effort is needed to improve the business climate" (World Bank 2017c, 9).

- In Zambia, the country achieved measured *DB* reforms with World Bank and IFC support, yet there was "a marginal decline in Zambia's distance to frontier score for overall ease of doing business" (World Bank 2019e, 6). For Benin, the *DB* target of reducing days to enforce a contract was detached from the country program in that "no program interventions could reasonably be identified with … number of days to enforce a contract—and hence any attribution is an issue" (World Bank 2018a, 6).

- In other countries, the focus on *DB* had limited impact because it failed to address binding constraints. As described in chapter 2, this was the case in Rwanda, where the CPE found that, in spite of its top "*DB* reformer" status, "sustaining growth and poverty reduction—from already impressive achievements—will require significant structural change in the economy" (World Bank 2019c, 3). In Albania, which reached the top half of the global ranking in *Doing Business* by *DB2018*, the CPE says it did not address important private sector constraints, including weak institutions and the absence of a reliable and affordable power supply and adequate roads. In small states, IEG's clustered program evaluation found that the Bank Group "needs a sharper focus on the most binding business constraints, using sector-specific lenses. Engagement based on the *DB* framework and similar cross-cutting approaches led to useful reforms … but engagement did not always focus on the most binding constraints." (World Bank 2016a, 47). In the Kyrgyz Republic, a key lesson was that: "overarching PSD [private sector development] reforms have greater impact than changes in specific doing business indicators" and selective interventions (World Bank 2018c, 2).

» In some countries, although the EoDB ranking showed progress, there was no clear evidence that the investment climate improved. The evaluation of Tunisia's country program through 2013 references business surveys and analytic work that "pointed to the heavy handed and pervasive influence of the state, and to the lack of serious reforms in the onshore sector" (World Bank 2014b, 48). A key problem was "privilege and unequal application of the rules of the game" that constrained competition. Weak governance was manifested in "discretion in the application of laws and regulations, inefficient procurement processes, rigged privatization, declassification of public land and assets and improper use of public banks." These factors were "binding constraints on domestic private investments."

The project portfolio informed by *DB* is generally successful in achieving stated project objectives. Of 137 IEG-validated evaluated projects involving 291 interventions (components), 87 were World Bank lending projects and 50 were IFC AS.[4] (World Bank advisory services and analytics projects have no validated evaluation framework.) At the intervention level, the World Bank had a success rate of 85 percent (134 out of 157). At the project level, this success rate was 70 percent. Within World Bank lending instruments, interventions in development policy loans and investment project financing had a similar success rate (85 and 86 percent, respectively), while specific investment loans were more successful, with 91 percent achieving their outcomes. Success rates were virtually identical in low-, lower-middle-, and upper-middle-income countries. For IFC AS, the success rate for *DB*-informed interventions was 78 percent, yet at the project level, it was 54 percent. Thus, for both, the overall success rate of *DB*-informed components was higher than that of the projects that they were a part of. This suggests *DB*-informed component objectives may point to one appeal of *DB*-informed components—their high likelihood to succeed.

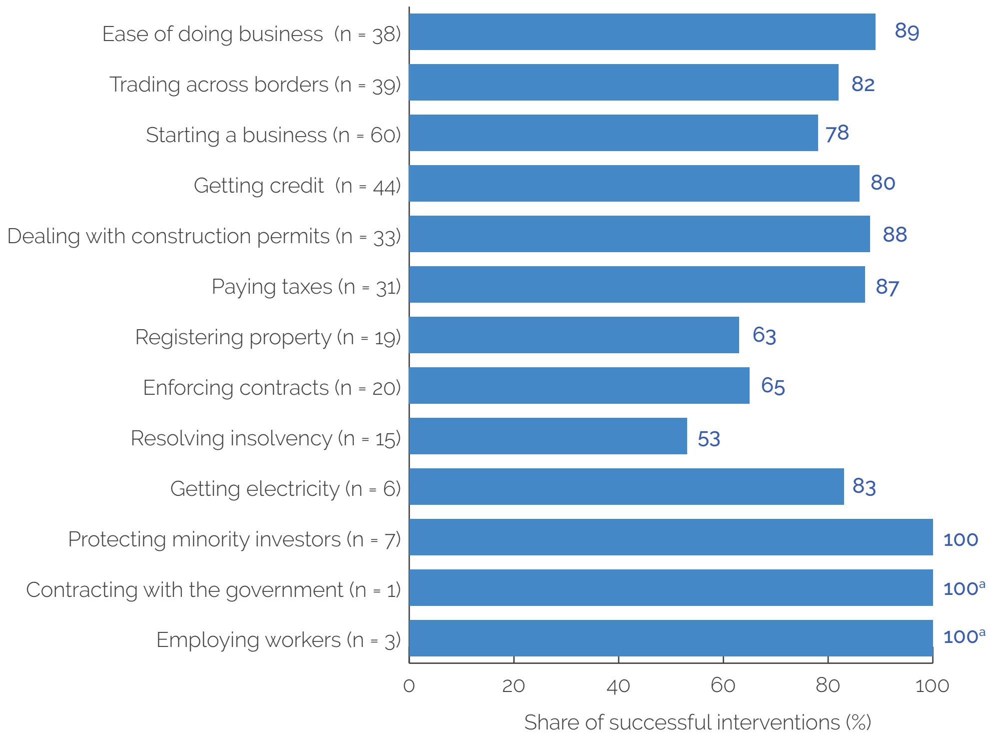
In the evaluated portfolio, success rates were lower in 3 of 12 specific indicator areas requiring deep institutional reforms—enforcing contracts, registering property, and resolving insolvency (figure 3.3). Projects on contracting with government and employing workers were extremely rare and even projects dealing with getting electricity and protecting minority investors were not common.

Regarding how *DB* indicators were used, projects using the indicators as justification were the most successful, followed by those using *DB* as a project indicator. Projects using *DB* as an objective or to generate indicators had somewhat lower rates of success (table 3.2). In terms of component objectives, setting up a reform agency was markedly less successful than others. Although components with other objectives were between 71 and 100 percent effective, reform agency components were only 57 percent effective for Bank lending, and 50 percent effective for IFC AS.

Of the 291 evaluated interventions, 262 had data on immediate outcomes of the work, ranging from more transparent tariffs to improved systems to reduced costs of compliance. In general, the data showed better success in achieving project component objectives than in improving immediate outcomes. The measurements least likely to show the desired change were improved administrative procedures (59 percent) and reduced days to complete procedures (63 percent).

Fewer than half of the evaluated interventions provided data on intermediate outcomes (figure 3.4). The most common of these to be reported were an increase in credit, cost savings for businesses, an increase in investment, and an increase in business entry. Of these, investment seemed to respond best to reforms (88 percent successful), followed by improved trade volume (67 percent) and business entry (64 percent). Other categories of intermediate outcomes, including higher tax compliance or revenue (44 percent), cost savings for businesses (25 percent), and an increase in formality (17 percent), indicated success less often.

Figure 3.3. Project Success by *Doing Business* Indicator Area, Fiscal Years 2010–20



Source: Independent Evaluation Group, portfolio review analysis.

Note: Figure is based on 291 interventions (which excludes 12 interventions with no data regarding their intervention outcomes). Interventions may be counted more than once since they can support multiple business areas. The share of successful interventions is defined as the proportion of interventions that achieved or mostly achieved their intervention outcomes.
a. Denotes n < 5 interventions.

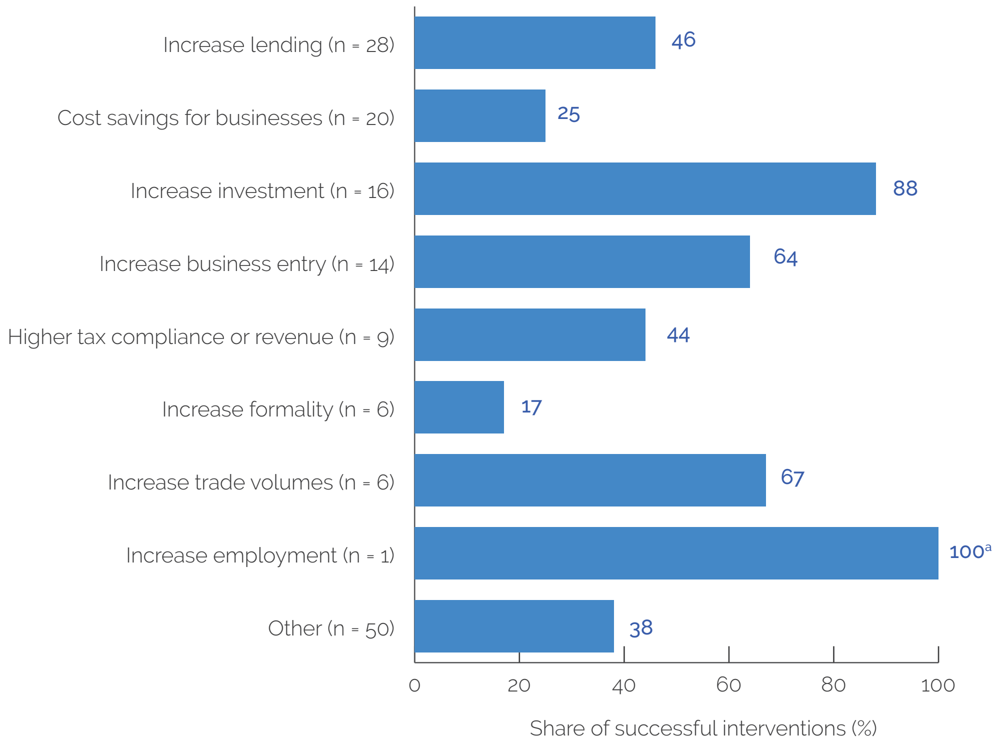
Table 3.2. Success Rate of *Doing Business*–Related Interventions by Type of Use of the *DB* Report, Fiscal Years 2010–20

Use of *DB* Report or Indicators	Indicators (no.)	Success (%)
As justification for project	183	82
As project indicator	142	80
As project objective	50	72
As support to generate *DB* report or to update indicators	6	67

Source: Independent Evaluation Group, portfolio review analysis.

Note: Table is based on 291 interventions (which excludes 12 interventions with no data regarding their intervention outcomes). Interventions may be counted more than once since they can use *DB* reports in multiple ways. *DB* = *Doing Business.*

Figure 3.4. Success Rate of *Doing Business*–Related Intermediate Outcomes, Fiscal Years 2010–20



Source: Independent Evaluation Group, portfolio review analysis.

Note: Figure shows the percentage of interventions above the line, World Bank Group validated by the Independent Evaluation Group. Figure is based on 150 intervention with outcomes (which excludes 153 interventions with no data regarding their immediate outcomes). Interventions have multiple intermediate outcomes. The share of successful interventions is the proportion of interventions that achieved or mostly achieved their intermediate outcomes.
a. Denotes n < 5 interventions.

Learning from Factors of Project Success

IEG’s review of evaluated projects found 696 references to factors to which project success or failure were attributed, most within the Bank Group’s control. Eighty-four percent of factors associated with project success and 82 percent of factors associated with project failure related to either quality at entry, project supervision, or monitoring and evaluation (figure 3.5):

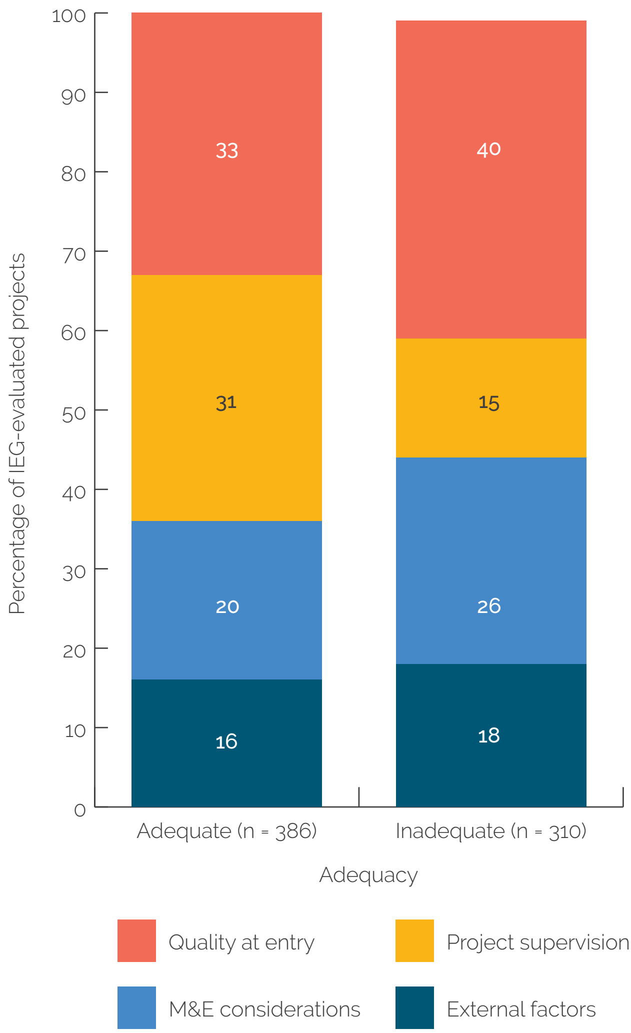
» Regarding quality at entry, the two most important factors were the role of accompanying or prior analytic work and proper identification of risks at appraisal. A negative factor was design complexity that exceeded implementation capacity.[5]

- During supervision, key factors included client engagement and follow-up, effective coordination with internal and external stakeholders, and flexibility of implementation.[6]
- The quality of monitoring and evaluation could contribute to or inhibit success.[7]
- Two external factors—client commitment and public sector institutional capacity—figured most importantly, although agency coordination and political economy factors also mattered in select cases.[8]
- Advisory services and analytics self-evaluations indicate success is more subject to external factors, led by political economy and agency coordination, and client commitment and capacity. Realism of the timetable, design simplicity, and elements of supervision ranging from client engagement to team composition were important internal factors.[9]

IEG's econometric analysis finds several factors significantly predictive of project success (appendix H). Contextually, the multivariate logistic regression found that, although country income level and region were not predictors of success, the degree of political stability was. Key internal factors were good up-front analytic work, strong coordination, and appropriate team composition. IEG did not gain insight into *DB* country reform development outcomes applying similar econometric analysis.

IEG's deep dives into Project Performance Assessment Reports and IFC AS projects highlighted several lessons of success and failure, reinforcing the analysis above but adding nuance (table 3.3; appendix I). They add five key success factors: focus on binding constraints, a strong interagency coordination unit, timely availability of expertise, longer-term and more comprehensive engagements, and public-private dialogue. The analysis also shows how capacity could be built, through learning by doing, sustainable funding mechanisms, timely and appropriate expertise, and careful selection of contractors. Value is found in the use of complementary indicators and analytics, as well as knowledge sharing and peer-to-peer learning.

Figure 3.5. Factors Influencing Outcomes in IEG-Evaluated Projects, Fiscal Years 2010–20



Source: Independent Evaluation Group, analysis of evaluated projects and portfolio review analysis.

Note: IEG = Independent Evaluation Group; M&E = monitoring and evaluation.

Table 3.3. Lessons from World Bank Lending and International Finance Corporation Advisory Services Projects

Success	Failure
1. Strong ownership/commitment from the government, coordinating ministry key (PPARs) needed to overcome inertia, vested interests.	1. *DB* provides limited evidence on relevance, priority of reforms
2. Strength of interagency coordination unit is key.	2. Mismatch between project complexity and client capacity hinders success.
3. Capacity is built by learning by doing, sustainable funding mechanisms; and with timely and appropriate expertise and careful selection of contractors.	3. Failure is more likely where there is a lack of focus on binding constraints.
4. Having the right technical expertise at the right time and place matters.	4. Governments need a proper framework for inter-governmental cooperation across agencies and central/regional government.
5. World Bank and IFC can complement each other through collaboration. World Bank Group organizational changes at times helped or hindered success.	5. One-stop shops and single windows need authority over the functions they combine, requiring process simplification and "back-office re-engineering," not just a simplified interface.
6. Deeper reforms require comprehensive and long-term engagement. Repeat interventions can be strategic or merely opportunistic.	6. Discontinuity of counterparts, regime change, and shifts in influence of champions can disrupt progress.
7. Many IFC AS projects use other primary indicators due to limited DB relevance, timeliness.	7. Global indicator standardization under *DB* may be out of alignment with industry standards.
8. Emerging lessons point to value of knowledge sharing, peer-to-peer learning.	8. Lender preference for immovable collateral, distrust, and technical issues may limit uptake of collateral registries.
9. There is value in public–private dialogue.	

Source: Independent Evaluation Group.

Note: AS = advisory services; *DB* = *Doing Business*; IFC = International Finance Corporation.

[1] As indicated in figure 3.2, there were 24 additional claims of benefits to Doing Business reform that did not specifically identify what those benefits were.

[2] Of the 89 claims, 14 (16 percent) did not mention a source, and 8 mentioned prior World Bank publications (including *DB* reports), while the remaining 67 claims referenced specific papers. These 67 claims made 117 references to published literature; however, 39 of those references were mentioned in multiple *DB* reports, leaving only 77 unique sources. Excluding eight general claim references related to overall improvements in areas tracked by the ease of doing business index, the total number of papers referenced is 69. Of these 69 references, only 31 could be found in the bibliographic database maintained by the *DB* team from 100 leading journals. Of these, 24 could be mapped to a specific business area where a clear link of intervention to outcome might be established. Of these, 10 were identified by the Independent Evaluation Group in its desk review of literature as providing relevant evidence on outcomes for specific indicators, while seven of these 10 were validated by multiple articles (box 3.2). Two of the 12 suffered from mixed evidence where one finding contradicted another in the literature pool. Taking the structured literature review as a basis for rigorous study of outcomes, only 8 (13 percent) of the 69 references to published literature can be found in the structured literature review.

[3] This section draws from the following Country Program Evaluations (CPEs) and Completion and Learning Report Reviews (CLRRs) and a Performance and Learning Review:
Albania CPE (World Bank 2021a),
Benin CLRR (World Bank 2018a),
Bhutan Performance and Learning Review (World Bank 2017c),
Cluster CPE on Small States: Organisation of Eastern Caribbean States (World Bank 2016b),
Kyrgyz Republic CLRR (World Bank 2018c),
Cluster CPE on Small States: Mauritius (World Bank 2016a),
Mexico CPE (World Bank 2018d),
Philippines CPE (World Bank 2019d),
Romania CLRR (World Bank 2018e),
Rwanda CPE (World Bank 2019c),
Tunisia CPE (World Bank 2014b),
Zambia CLRR (World Bank 2019e)

[4] Information was drawn from Implementation Completion and Results Report Reviews, Expanded Project Supervision Reports, and evaluative notes. Effectiveness, learning, and environmental and social aspects sections apply only to projects evaluated by the Independent

Evaluation Group. Twelve additional interventions were identified within these projects for which no relevant data were available on effectiveness.

[5] Positive examples: Senegal Economic Governance Project (P113801; analytic work); Nigeria's Lagos State Development Policy Operation II Project (P123352; identification and mitigation of risks). Negative examples include Côte d'Ivoire's Second Poverty Reduction Support Credit Project (P143781) and Pakistan's ADR Phase 2 (inadequate prior analysis—where the project suffered from insufficient up-front analysis of stakeholders as part of its due diligence, and Sierra Leone Financial Sector Support TA Project (P121514) which suffered from design complexity.

[6] Positive examples: IFC Liberia Investment Climate Advisory Services Phase 3 Project (577647; engagement with counterparts); IFC's Costa Rica Secured Transactions and Collateral Registries Project (coordination with a broad range of stakeholders); Tajikistan Private Sector Competitiveness Project (P130091; adaptation to challenges).

[7] Positive example: Mauritius Fourth Trade and Competitiveness Development Policy Loan (P116608; well-designed monitoring and evaluation [M&E] system). Negative examples: Kyrgyz Republic's Development Policy Operation 1 Project (P126034; weak M&E coordination and integration); Togo's Private Sector Development Support Project (P122326; weak M&E oversight and coordination).

[8] Positive examples: Ukraine's 2015 Second Development Policy Loan (P151479; client commitment); Colombia's 2014 Taxes Program (599785; client commitment, stakeholder buy-in). Negative examples: Senegal Economic Governance Project (P113801; client commitment); Philippines' 2014 Third Development Policy Loan (P147803; capacity constraints); IFC Investment Climate in the Caribbean Advisory Services Project (567627; limited counterpart skills, capacity).

[9] Unlike World Bank lending and IFC advisory services, the framework for World Bank advisory services and analytics self-evaluation has neither been agreed to nor validated by the Independent Evaluation Group. Furthermore, the potential biases of unvalidated self-evaluation are evident from the overwhelming reported effectiveness rate of reimbursable advisory services (96 percent).

4 | Recommendations to Improve the Use of *Doing Business* in Country Reforms

Highlights

Doing Business (*DB*) indicators are most relevant to motivating countries to reform their legal and regulatory environment for business and pointing to areas for reform within their coverage area. They are best used in conjunction with complementary analysis and indicators that ensure limited development resources are focused on binding constraints. *DB* indicators are less relevant as project-level objectives or success metrics.

Although *DB* has both influence and value, it is vital that the resource be as accurate and informative as possible and that it learn from evidence. Indicators suffer from inadequate feedback loops from research and field experience to their design and application.

DB reports have made many claims for the benefits of measured country reforms that go beyond rigorous or replicated evidence. By favoring supportive evidence and by not establishing strong criteria for filtering evidence, the reports open the door for critics of their objectivity and accuracy, posing a reputational risk to the World Bank Group and potentially misleading clients and stakeholders.

The evidence presented in this evaluation shows that *DB* indicators are powerful motivators of countries to reform their legal and regulatory environment for business. The high-profile *DB* report and indicators and the competition bred by country ranking are nearly uniformly recognized as features that motivate countries to engage in legal and regulatory reforms to enhance their business environments. Pragmatically, most experts judged this benefit to outweigh some of the methodological imperfections in the indicators and their indexation and ranking. In an institution that emphasizes the contribution of the private sector to development, being able to engage countries in enhancing conditions for doing business matters. The indicators have further shown value in pointing to problematic areas for reform within the areas they cover.

As a guide to binding constraints, *DB* is limited by its own coverage and methods. The stylization and economy of scope and data collection that make *DB* possible as an annual report on 190 countries' regulatory conditions also necessitate careful application. This evaluation shows that in many country contexts, the following is true: (i) other factors—including policy, structural, and institutional ones—are essential for progress on the business environment; (ii) there is a broader or deeper reform agenda than that captured by the *DB* indicators; and (iii) the *DB* methodology and base case scenario may not necessarily reflect local conditions.

Given limited country reform bandwidth and resources, it is vital to contextualize the strongly motivating messages of *DB* rankings with complementary sources of information to guide country reform priorities. It is in the interest of the client countries and the Bank Group to focus on the reforms yielding the greatest benefit. The integration of *DB* with other sources of data and analytic guidance seems to work well. The more sophisticated country users of *DB* (for example, Colombia) and the most sophisticated Bank Group analyses (for example, recent CPSDs) do this as a matter of course. More generally, it is vital for all users of *DB* to bring other sources of evidence and analytic tools to bear in determining reform priorities. This would also resonate with earlier IEG recommendations (see World Bank 2015b; World Bank 2019b) about considering the policy objectives, such as protecting public health and safety, not just the compliance costs, of regulations. Such a broader set of sources has generally not been reflected in *DB* reform memos, but it is evident in many country cases over the broader reform dialogue. The Bank Group needs to provide such context in its guidance, not only in textual caveats in *DB* reports, but at all stages of engagement.

Recommendation 1. In line with much existing practice, the Bank Group should continue to use *DB* to motivate client engagement and to assist in reform focus within its menu of regulatory areas—but only where the priority and nature of reforms are confirmed by complementary analytics. The intended outcome of this recommendation is that when countries engage with the Bank Group on business environment reform, they are consistently offered guidance based on a balance of appropriate evidence sources and frameworks.

Although the available evidence on the benefits of improving conditions measured by *DB* is mostly positive for development outcomes, strong evidence is limited by indicator area and type of reform. It is important, therefore, to recognize the limited understanding of the extent to which improvements in *DB* indicators result in improved development outcomes. Further, the evidence gathered in this evaluation shows that substantive reforms can fail to move the indicators and that, even if they do, such reforms may not yield substantial development benefits. The same features that enable *DB* to be produced annually and globally limit its value as an indicator of progress and especially as an explicit objective of reform. By covering only one to two cities and an often-hypothetical specific company or transaction, *DB* is made possible but also constrained. A common complaint from client countries is that *DB* indicators are not granular enough to track their reform implementation. Given this lack of granularity, IEG found that IFC AS has largely stopped using *DB* indicators as primary monitoring indicators. In addition, establishing *DB* indicators as project objectives invites the kind of strategic behavior that narrows focus to just influencing the indicator, rather than addressing the full substantive area of reform. It can increase the kind of pressure on the Bank Group from clients to improve indicators that was identified in the Group Internal Audit Vice Presidency audit (World Bank Group 2020). Yet 42 percent of the identified portfolio used *DB* indicators as project objectives, project indicators, or both.

Recommendation 2. Consistent with good practice, the Bank Group should avoid using *DB* indicators as explicit reform objectives or monitoring indicators in projects and country strategies and, where avoidable, should not use *DB* as primary indicators of reform progress. The intended outcome is to reduce a practice that ties project success to movement in *DB* indicators, which has proven difficult and potentially misleading, eliminating the usage of *DB* as a sole indicator or objective and focusing instead on more tailored and granular indicators of success.

DB indicators currently suffer from inadequate feedback loops from research and field experience to their design and application. While it is important to recognize the influence and value of *DB*, it is also vital that the resource be made as accurate and informative as possible and that it learn from evidence. Complementary work by DEC's expert committee will provide greater insights into potential improvements in the methodology of individual indicators. IEG found limitations in the extent to which indicators reflect evidence and experience. First, there are indicators for which there is little evidence regarding the economic relevance of what the indicators measure. DWCP and getting electricity are important areas for indicators, but there is no rigorous empirical support for outcomes linked to the aspects that *DB* indicators currently capture. Little rigorous evidence is available overall on getting electricity, registering property, and enforcing contracts. Three scholarly articles in the *DB* literature database question the ability of DWCP to capture the real difficulty of building regulations for domestic SMEs. This raises the question, why would the Bank Group continue to produce indicators and promote reforms based on them without firm evidence of their development benefits?

Standard assumptions about how compliance costs and time are influenced by "steps" and "documents" may be challenged by digitalization and e-government. It is vital, therefore, that indicators keep up with changes in technology. For example, use of big data and the growth of digital financial services may erode the relevance of traditional credit information systems.

Although this evaluation recognizes that changes to *DB* indicators have costs to client countries and to researchers, well-communicated and infrequent changes to indicators can improve their accuracy without imperiling their benefits. This is confirmed by the generally benign view many experts have of several past reforms to indicators. In spite of the acknowledged costs of discontinuities in indicators, underscored by the 2018 external audit (Morck and Shou 2018), there are ways to limit these costs.

Given its influence, it is desirable for the *DB* approach to capture a fuller range of regulatory, legal, and institutional conditions that influence the life cycle of enterprises. IEG has examined this issue before (World Bank 2015b), as have many others, highlighting areas ranging from consumer and environmental protection to competition and intellectual property regulation. Even in areas nominally covered, aspects of some key regulations—like sectoral business licensing and many areas of contract law—remain out of scope.

Recommendation 3. The Bank Group should update *DB* indicator areas and definitions at regular and predictable intervals to reflect learning from research and field experience. Doing so will improve links to important development outcomes, strengthen relevance to the experience of domestic SMEs, and adapt to technological changes in the areas covered by the indicators. The intended outcome is for the Bank Group to deliver the best possible information to country clients to inform their business environment reforms as guided by research and field experience. The indicator agenda and characteristics should reflect ongoing learning from evidence and experience, showing what matters and the need to adapt to technological changes in areas covered. Similarly, advice to client countries on appropriate reform models conveyed through the *DB* report, projects, and knowledge sharing should reflect such learning. Where review of evidence (like that undertaken for this evaluation) reveals knowledge gaps, this has direct implications for a strategic program of research to fill such knowledge gaps. Effective feedback loops require both a steady flow of information from which to learn—from research and monitoring and evaluation—and routines through which *DB* indicators can adapt to such feedback with the least disruption to users. Disruption caused by such updates can be managed by making such changes infrequently and predictably, by engaging in a transparent and consultative process, and by maintaining former indicator series for a period of years after changes are introduced.

DB reports have made many claims for the benefits of measured reforms that go beyond rigorous or replicated evidence. By favoring supportive evidence and by not establishing strong criteria for filtering evidence, the reports open the door for critics to question the objectivity and accuracy of this important resource. This also poses a reputational risk to the Bank Group and Development Economics Vice Presidency and may mislead clients and stakeholders. This evaluation shows how *DB* reports, alongside some robust claims, forward some claims on the relationship of changes in areas measured by its indicators to development outcomes that have no clear evidence, some with inadequate evidence, and some where evidence is mixed. The criteria for selecting and featuring such claims is not transparent or consistent, but the general tone is one of advocacy. This does not seem needed or advantageous given the traction *DB* has found worldwide and the considerable evidence in the literature cited in this evaluation validating important parts of its agenda. IEG's SLR shows that rigorous methods and evidence are available and implementable. Where there are gaps, it establishes an excellent agenda for future research. The Bank Group need not set its criteria for selecting evidence at the level of the SLR, but it should establish, publicize, and apply its criteria.

Recommendation 4. The Bank Group should strengthen the accuracy and validity of *DB* claims in *DB* reports and related communications in line with robust evidence. The intended outcome is to produce *DB* reports that accurately inform their audience about the relationship of *DB* indicators to outcomes based on robust evidence. As a leading publication from the research arm of the World Bank, the Bank Group needs to ensure that claims made in *DB* reports are robustly substantiated by research and refrain from claims that are not. It should adopt clear standards of evidence and commission DEC or outside research if evidence is lacking.

The ultimate outcome sought with this set of recommendations is to build on the many good practices observed in the course of this evaluation. In doing so, the Bank Group could ensure that the *DB* indicators maintain their substantial power of motivating and engaging client countries in business environment reform, in a manner that guides clients to prioritize the reforms with the greatest development benefits for their socioeconomic situation, based on a balanced and accurate consideration of evidence.

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APPENDIXES

Independent Evaluation Group

The Development Effectiveness of the Use of Doing Business *Indicators, Fiscal Years 2010–20*

Appendix A. Methodology

Evaluation Objective

The evaluation explored the accuracy and usefulness of the *Doing Business* (*DB*) report and indicators in identifying reform priorities, guiding the design of reforms, and monitoring the progress of reforms. It probed available sources for evidence of the benefits of *DB*-related reforms for improving investment and employment, inequality, and other country development objectives. It also gathered and reported available information on the social and environmental consequences of *DB*-related reforms, the comprehensiveness of *DB* as a guide to investment climate reform, and the value (and challenges) of aggregated *DB* indicators, including the "ease of doing business" score.

The evaluation objective inspired two lines of inquiry that guided data collection and analysis (box A.1). Evaluation questions were designed to break the topic into tractable components in the areas of *DB* influence, relevance, and effectiveness, and factors affecting the outcomes of *DB* support.

Box A.1. The Evaluation's Two Lines of Inquiry

Doing the Right Things: This line of inquiry examined the relevance of indicators to country contexts and priorities, substantive dimensions of the areas they cover, and World Bank Group strategic and operational priorities.

Doing Things Right: This line of inquiry examined whether *Doing Business* has been used effectively by the Bank Group and client countries to achieve intended immediate and intermediate business environment reform outcomes, subject to broader policy priorities.

Source: Independent Evaluation Group.

Evaluation Questions

The evaluation sought to answer the questions in table A.1 under an overarching question about lessons from the use of *DB* in guiding business environment reforms in client countries over the period of fiscal years 2010–20 (FY10–20). The evaluation questions were informed by a review of literature, previous Independent Evaluation Group (IEG) evaluations, and consultations with subject matter experts in business environment reform.

Table A.1. Evaluation Questions

Evaluation Questions	Data Collection and Analysis Methods	Strengths and Limitations
Is *DB* doing the right things in terms of specific indicators and country contexts?		
1. Doing the Right Things: What is the relevance of *DB* indicators to » The business environment priorities of client countries? » The substantive dimensions within each indicator's focus area? » World Bank Group strategic and operational priorities?	Literature review; synthesis of available evaluative materials and country case studies; review of country strategies, diagnostics, and evaluations; PRA of approved projects; prior IEG country-based evaluations; deep dives for individual *DB* areas; statistical and econometric analysis.	» Volume and breadth of available literature. » Access to new tools to enhance identification of correct portfolio. » Limited external, independent evaluations of *DB* use, with many gaps. » Inconsistent sources on use of *DB* indicators in client country reforms, with many gaps. » COVID-19 limitations on fieldwork.

(continued)

Evaluation Questions	Data Collection and Analysis Methods	Strengths and Limitations
Is *DB* being used by clients and the Bank Group in the right ways to achieve the best effect for business environment reform?		
2. Doing Things Right: Is *DB* » Effectively achieving desired outcomes? » Being used by clients and the Bank Group to achieve the best outcomes for business environment reform (for example, entry, investment, and employment) subject to broader policy priorities (for example, public safety, equity, and the environment)?	Structured literature review, PRA of evaluated projects, including PPARs; review of country-based evaluations; country case studies; expert and stakeholder interviews; analysis, deep dives for individual *DB* areas; statistical and econometric analysis of *DB* and external indicators of effectiveness.	» Consistent triangulation between quantitative and qualitative methodologies to draw findings and conclusions. » Country case studies selected based partly on the size and diversity of interventions supported or not supported by the Bank Group. » Biases inherent in interviews. » Project evaluations rarely showing outcomes or whether reforms were sustained. » COVID-19 limitations on fieldwork.

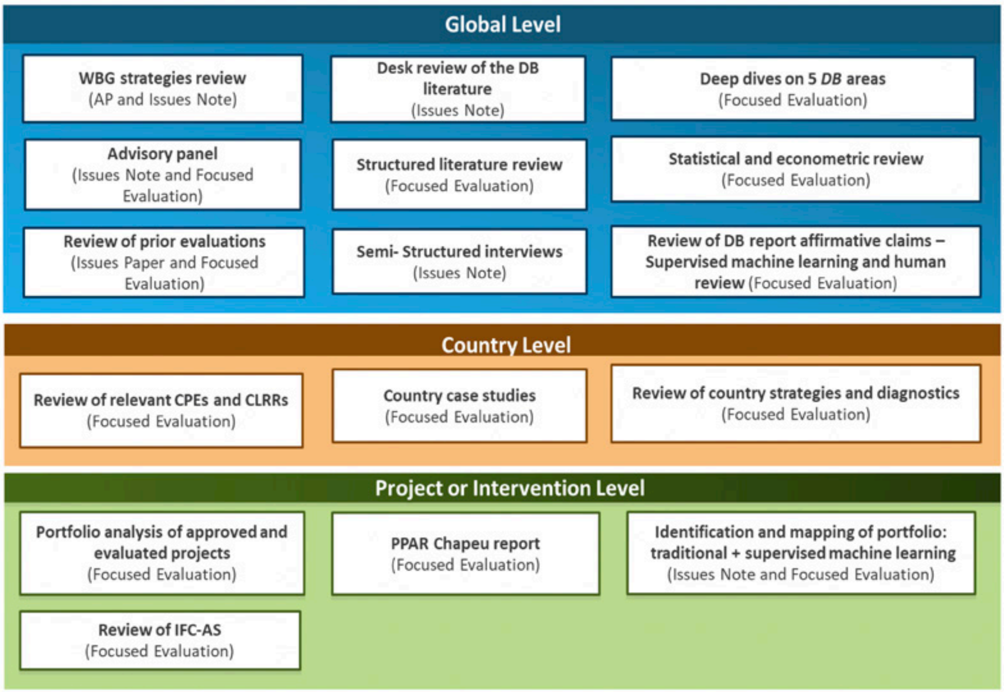
Source: Independent Evaluation Group.

Note: DB = *Doing Business*; IEG = Independent Evaluation Group; PPAR = Project Performance Assessment Report; PRA = portfolio review and analysis.

Overarching Principles and Methods Design

Three central principles motivated the evaluation design: theory-based evaluation, mixed-methods analysis, and multilevel analysis. First, the evaluation adopted a theory-based approach that sought to understand the linkages between interventions supported by *DB*, World Bank Group, or client governments, and country-level reforms based on the influence model elaborated. Second, the evaluation also applied a mixed-methods approach that combined an array of complementary methods for data collection and analysis (for example, internal project-level data, external country data sets, project performance data, semistructured interviews, case studies, sector deep dives, and literature reviews), and then triangulated to ensure robust findings. Third, the evaluation used three levels of analysis—global, country, and project or intervention level (figure A.1), which provided information on whether and how country reforms and Bank Group programs and projects that were related to *DB* succeeded or not, including factors associated with their success or failure.

Figure A.1. Products, Methods, and Levels of Analysis



Source: Independent Evaluation Group.

Note: AP = Approach Paper; CLRR = Completion and Learning Report Review; CPE = Country Program Evaluation; *DB* = *Doing Business*; IFC-AS = International Finance Corporation advisory services; PPAR = Project Performance Assessment Report.

The global level of analysis was supported by the structured literature review, analysis of Bank Group strategies and policies, deep dives into a subset of areas measured by *DB*, an expert panel discussion, review of *DB* report affirmative claims, review of prior evaluations, structured interviews of key informants, and a quantitative analysis of the *DB* indicators and indexes. At the country level, the evaluation collected data and evidence through the following methods: Bank Group country strategy and diagnostics analysis, country case studies, comparative case analysis, and review of relevant Country Program Evaluations and Completion and Learning Report Reviews (CLRRs; figure A.1). At the project or intervention level, a portfolio review analysis and deeper reviews of International Finance Corporation advisory services (IFC AS) evaluated projects and of evaluated Project Performance Assessment Reports for World Bank lending projects were conducted to understand the breadth of interventions undertaken by the Bank Group to support *DB* reforms.

The evaluation produced two deliverables:

- First, an Issues Paper that took stock of existing evidence on *DB* relevance, identified key issues, and elaborated a framework and testable hypotheses for the deeper analysis of a full evaluation to follow.
- Second, this focused evaluation that applies the theory of change and lines of inquiry (and their explicit hypotheses) generated in the first product (table A.2). This product answers questions about relevance and effectiveness in terms of both immediate and intermediate outcomes.

Table A.2. Evaluation Questions, Lines of Inquiry, and Hypotheses

Evaluation Question	Line of Inquiry	Explicit Hypotheses
1. What is the relevance of *DB* indicators to a. The business environment priorities of client countries? b. The substantive dimensions within each indicator's focus area? c. World Bank Group strategic and operational priorities?	Whether all *DB* indicators are relevant to constraints influencing business dynamics and economic contribution of policy reforms.	*DB* indicators vary in their relevance to the key constraints influencing business dynamics, hence the economic contribution of reforms, based on the area and the country context.
1a and 2b Are clients using *DB* to achieve improved outcomes for business environment reform in line with the country's development policy priorities?	Whether (i) client institutional capacity and ability (high vs. low) to tailor the use of *DB* indicators to its development priorities and framework and (ii) client motivation (for example, to achieve policy reform vs. improve *DB* ranking) are key influences on the use and appropriateness of *DB* indicators.	Client institutional capacity and capability is a key factor influencing how *DB* indicators should be used and whether their use is effective. Client motivation is a key factor influencing the how *DB* indicators should be used and whether their use is effective.

(continued)

Evaluation Question	Line of Inquiry	Explicit Hypotheses
1a, 1b, 2b	Whether *DB* indicators are useful to (i) draw attention and resources to business environment reform in areas they measure directly, (ii) draw attention and resources to business environment reform beyond the areas they measure directly, (iii) correctly identify and order priority reform areas, and (iv) monitor and evaluate reform implementation.	*DB* indicators are useful to draw attention and resources to legal and regulatory reforms in the areas they directly measure. *DB* indicators are useful to motivate broader processes of business environment reform. *DB* indicators are useful for identifying binding constraints and priority reforms. *DB* indicators are useful to monitor and evaluate reform progress.
1a, 1b, 2a, 2b	Whether complementary data and guidance enhance the relevance of *DB* indicators to business environment reforms and the ability to follow with complementary or deepening reforms.	*DB* indicators are more effectively used in conjunction with complementary data and guidance to enhance the relevance, comprehensiveness, and depth of corresponding business environment reforms.
2a. Is *DB* reform achieving desired outcomes? And derives from feedback loop in theory of change.	Whether the feedback loops between available empirical evidence and *DB* indicator design and use are robust.	*DB* benefits from robust feedback loops between empirical evidence (research and evaluative data) and indicator design.
1c. and derives from challenges regarding data integrity.	Whether current institutional arrangements separating indicator generation from project work (including reimbursable assistance) are adequate to prevent a perception of conflict of interest within the World Bank Group.	Current institutional arrangements separating *DB* indicator generation from *DB* reform project work (including reimbursable assistance) are adequate to prevent a perception of conflict of interest within the World Bank Group.

Source: Independent Evaluation Group.

Note: DB = Doing Business.

Evaluation Components

As noted, this IEG evaluation uses several evaluation tools and methods to understand and assess the relevance and effectiveness of the use of *DB* indicators at the global, country, and project or intervention levels. In preparation, each line of inquiry identified in the Issues Paper and its subordinate evaluation hypothesis was explored applying a constellation of tools to provide evidence. Table A.3 maps the tools that were most helpful in illuminating the lines of inquiry. The Approach Paper has highlighted the limitations of each of these methodologies, and the need and intention for triangulation to enhance the robustness of findings. Potential error is limited by drawing evidence from multiple sources to test each hypothesis.

Table A.3. Lines of Inquiry and Evaluation Tools

Main Lines of Inquiry	Evaluation Tools Used to Test Hypotheses						
	PRA	SLR	IDD	CCS	CLR	SSI	SER
1. All *DB* indicators are relevant/are not relevant to constraints influencing business dynamics and economic contribution of policy reforms.		X	X	X	X	X	X
2. The following factors are/are not key at influencing the use and appropriateness of *DB* indicators include							
a. Client institutional capacity and ability (high vs. low) to tailor use of indicators to its development priorities and framework;	X			X	X	X	X
b. Client motivation (for example, achieve policy reform vs. improve *DB* ranking).	X			X	X	X	X
3. *DB* indicators are useful/not useful for							
a. Drawing attention and resources to business environment reform in areas they measure directly;			X	X	X	X	
b. Drawing attention and resources to business environment reform beyond the areas they measure directly;			X	X	X	X	
c. Correctly identifying and ordering priority reform areas;			X	X	X	X	
d. Monitoring and evaluating reform implementation.	X		X	X	X	X	
4. Complementary data and guidance enhance/do not enhance the relevance of *DB* indicators to business environment reforms and the ability to follow with complementary or deepening reforms.			X	X	X	X	

(continued)

Main Lines of Inquiry	Evaluation Tools Used to Test Hypotheses						
	PRA	SLR	IDD	CCS	CLR	SSI	SER
5. The feedback loops between empirical evidence and indicator design and use are robust/weak.		X	X	X		X	
6. Current institutional arrangements separating indicator generation from project work are adequate/inadequate to prevent a perception of conflict of interest.				X		X	

Source: Independent Evaluation Group.

Note: DB = *Doing Business*; CCS = country case studies; CLR = country-level reviews of strategies and diagnostics; IDD = indicator-specific deep dives; PRA = portfolio review and analysis; SER = statistical and econometric analysis; SLR = structured literature review; SSI = semistructured interviews.

Portfolio Review and Analysis

The evaluation conducted a systematic desk review and assessment of projects to identify design features and characteristics, achievement of objectives, drivers of success and failure, and achievement of social objectives. Consistent with the Approach Paper, a *DB*-informed project was one that referenced *DB* indicators in its justification, objectives, or indicators. A combination of manual identification, manual codification, and supervised machine learning methods was used to identify all Bank Group projects approved between FY10 and FY20 that were informed by the *DB* report or indicators in their objectives, components, and result matrices, and that had relevant influence in their motivation (figure A.2). Feedback from the World Bank and IFC was also incorporated in the final portfolio identification.

The overall objective of the identification methodology was to classify projects that referenced *DB* indicators or relevant dimensions in their rationale, objectives, components, or result matrices. The manual identification process is the method traditionally used by IEG; however, the identification of projects was challenging because the team could only extract information about projects' objectives and titles, and project result matrices from the data warehouse. In this sense, some projects qualified as being informed by *DB* were still missing. Thus, IEG decided to also undertake a pilot automatized process using supervised learning methods, and experiment with what this second identification process would indicate. IEG manually reviewed the sample to assure the identified projects qualified. A comparison between both categorizations allowed IEG to assure full project-level description while assessing the pilot's accuracy and pertinent improvements. The protocol guiding this process is outlined in the following sections.

Figure A.2. Identification Methodologies in Place

Manual identification

- Systematic searching throughout projects' titles, objectives, and results matrices to identify those that mentioned:
  - At least one keyword previously defined in titles and objectives
  - DB indicators and subindicators in results matrices

Manual codification

- Analysis of identified project's intervention types and characteristics in two stages:
  - **Issues note**, covering 35% of opertations, randomly chosen and stratified per institution, income level and region
  - **Focused evaluation**, covering 100% of identified WB lending, IFC projects and Reimbursable Advisory Services and 50% sample of WB-ASA Non-Reimbursable.

Supervised machine learning

- Use of shallow and deep learning techniques to identify projects that referenced DB indicators or relevant dimensions in their rationale.
- The team **manually validated** project documentation of 107 projects to assess the classification of DB-related projects., representing a random sample of 40% plus the projects that were considered for the countries' case of studies.

Source: Independent Evaluation Group.

Note: ASA = advisory services and analytics; *DB* = *Doing Business*; IFC = International Finance Corporation.

Manual Identification

First, IEG conducted a systematic keyword search of projects' objectives and titles and looked for *DB* indicators and subindicators in projects' result matrices. IEG selected those that contained at least one of the targeted keywords described in table A.4.

Table A.4. Keyword Search Strategy to Identify *Doing Business* Portfolio

Area of Business Regulation	Keywords Used
General	doing business/business environment/business regulation/business operation/regulatory reform
Starting a business	procedure/time/cost **with** start/starting
Dealing with construction permits	procedure/time/cost **with** construction permit(s)
Getting electricity	procedure/time/cost **with** electricity
Registering property	(property **with** procedure/time/cost) **and** (land **with** administration)
Getting credit	(bureau/registry/information **with** credit) **and** (movable collateral **with** laws)
Protecting minority investors	minority **with** rights
Paying taxes	paying taxes/tax payment/time to comply
Trading across borders	trading across borders **and** (time/cost/documents **with** import/export)
Enforcing contracts	time/cost **with** dispute
Resolving insolvency	time/cost/recovery rate/legal framework **with** insolvency
Employing workers	employment **with** regulation
Contracting with the government	(time/procedure **with** procurement) **and** (procurement **with** regulatory framework)

Source: Independent Evaluation Group, portfolio review analysis.

Note: Of the projects identified through the keywords search strategy, 20 percent were identified based on keywords included in the general category.

When the project objective was not available in the business warehouse project list, IEG adopted an alternative strategy, according to the institution. For World Bank projects, if the project objective was not available in the business warehouse project list, IEG searched relevant themes for alignment with *DB* areas (see table A.5). World Bank advisory services and analytics (ASA) included the economic and sector work and technical assistance product lines from operations approved between FY10 and FY18, as these are the product lines that identify sectors and thematic codes. But because the five ASA product lines (economic and sector work, technical assistance, IW, TE, and PA) were replaced with the AA code after FY18, IEG used this code for the operations approved in FY19 and FY20. For IFC projects, if the project objective was not available, IEG used relevant business lines summarized in table A.5.

Table A.5. Bank Group System Codes to Identify *Doing Business* Portfolio

World Bank Lending and ASA	International Finance Corporation
Theme codes: » Business enabling environment (21) » Energy and policy reform (862) » Access to energy (863) » Personal and property rights (423) » Financial infrastructure and access (32) » Tax policy (114) » Trade (14) » Legal institutions for a market economy (422) » Judicial and other dispute resolution mechanism (421) » Labor markets institutions (662) » Transparency, accountability and good governance, procurement (432)	Business line products and sector names: » Economic and private sector development – climate business area » A2F – credit bureaus (D) » FAM – collateral registries/secured transactions (ID) » EFI – credit infrastructures (ENT) » IC – investment policy (I-D) » IC – discontinued product – access to land (EXT) » IC – discontinued product – business taxation (I-D) » IC – trade logistics (I-D) » IC – debt resolution and business exit (ENT) » Investment climate – business regulation (D) » SBA – sustainable and inclusive investing (ENT) » SBA – environmental, social and trade standards (ENT) » TAC – business environment (D) » Credit information services (O-KB)

Source: Independent Evaluation Group.

Note: ASA = advisory services and analytics.

This process identified 1,669 potential *DB* projects: 372 World Bank lending projects, 916 World Bank nonreimbursable advisory services and analytics projects (World Bank ASA and World Bank RAS), 380 IFC AS projects, and 1 IFC investment services (IFC IS) project that was approved between FY10 and FY20.

Manual Codification

To analyze the selected projects' intervention types and characteristics, IEG conducted the manual coding of the portfolio in two stages:

- Issues Note. To expedite early understanding of the portfolio, the team initially reviewed 577 projects (a 35 percent sample), composed of 192 World Bank lending (52 percent of their identified portfolio), 225 World Bank ASA and World Bank RAS (25 percent), 159 IFC AS (42 percent), and 1 IFC IS (100 percent). The sample was random and stratified by institution, income level, and region.
- Focused evaluation. The team manually reviewed project documentation of all 372 World Bank lending, 380 IFC AS, 1 IFC IS, 127 World Bank RAS identified projects, and a 50 percent random sample of the World Bank ASA to understand *DB* projects' intervention types and characteristics. In addition to the sample of 50 percent of the World Bank ASA projects, the team also analyzed the ones that were considered for the countries' case studies. So, in total, we analyzed 57 percent of the World Bank ASA projects.

While this systematic approach prioritized keyword searches of project objectives, as well as indicators in project result matrices, the team also read projects' documentation to include those whose objectives, components, and result matrices were informed by the *DB* report and those where *DB* had a relevant influence on their rationale or motivation. The team followed a strict protocol, including a double-check routine to guarantee quality control.

Supervised Learning Methods

In collaboration with IEG's methods advisory team, the evaluation complemented manual coding with automatic coding, adapting both shallow and deep learning techniques for classification. This was a pilot aimed at identifying World Bank lending projects that used *DB* in their rationale. This process was especially useful to identify qualifying projects that were excluded from initial human search (possible false negatives). The team used the following steps to identify those projects:

» Initiation: The methods advisory team integrated relevant details from the underlying portfolio into a preliminary conceptual framework. The framework incorporated an aggregate description of the portfolio and assessed the composition of the input data to identify any potential challenges that might be encountered in content analysis.

» Taxonomy: Building on insights from the learning sample already completed, a taxonomy was generated using a combination of both manual and automatic label recognition techniques, yielding a coding scheme for the classification of salient *DB* influence in the portfolio.

» Automatic coding: This step integrated both shallow and deep learning techniques for classification. Shallow learning techniques (for example, n-gram analysis, term frequency—inverse document frequency) provided a sense of overarching patterns in the data, generating a broad assessment of relative *DB* occurrences in the portfolio. Deep learning techniques were used to derive contextual meaning and add granularity to the coding scheme. Manual and automatic coding occurred iteratively along with intercoder reliability tests to improve the reliability and validity of the taxonomy.

» Deployment: Once the taxonomy was sufficiently fine-tuned, it was deployed against the documents. Output from supervised learning was iteratively validated to ensure consistency relative to the original taxonomy.[1] Searches were conducted in structured text data available in the system (for example, PDO, component titles, indicators).

» Validation: This process identified 226 potential World Bank lending *DB*-related projects. The team manually validated project documentation of 107 projects to assess the classification of *DB*-related projects, representing a random sample of 40 percent plus the projects that were considered for the countries' case of studies.

World Bank Group Strategies Review

IEG reviewed *Forward Look: A Vision for the World Bank Group in 2030* and *IFC 3.0* to identify if they referenced the *DB* report or indicators to any extent. The team also examined the *World Bank Annual Report 2019* and *IFC Annual Report 2019*. Two main findings arose from this review:

1. Although *DB* is not explicitly embraced in Bank Group strategies, regulatory reform is.

2. The Bank Group often focuses resources on improving countries' business environment using *DB* as a metric.

Advisory Panel

An ad hoc advisory panel, comprising two internal and two external experts, provided guidance at two different stages of the evaluation.

Review of Prior Evaluations

The team reviewed independent reviews and evaluations which IEG and the World Bank have either conducted or commissioned in the past 12 years to assess *DB* indicators and their use. The prior work includes IEG's 2008 evaluation *Doing Business: An Independent Evaluation—Taking the Measure of the World Bank-IFC Doing Business Indicators* and IEG's 2015 evaluation *Investment Climate Reforms: An Independent Evaluation of World Bank Group Support to Reforms of Business Regulations*. IEG's 2016 learning product, *Supporting Transformational Change for Poverty Reduction and Shared Prosperity,* also treated both catalytic qualities and limitations of *DB*. In addition, IEG's 2017 evaluation *Data for Development* noted the influence and wide use of *DB*, and IEG's 2019 evaluation *Grow with the Flow: An Independent Evaluation of World Bank Group Support to Facilitating Trade 2006–17* reviewed the *DB* trading across borders indicator. In the last decade, the World Bank commissioned two independent reviews of *DB*: the 2013 *Independent Panel Review of the Doing Business Report* (produced by a panel selected by the president of the World Bank Group), and the 2018 external audit *On the Integrity of the "Ease of Doing Business" Indicators: Final Report*. On the one hand, these reviews of *DB* recommended the continuation of the *DB* indicators and found substantial benefits in motivating country policy reform. On the other hand, each study also identified key areas of attention and action required to strengthen the *DB* indicators or their use.

Desk Review of the *Doing Business* Literature

IEG conducted a desk review of 426 articles from 100 leading academic journals as an initial stocktaking of literature-based evidence. The database of articles had been previously identified and collected by the *DB* team and were shared with IEG. The *DB* literature database contains a research literature with abundant coverage of a few *DB* indicators (starting a business, protecting minority investors, and trading across borders) and much sparser coverage of others (for example, dealing with construction permits and getting electricity). The desk literature review did not assess the methodological rigor of the published articles. The review found areas with strong evidence (as indicated by confirmation in multiple articles) on the association of selected indicators with development and economic outcomes for businesses and economies. Yet there were substantial gaps around some indicators. Much of this literature finds significant associations of *DB* indicator measures with outcomes, without necessarily establishing causation. Some of the literature casts doubt on the association of the measure either with the underlying area it is tracking (for example, construction permits) or with outcomes.

Structured Literature Review

IEG commissioned and supervised a structured literature review regarding the effects of business regulatory reforms on different outcomes by *DB* area (appendix F). The objective of this review was to minimize researcher bias by collecting and appraising all available research that has been identified using an explicit literature search strategy and meeting prespecified eligibility criteria. The structured literature review followed the PICOS(LY) approach to specify the characteristics of eligible studies, outlining includable interventions, comparison groups, outcomes, study designs, and the written language of the study. Identifying a comprehensive list of studies for this review was challenging because of the scope and breadth of the various aspects of the regulatory environment covered by the *DB* project. The search required looking for evidence across a wide base of literature in the *DB* database, in the 3ie database, and through citation tracking using Google Scholar's electronic citation tracking system. Screening at title and abstract removed studies with no clear relevance to the topic being reviewed. In addition, full-text screening removed studies that did not specifically meet the inclusion criteria. Of the 1,894 manuscripts screened at full text, 103 records met the inclusion criteria.

Review of *Doing Business* Report Affirmative Claims

The team reviewed *DB* reports published between 2010 and 2020 to identify claims about the impact of *DB*-related reforms and their channels of influence. The review aimed to understand the areas and types of reforms, and how they were linked to different outcomes. The identification of relevant claims followed a combination of manual codification and supervised learning methods that were implemented in collaboration with IEG's methods advisory team and included the following steps:

- Taxonomy and initial identification: Building on insights from the evaluation theory of change and automatic label recognition techniques, the team generated a search taxonomy (keywords/phrases) that was used to identify sentences that used relevant words/phrases and were therefore likely to be making potential claims. This initial review identified 4,085 potentially relevant sentences in the 11 *DB* reports.

- Learning sample: In order to refine the initial selection, the team created a learning sample or training data set based on manual screening of a 3 percent random sample (151 paragraphs) stratified by report and taxonomy term, to classify whether a sentence was relevant or not.

- Classification models: Using the learning sample, the team ensembled three text classification models (logistic regression, support vector machine, and multilayer perceptron) to estimate the probability of relevance for each of the 4,085 sentences. This exercise assigned 184 sentences a probability greater than an established threshold of 79 percent in all of the three models.

- Manual screening: The team manually reviewed the 184 sentences and their adjoining sentences for reference. Within the paragraphs identified, the team eliminated those that did not have coherent framing of reform-related effects and those that were duplicates. Then, the team manually looked for mentions of mechanisms between reforms and their immediate outcomes, intermediate outcomes, and impacts.

Indicator-Specific Deep Dives

Indicator-specific deep dives provided an opportunity for the evaluation to study *DB* areas in a structured and focused manner. The deep dive methodology, guided by a common template, included: (i) a focused literature review, (ii) a review of relevant reforms supported by the Bank Group through its portfolio and a review of the treatment of the *DB* area in country-related documents, (iii) a cross-case-study analysis, and (iv) interviews with expert practitioners. The selection of deep dives was based on prevalence of areas in recorded projects, country reforms, and literature. Each of them delved into the *DB* indicator and subindicator features and examined construct and content validity (the degree to which the index or indicators measure the concept they intend to and the extent to which the index or indicators are representative of the area they aim to measure). Deep dives also provided detail on the relevant portfolio's design features and drew on evidence from portfolio review and analysis on relevance and effectiveness, including factors that were associated with success and failure. In addition, they included evidence from the structured literature review on the corresponding *DB* area. Deep dives also drew from the draft case studies and considered the role of stakeholders (other than the Bank Group) at the country of global level.

Semistructured Interviews

Semistructured interviews were conducted with 20 subject matter experts, managers, and practitioners within the World Bank Group and external bodies, including governments and academic institutions. At an early stage of the evaluation, an ad hoc panel assisted in identifying key issues and challenges to better understand the underlying theory, and to develop a set of preliminary hypotheses. The same panel was later consulted on emerging findings. The interviews with Bank Group staff engaged in *DB* projects helped the team to understand institutional priorities, program features, achievement of objectives, and lessons derived from the experiences. They also helped to gauge stakeholders' perspectives on the accuracy and usefulness of *DB* for identifying reform priorities, guiding the design of reforms, and monitoring reform outcomes. The evaluation team developed an interview guide to ensure key questions were asked consistently across interviews while maintaining the flexibility needed to follow response trajectories that might not adhere to the guide.

Statistical and Econometric Analysis

The evaluation applied statistical and econometric methods to examine the relevance and effectiveness of *DB* indicators. The team provided evidence on the reliability of the *DB* indicators by assessing (i) whether *DB* indicators accurately measured specific aspects of the regulatory environment, (ii) whether the *DB* aggregate score was able to measure the quality of client countries' regulatory environments, and (iii) whether *DB* indicators accurately identified the right regulatory policy priorities. To conduct this analysis, IEG collected several measures of the regulatory environment from different sources to correlate them with the corresponding *DB* indicators. In addition, the team estimated a multivariate logistic regression to relate *DB*-informed interventions' outcomes to possible predictors of reform success, including factors of success and country-level characteristics. Further efforts to apply econometrics to relate *DB*-measured country reforms to development outcomes did not prove conclusive.

Country Case Studies

The evaluation conducted 10 country case studies in purposively selected countries. Case selection reflected a diversity of country conditions and contexts (including regional diversity, income level, and International Development Association and fragility, conflict, and violence [FCV] classification). The country selection criteria included both high and low achievement of *DB* reforms—whether supported or not by the Bank Group—and high or low level of supportive Bank Group projects. The sample represented all regions and income categories of countries, as well as FCV and non-FCV countries. The evaluation team also consulted experts on which countries offered the richest opportunities for learning. The evaluation adopted a template for data collection and followed standard protocols to facilitate comparison across case studies.

These protocols included (i) a review of the country's business environment and development challenges; (ii) a review of country experience with *DB*;

(iii) a review of Bank Group country strategies, diagnostics, and analytical works; (iv) a review of *DB*-related reforms supported or not by the Bank Group; (v) structured interviews with stakeholders (government, multilateral development banks, private sector, nongovernmental organizations, academics, and so on); and (vi) the extent to which *DB*-related reforms (supported or not by the Bank Group) achieved their desired outcomes and contributed to improved economic and social outcomes. Cases involved remote field-based assessments and aimed to identify to what extent the Bank Group–supported reforms and country-led reform efforts were effective and how and why specific reforms or reform interventions were or were not successful in delivering the intended results. Two team workshops strengthened learning across case studies and deep dives.

Country-Level Reviews of Strategies and Diagnostics

The evaluation conducted a series of systematic document reviews for a sample of countries to complement the evaluation's portfolio review. The evaluation carried out a systematic review of all the Bank Group Country Partnership Frameworks approved after FY15 to better understand the level of alignment and coherence of Bank Group country-level strategies and *DB*-related concerns. A similar review was carried out for a random sample stratified by income level, region, and FCV status for those countries which had been subject to Systematic Country Diagnostics and all 18 of the published Country Private Sector Diagnostics available at the time of the review. A categorical array was developed to systematically assess evaluation questions across strategy documents and diagnostics.

Review of Relevant Country Program Evaluations and Completion and Learning Report Reviews

IEG complemented the Country Partnership Framework review by analyzing the most recent country strategy CLRRs to learn the extent to which the World Bank's country strategy objectives were informed or motivated by *DB*, whether they achieved their business environment reform outcomes, and the relevant lessons from the reviews. To make it comparable, the team reviewed the latest CLRRs with their corresponding Country Assistance Strategies or

Country Partnership Strategies of the same countries as in the Country Partnership Framework revision. The final review included 61 countries with an available CLRR. The team also reviewed some Country Program Evaluations to extract examples of *DB* use.

Review of International Finance Corporation Advisory Services and Project Performance Assessment Report Chapeau Report

IEG conducted deep dives regarding 50 evaluation notes for all IFC AS–evaluated projects and seven available Project Performance Assessment Reports, which in both cases were drawn from the identified population of *DB*-informed projects in the portfolio review and analysis. This analysis aimed to enrich the understanding of the factors of success and failure and extract lessons learned.

Design Matrix

Table A.6 lists evaluation questions with the evaluation design. The number of check marks represents the strength of the method to answer the questions.

Table A.6. Evaluation Questions and Methods Applied

1. Doing the Right Things: Is *DB* doing the right things in terms of specific indicators and country contexts?							
What is the relevance of *DB* indicators to							
a. The business environment priorities of client countries?	✓✓✓	✓✓	✓✓	✓✓	✓✓✓	✓✓✓	✓✓✓
b. The substantive dimensions within each indicator's focus area?	✓✓✓	✓✓	✓✓✓	✓✓✓		✓✓	✓✓✓
c. World Bank Group strategic and operational priorities?	✓✓✓	✓✓	✓✓	✓	✓✓✓	✓✓✓	✓

(continued)

2. Doing Things Right: Is *DB* being used by clients and the Bank Group in ways to achieve the best effect for business environment reform?							
a. Is *DB* effectively achieving desired outcomes?	✓✓✓	✓✓✓	✓✓	✓✓	✓✓	✓✓	✓✓
b. Is DB being used by clients and the Bank Group to achieve the best outcomes for business environment reform (such as entry, investment, and employment) subject to broader policy priorities (such as public safety, equity, and environment)?	✓✓✓	✓✓	✓✓	✓✓	✓✓	✓✓✓	✓

Source: Independent Evaluation Group.

Note: The number of check marks indicates the strength of the method to answer the question, from one check mark suggesting that the method provided some data to answer the evaluation question, to three check marks suggesting that the method provided a great deal of data to answer the evaluation question. *DB* = *Doing Business.*

Design Limitations

Notwithstanding these steps, the evaluation methodologies had limitations related to gaps and inconsistencies in the literature and country social and economic data sets; the limited number of relevant evaluated projects (and even smaller number of evaluated unsuccessful projects) and country programs with *DB* relevance (especially in light of the lack of IEG-validated evaluations of ASA); the limited ability of a limited number of case studies and deep dives to represent the universe; limited data on intermediate outcomes and sustainability of reforms and difficulties in establishing attribution to specific reforms; and difficulties in conducting fieldwork (even remotely) imposed by COVID-19. There were also some false negatives or false positives in identifying relevant literature, project activities, and reforms due to the multifaceted nature of areas covered by some *DB* indicators, lack of standard terminology, and the sometimes indirect nature of influence. Establishing causal connections between *DB* indicators and observed reforms, and between reforms and observed outcomes, was complicated by the likelihood of multiple causal factors and the potential for omitted variables.

[1] Among others, unsupervised learning methods, such as word embeddings and machine-generated synonyms from Google's Word2Vec or Facebook's fastText, can be used.

Appendix B. Portfolio Review

Relevance

This portfolio review aims to provide an overview of World Bank Group projects that referenced *Doing Business* (*DB*), either as indicators or as relevant dimensions in their rationale, objectives, or result matrices, approved between fiscal years 2010 and 2020 (FY10–20). This support was channeled almost exclusively through two Bank Group institutions: the World Bank and the International Finance Corporation (IFC). In the case of the World Bank, its support included lending operations (World Bank lending), as well as reimbursable and nonreimbursable advisory services and analytics (ASA), whereas IFC support was delivered through advisory services (IFC AS). The Independent Evaluation Group (IEG) estimates there were 269 *DB*-informed lending projects and 407 advisory services projects approved from 2010 through 2020, with a total commitment value for *DB* activities of US$15.5 billion. Of these 676 projects, 137 were evaluated by IEG. Most of the support was provided through advisory services (60 percent), of which the World Bank provided 55 percent while the IFC delivered 45 percent. Regarding financing projects, the World Bank accounted for all *DB* lending projects and around 96 percent of volume in dollar value when accounting for total project volume ($14.9 billion; table B.1).

Table B.1. Summary of *Doing Business*–Related Portfolios, Approved FY10–20 (projection)

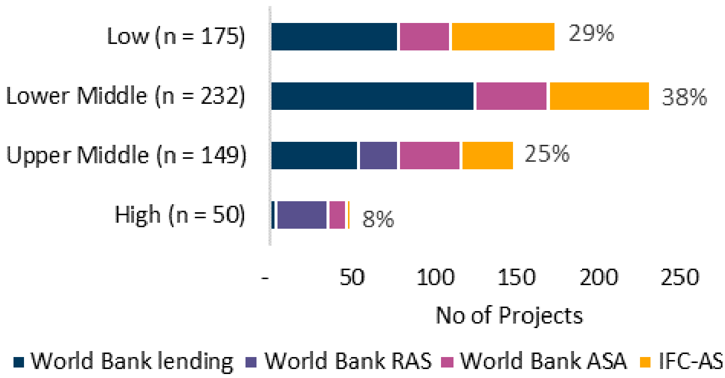
Institution	Projects (no.)		Projects (%)		Interventions (no.)		Interventions (%)		Volume/ Commitments (US$, millions)		Volume/ Commitments (%)	
World Bank lending	269		40		517		43		14,853		96	
Lending subtotal		269		40		517		43		14,853		96
World Bank ASA	165		24		173		14		379		2	
World Bank RAS	58		9		81		7		20		0.1	
IFC AS	184		27		428		36		287		2	
Advisory services subtotal		407		60		682		57		686		4
Total		676		100		1,199		100		15,539		100

Source: Independent Evaluation Group, portfolio review analysis.

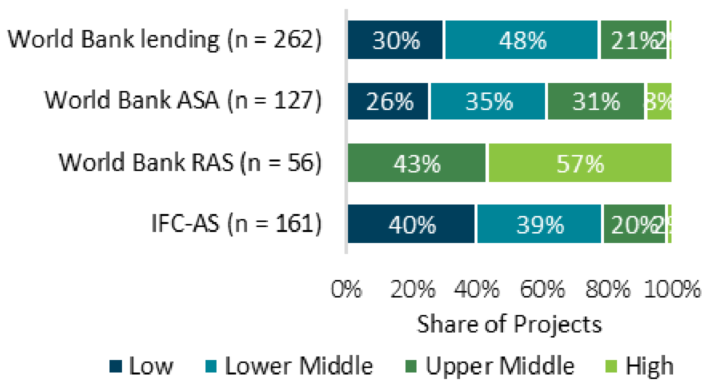
Note: All information is projected based on the population and sample sizes. Specifically, the results were multiplied by a factor of 226/107 for World Bank lending projects identified by machine learning, and 789/452 for World Bank ASA projects. Volume, commitment, or funds managed were identified or estimated according to what was allocated to *Doing Business*–related interventions. If the amount was not explicitly stated, it was estimated based on the number of components, subcomponents, or activities. ASA = advisory services and analytics; IFC AS = International Finance Corporation advisory services; RAS = reimbursable advisory services.

Figure B.1. Distribution of *Doing Business* Projects by Income Level, FY10–20 (projection)

a. World Bank Group projects by income level and institution



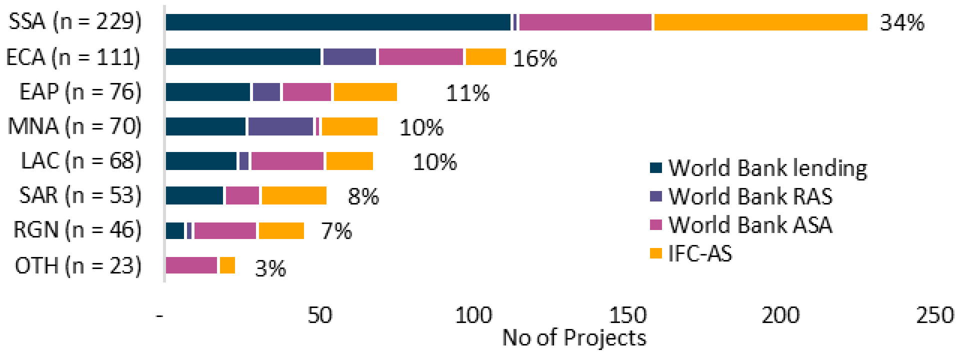
b. Share of projects by institution and income level



Source: Independent Evaluation Group, portfolio review analysis.

Note: Excludes 70 regional projects and projects in income-unclassified countries. All information is projected based on the population and sample sizes. Specifically, the results were multiplied by a factor of 226/107 for World Bank lending projects identified by machine learning and 789/452 for World Bank ASA projects. ASA = advisory services and analytics; IFC AS = International Finance Corporation advisory services; RAS = reimbursable advisory services.

Figure B.2. Distribution of *Doing Business* Projects by Region, FY10–20 (projection)



Source: Independent Evaluation Group, portfolio review analysis.

Note: All information is projected based on the population and sample sizes. Specifically, the results were multiplied by a factor of 226/107 for World Bank lending projects identified by machine learning and 789/452 for World Bank ASA projects. ASA = advisory services and analytics; EAP = East Asia and Pacific; ECA = Europe and Central Asia; IFC AS = International Finance Corporation advisory services; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; OTH = other; RAS = reimbursable advisory services; RGN = regional; SAR = South Asia; SSA = Sub-Saharan Africa.

Table B.2. Supported Countries, Projects, and Interventions by Region, FY10–20 (projection)

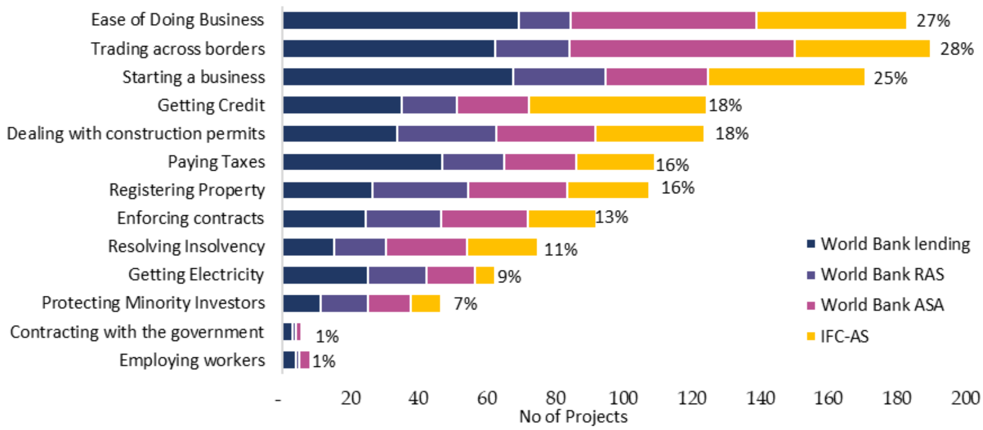
Region	Financing				Advisory Services*			
	Countries	Projects (no.)	Avg. projects per country	Volume (US$, million)	Countries	Projects (no.)	Avg. projects per country	Volume (US$, million)
SSA	39	113	2.9	2,350	43	116	2.7	434
ECA	19	51	2.7	2,236	23	60	2.6	36
LAC	15	24	1.6	3,071	18	44	2.5	28
EAP	10	28	2.8	1,549	17	48	2.8	43
MENA	6	27	4.5	3,926	18	43	2.4	34
SAR	8	20	2.4	1,314	7	33	4.8	55
RGN		7		407		39		47
OTH						23		9
Total	97	269	2.8	14,853	126	407	3.2	686

Source: Independent Evaluation Group, portfolio review analysis.

Note: All information is projected based on the population and sample sizes. Specifically, the results were multiplied by a factor of 226/107 for World Bank lending projects identified by machine learning and 789/452 for World Bank advisory services and analytics projects. Volume, commitment, or funds managed were identified or estimated according to what was allocated to *Doing Business*–related interventions. If the amount was not explicitly stated, it was estimated based on the number of components, subcomponents, or activities. EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; OTH = other; RGN = regional; SAR = South Asia; SSA = Sub-Saharan Africa.

* Advisory services include International Finance Corporation advisory services and World Bank advisory services and analytics projects.

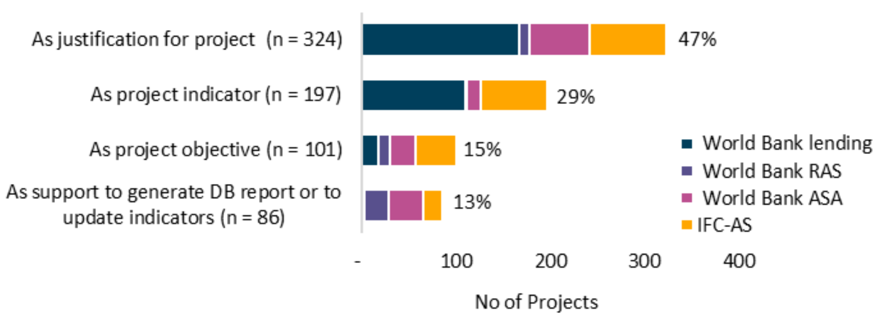
Figure B.3. Distribution of Supported *Doing Business* Areas, FY10–20 (projection)



Source: Independent Evaluation Group, portfolio review analysis.

Note: All information is projected based on the population and sample sizes. Specifically, the results were multiplied by a factor of 226/107 for World Bank lending projects identified by machine learning and 789/452 for World Bank ASA projects. Projects can be counted more than once if they support more than one business area. ASA = advisory services and analytics; IFC AS = International Finance Corporation advisory services; RAS = reimbursable advisory services.

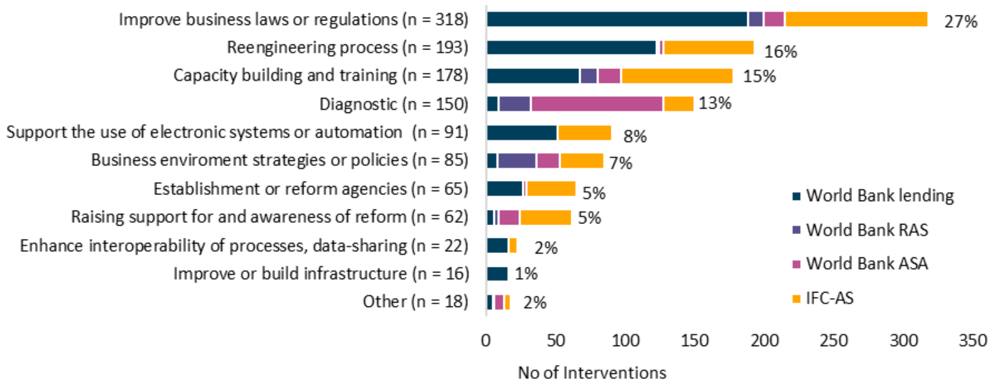
Figure B.4. Use of *Doing Business* Reports in Projects, FY10–20 (projection)



Source: Independent Evaluation Group, portfolio review analysis.

Note: All information is projected based on the population and sample sizes. Specifically, the results were multiplied by a factor of 226/107 for World Bank lending projects identified by machine learning, and 789/452 for World Bank ASA projects. ASA = advisory services and analytics; *DB* = *Doing Business*; IFC-AS = International Finance Corporation advisory services; RAS = reimbursable advisory services.

Figure B.5. Distribution of *Doing Business* Intervention Types, FY10–20 (projection)



Source: Independent Evaluation Group, portfolio review analysis.

Note: All information is projected based on the population and sample sizes. Specifically, the results were multiplied by a factor of 226/107 for World Bank lending projects identified by machine learning and 789/452 for World Bank ASA projects. ASA = advisory services and analytics; IFC-AS = International Finance Corporation advisory services; RAS = reimbursable advisory services.

Effectiveness at the Intervention Level

This section analyzes the achievements of Bank Group *DB*-relevant interventions for the 137 evaluated projects. IEG assessed the accomplishment of project objectives (with IEG-validated ratings and data available at the individual intervention level).[1] The evaluated projects included 87 World Bank lending projects and 50 IFC AS, in which 303 interventions were identified. However, for 12 interventions no relevant data were provided on their effectiveness; therefore, the denominator for the calculations reflected in the figures below is 291 (table B.3).

Table B.3. Distribution of Evaluated *Doing Business* Projects and Interventions by Institution

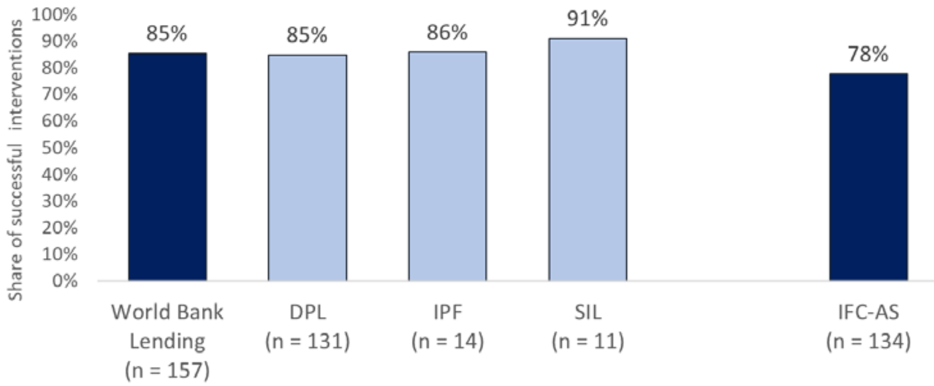
Institution	Interventions		Projects	
	Number	%	Number	%
World Bank lending	157	54	87	64
IFC advisory services	134	46	50	36
Total	291	100	137	100

Source: Independent Evaluation Group, portfolio review and analysis.

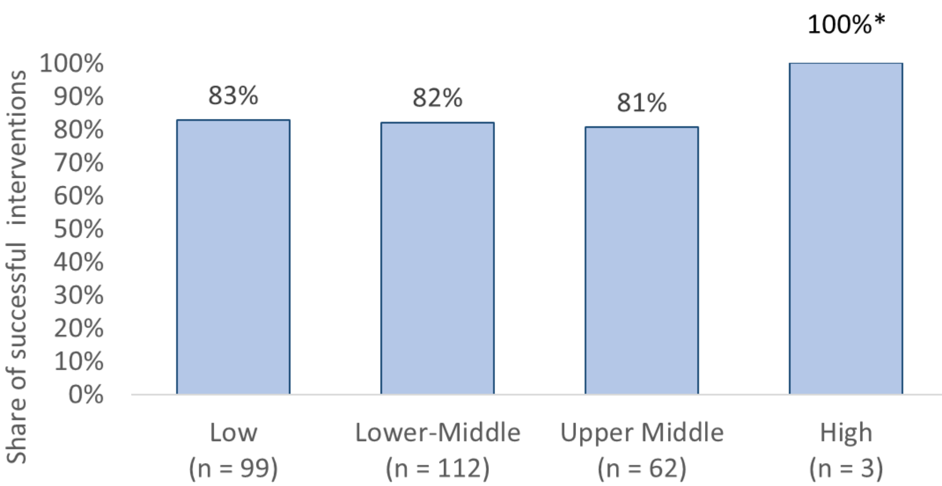
Note: Eight World Bank lending and four IFC advisory services interventions do not have data about their effectiveness. IFC = International Finance Corporation.

Figure B.6. Success Rate of *Doing Business*–Related Interventions, FY10–20

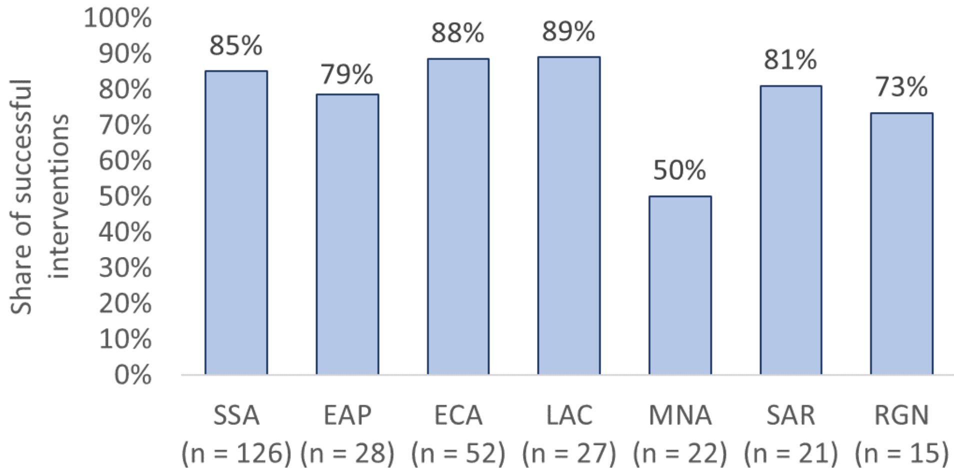
a. By institution*



b. By income level



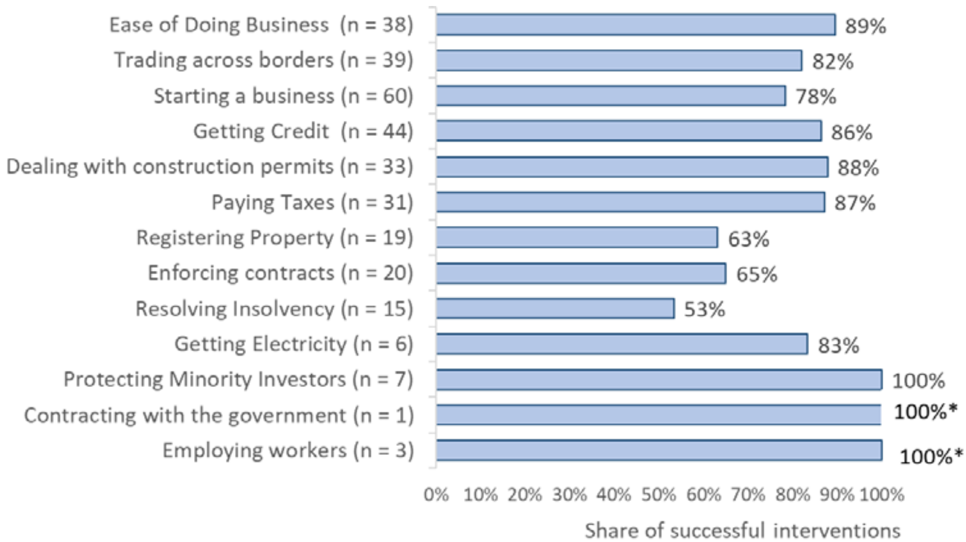
c. By Region



Source: Independent Evaluation Group, portfolio review analysis.

Note: Panels a and c are based on 291 interventions (which excludes 12 interventions with no data regarding their intervention outcomes), and panel b is based on 276 interventions (which excludes 27 interventions part of regional projects or unclassified countries/territories or with no data regarding their intervention outcomes). Success rate is defined as the proportion of interventions that achieved or mostly achieved their intervention outcomes. DPL = development policy lending; EAP = East Asia and Pacific; ECA = Europe and Central Asia; IFC AS = International Finance Corporation advisory services; IPF = investment project financing; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; RGN = regional; SAR = South Asia; SIL = specific investment loans; SSA = Sub-Saharan Africa.
* Program-for-results financing is not reported because only one project was identified under that category.

Figure B.7. Success Rate of *Doing Business*–Related Interventions by Business Area, FY10–20



Source: Independent Evaluation Group, portfolio review analysis.

Note: Figure is based on 291 interventions (which excludes 12 interventions with no data about intervention outcomes). Interventions may be counted more than once since they can support multiple business areas. Success rate is defined as the proportion of interventions that achieved or mostly achieved their intervention outcomes.
* n < 5 interventions.

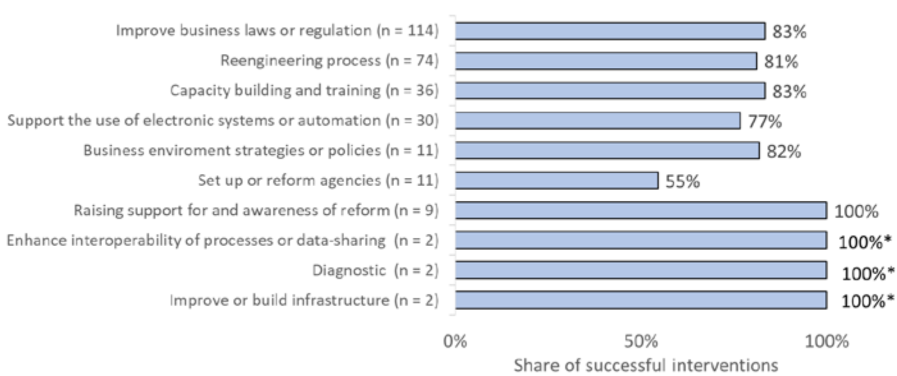
Table B.4. Success Rate of *Doing Business*–Related Interventions by Business Area and Institution, FY10–20

Business Area	World Bank Lending		IFC AS	
	Number	% Success	Number	% Success
Ease of doing business	21	90	17	88
Trading across borders	23	87	16	75
Starting a business	31	90	29	66
Getting credit	14	79	30	90
Dealing with construction permits	14	93	19	84
Paying taxes	15	93	16	81
Registering property	9	78	10	50
Enforcing contracts	9	56	11	73
Resolving insolvency	6	33	9	67
Getting electricity	5	100	1	0
Protecting minority investors	6	100	1	100
Contracting with the government	1	100	0	n.a.
Employing workers	3	100	0	n.a.
Total	157	85	159	78

Source: Independent Evaluation Group, portfolio review analysis.

Note: Based on 291 interventions (which excludes 12 interventions with no data about intervention outcomes). Interventions may be counted more than once since they can support multiple business areas. Success rate is defined as the proportion of interventions that achieved or mostly achieved their intervention outcomes. IFC AS = International Finance Corporation advisory services; n.a. = not applicable.

Figure B.8. Success Rate of *Doing Business*–Related Interventions, FY10–20



Source: Independent Evaluation Group, portfolio review analysis.

Note: Figure is based on 291 interventions (which excludes 12 interventions with no data about intervention outcomes). Success rate is defined as the proportion of interventions that achieved or mostly achieved their intervention outcomes.
[*] n < 5 interventions.

Table B.5. Success Rate of *Doing Business*–Related Interventions by Type and Institution, FY10–20

Intervention Type	World Bank Lending (no.)	World Bank Lending (% Success)	IFC AS (no.)	IFC AS (% Success)
Improve or build infrastructure	2	100	0	n.a.
Diagnostic	0	n.a.	2	100
Enhance interoperability of processes or data-sharing	1	100	1	100
Raising support for and awareness of reform	0	n.a.	9	100
Set up or reform agencies	7	57	4	50
Business environment strategies or policies	2	100	9	78
Support the use of electronic systems or automation	16	81	14	71
Capacity building and training	11	91	25	80
Reengineering process	44	84	30	77
Improve business laws or regulation	74	88	40	75
Total	157	85	134	78

Source: Independent Evaluation Group, portfolio review analysis.

Note: Based on 291 interventions (which excludes 12 interventions with no data about intervention outcomes). IFC AS = International Finance Corporation advisory services; n.a. = not applicable.

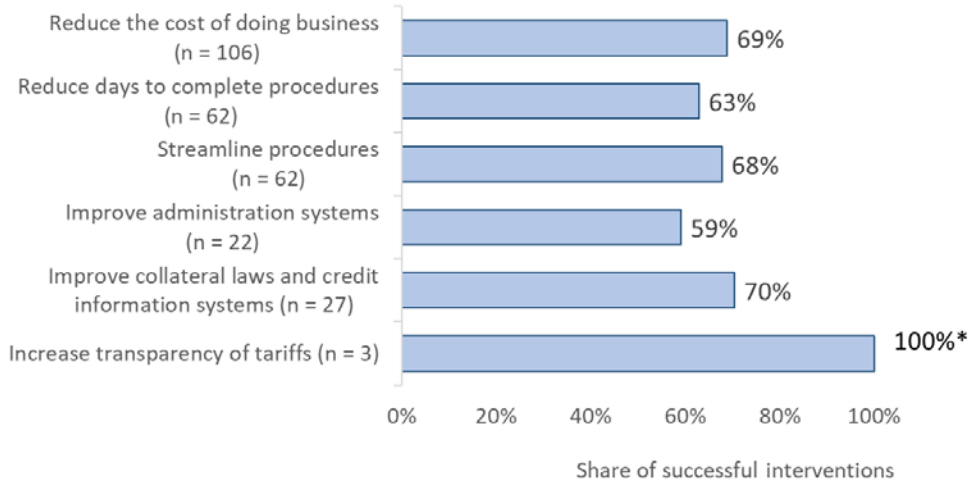
Table B.6. Success Rate of *Doing Business*–Related Interventions by Type of Use of the *Doing Business* Report, FY10–20

Use of *DB* Report / Indicators	Number	% Success
As justification for project	183	82
As project indicator	142	80
As project objective	50	72
As support to generate *DB* report or to update indicators	6	67

Source: Independent Evaluation Group, portfolio review analysis.

Note: Based on 291 interventions (which excludes 12 interventions with no data regarding their intervention outcomes). Interventions may be counted more than once since they can use *DB* reports in multiple ways. *DB* = *Doing Business*.

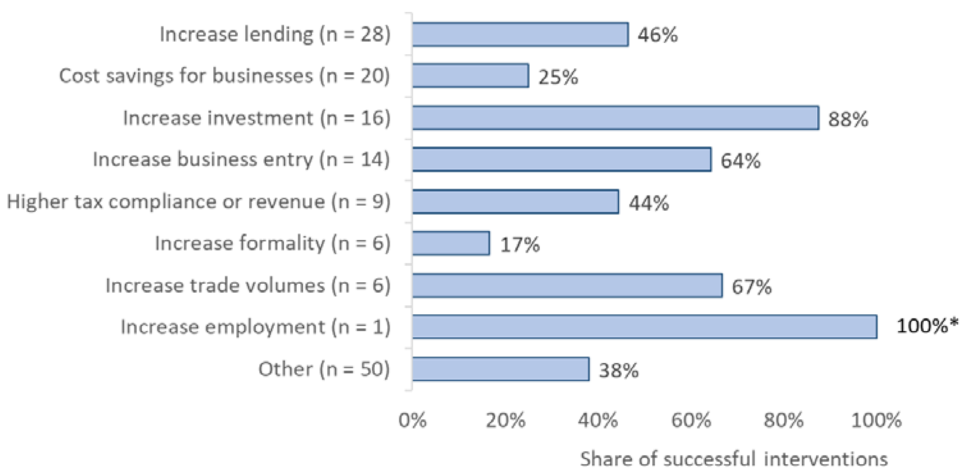
Figure B.9. Success Rate of *Doing Business*–Related Immediate Outcomes, FY10–20



Source: Independent Evaluation Group, portfolio review analysis.

Note: Figure is based on 262 interventions (which excludes 42 interventions with no data regarding their immediate outcomes). Interventions may be counted more than once since they can have multiple immediate outcomes. Success rate is defined as the proportion of interventions that achieved or mostly achieved their intervention outcomes.
* Denotes n < 5 interventions.

Figure B.10. Success Rate of *Doing Business*–Related Intermediate Outcomes, FY10–20



Source: Independent Evaluation Group, portfolio review analysis.

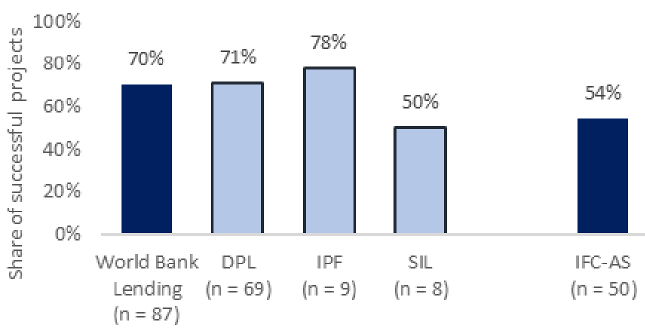
Note: Figure is based on 150 interventions (excluding 153 interventions with no data regarding their immediate outcomes). Interventions may be counted more than once since they can have multiple intermediate outcomes. Success rate is defined as the proportion of interventions that achieved or mostly achieved their intermediate outcomes.
* Denotes n < 5 interventions.

Effectiveness at the Project Level

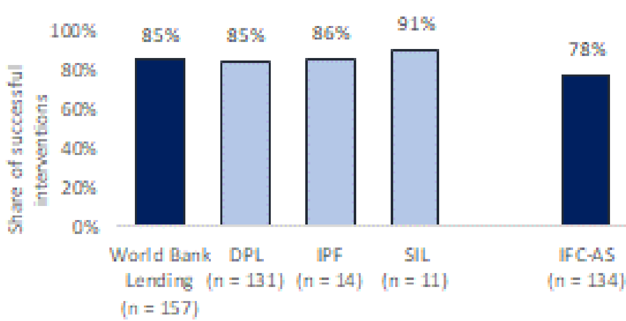
IEG's analysis indicates that components informed by *DB* were more successful on average than the overall projects of which they were components. For World Bank lending, while *DB*-informed components were 85 percent successful, *DB*-informed projects were only 70 percent successful. For IFC AS, while *DB*-informed components were 78 percent successful, *DB*-informed projects were 54 percent successful (figure B.11).

Figure B.11. Success Rate of *Doing Business*–Informed Projects and Interventions, FY10–20

a. Projects by institution*



b. Interventions by institution*



Source: Independent Evaluation Group, portfolio review analysis.

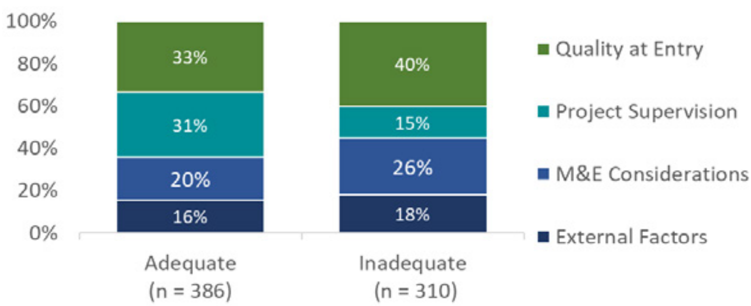
Note: Panel a is based on 137 evaluated projects; panel b is based on 291 interventions (which excludes 12 interventions with no data regarding their intervention outcomes). Success rate is defined as the proportion of projects or interventions that achieved or mostly achieved their intervention outcomes. DPL = development policy lending; IFC AS = International Finance Corporation advisory services; IPF = investment project financing; SIL = specific investment loans.
* Program-for-results financing is not reported as only one project was identified under that category.

Learning about Factors of Success and Failure

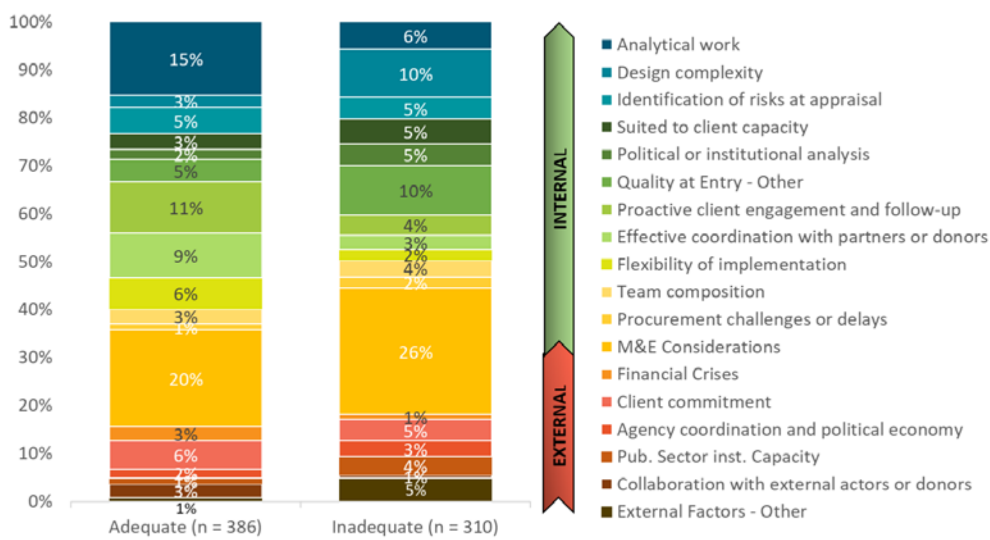
IEG's review of evaluated projects indicate there are 696 factors to which project success or failure were attributed, most within the Bank Group's control. These factors could be identified at the project level (not at the intervention level). Additionally, these factors were tagged as adequate (386) or inadequate (310; figure B.12).

Figure B.12. External and Internal Factors Influencing Outcomes by Type of Impact, FY10–20

a. Type of factors



b. Distribution of factors

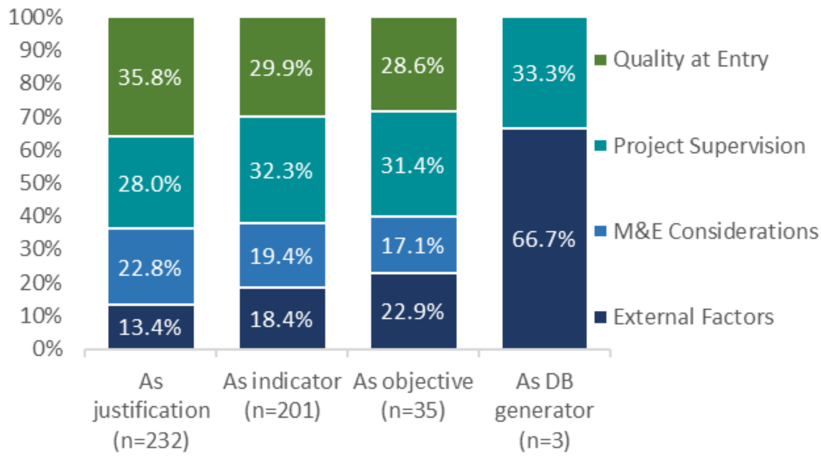


Source: Independent Evaluation Group, portfolio review analysis.

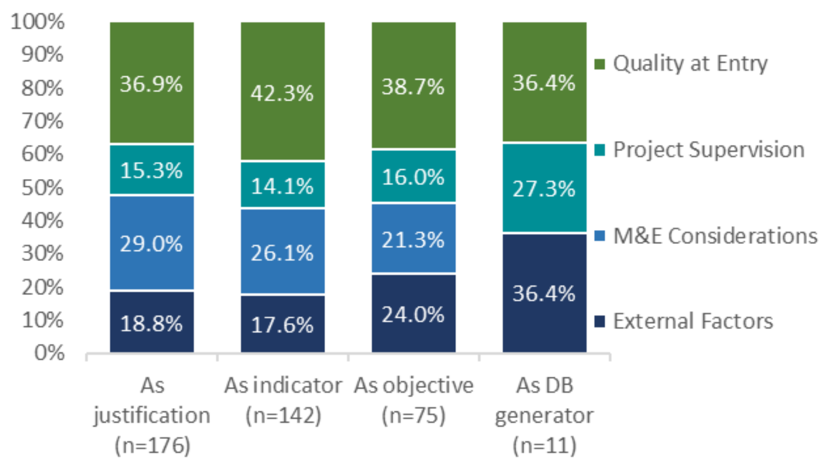
Note: The figure shows the factors (696) identified for the 137 evaluated projects. Projects may be counted more than once since they can have multiple factors that affected their outcomes. M&E = monitoring and evaluation.

Figure B.13. External and Internal Factors Influencing Outcomes, by Use of *Doing Business*, FY10–20

a. Adequate



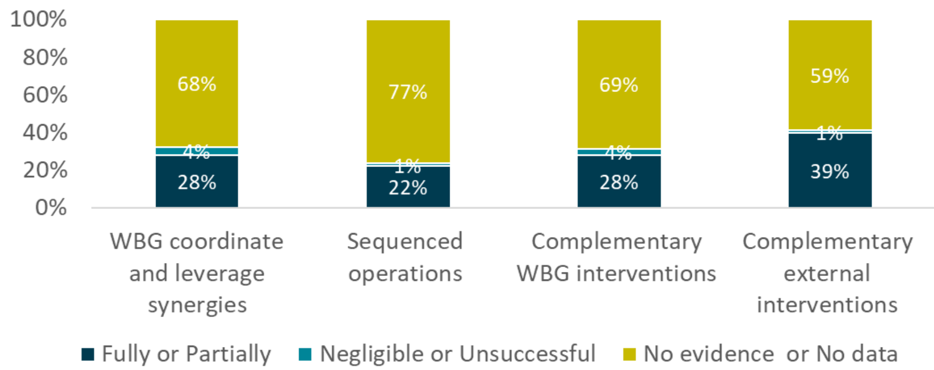
b. Inadequate



Source: Independent Evaluation Group, portfolio review analysis.

Note: Factors were identified at the project level, and one project may use the *DB* report in multiple ways. For this reason, factors may be counted more than once. DB = *Doing Business*; M&E = monitoring and evaluation.

Figure B.14. World Bank Group Coordination, FY10–20



Source: Independent Evaluation Group, portfolio review analysis.

Note: WBG = World Bank Group.

Effectiveness and Learning about Factors of Success and Failure in World Bank Advisory Services and Analytics Projects

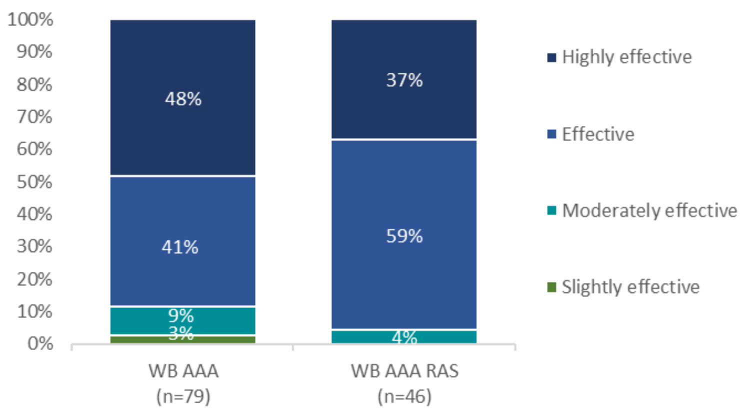
Unlike World Bank lending and IFC AS, the framework for World Bank ASA self-evaluation was neither agreed to nor validated by IEG. Furthermore, the potential biases of unvalidated self-evaluation are evident from the overwhelming reported effectiveness rate of reimbursable advisory services (RAS) of 96 percent (figure B.15).

Yet self-evaluation can be useful for capturing factors of ASA that either contributed positively to or detracted from project success. One key distinction is that ASA is more subject to the influence of external factors, led by political economy and agency coordination issues, client commitment, and client capacity. Quality at entry was more influential when it was absent, often centered around the realism of the timetable for reform, the adaptation of the support to the client, and, in particular for RAS clients, excessive design complexity. Project supervision played a strong positive role, particularly when there was effective coordination with partners, proactive client engagement, flexible implementation, and, in particular for RAS clients, proper team composition (figure B.16 and table B.7).

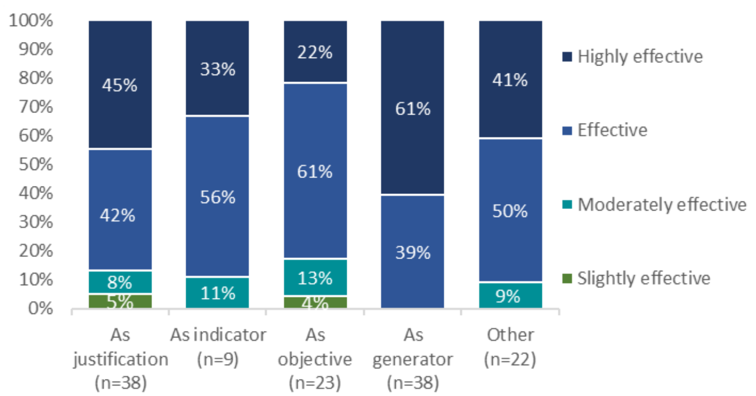
IEG extracted a 32 percent random sample (50 projects), stratified by region, income level, and year, from the 156 identified projects. Of the 50 sampled projects, the team could not identify factors of success/failure in 38 percent (19) of them. ASA projects represent 48 percent of the 31 remaining projects (15), while RAS projects represent 52 percent (16). Of the 31 remaining projects, IEG identified 82 factors.

Figure B.15. Overall Development Objective Effectiveness

a. By type of advisory service



b. By Doing Business use

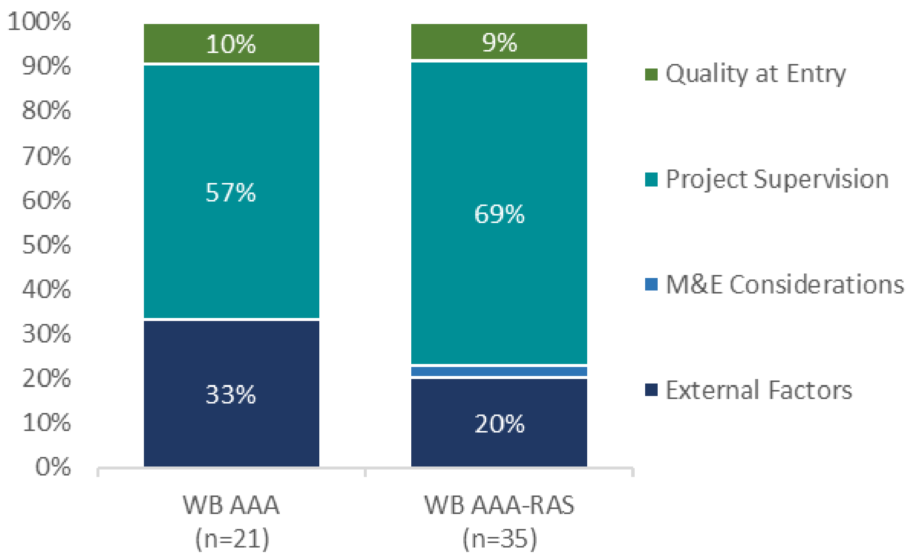


Source: Independent Evaluation Group, portfolio review analysis.

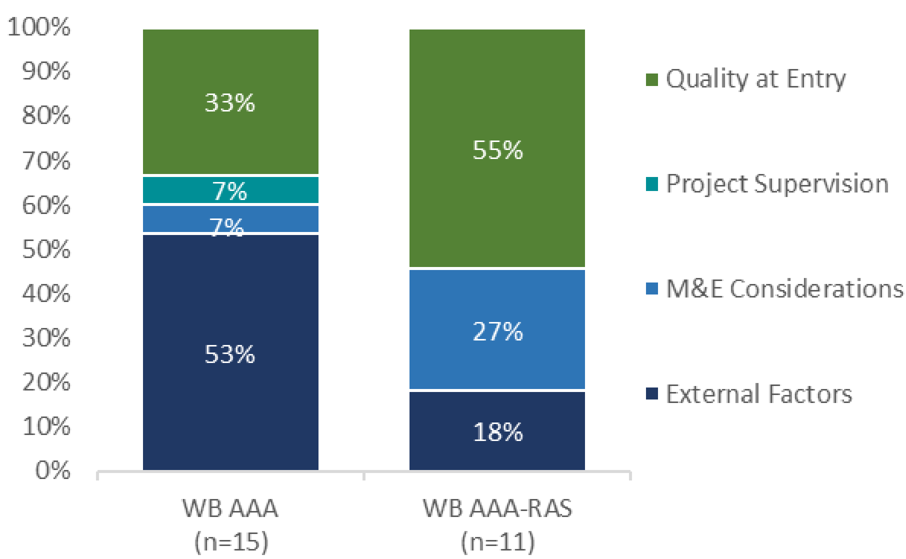
Note: IEG identified 156 ASA projects (unweighted). Of those, 127 (81 percent) were evaluated according to completion summary reports. Two projects did not report an overall development objective rate; nevertheless, other indicators were rated. One project may use the *Doing Business* report in multiple ways. For this reason, projects may be counted more than once in panel b. Highly effective = Exceptionally effective + Very effective + Fully satisfactory + Fully achieved; Effective = Effective + Yes + Largely achieved + Satisfactory; Moderately effective = Moderately effective + Moderately satisfactory + Partially; Slightly effective = Slightly effective. AAA = advisory services and analytics; RAS = reimbursable advisory services; WB = World Bank.

Figure B.16. External and Internal Factors by Type of Advisory Service

a. Adequate



b. Inadequate



Source: Independent Evaluation Group, portfolio review analysis.

Note: AAA = advisory services and analytics; RAS = reimbursable advisory services.

Table B.7. External and Internal Factors

Factor		Adequate, % (n = 56)	Inadequate, % (n = 26)
Quality at entry	Suited to client capacity	0	8
	Choice of instrument	0	4
	Enabling environment analysis	2	0
	Design complexity	2	12
	Timetable realism	5	19
Project supervision	Team composition	11	4
	Flexibility of implementation	13	0
	Proactive client engagement and follow-up	20	0
	Effective coordination with partners, donors, implementers	21	0
M&E considerations	Design	0	8
	Implementation	2	8
External factors	Other	0	4
	Agency coordination and political economy	2	15

Source: Independent Evaluation Group, portfolio review analysis.

Note: M&E = monitoring and evaluation.

[1] Information was drawn from Implementation Completion and Results Report Reviews, Expanded Project Supervision Reports, and evaluative notes.

Appendix C. Case Studies

Methodological Note

The 10 country case studies were developed through document desk reviews, online interviews with headquarters staff, and online (and in-person) local interviews with World Bank Group staff, government staff, and civil society members (entrepreneurs and their representatives, academics, and others). COVID-19 pandemic conditions mandated that most fieldwork was conducted remotely. The case studies were completed in May 2021 and pertain to experience up to that time. Following the templates used for the evaluation case studies, each background note is summarized in this appendix to address, whenever possible, the following:

- Doing the right things: Is *Doing Business (DB)* doing the right things in terms of indicators and the country context?
  - Country context and reform priorities
  - Country experience with *DB*
  - Bank Group's role and relevance
- Doing things right: Is *DB* being used by clients and the Bank Group in ways to achieve the best effect for business environment reform?
  - Effectiveness
  - Factors of success and failure
    - Internal
    - External

Cross-cutting findings from the case studies and deep dives are summarized in table D.1 at the end of appendix D.

Afghanistan

» Doing the right things: Is *DB* doing the right things in terms of indicators and the country context?

Afghanistan is a nation with severe development challenges. Persistent high poverty rates, high levels of inequality, and low economic growth are some of the main factors influencing the country's economic and social outcomes. Its status as a fragility, conflict, and violence country was a binding constraint throughout the evaluation period of fiscal years 2010–20 (FY10–20). These and other development challenges have been amplified by persistent and growing insecurity and uncertainty, and by declining aid. International development assistance contributed to growth and jobs but did not contribute to raising productivity. It resulted in a problematic business environment, with issues that go beyond the *Doing Business* indicators (DBIs) but with some issues that are captured by them. With regard to its rankings, the country is among the lowest ranked in the world, lagging the regional average in 9 of the 10 regulatory areas measured by the DBIs.

There has been a general alignment of *DB*-informed reforms with Afghanistan's national priorities. According to Bank Group documents as well as non–Bank Group information, national priority programs are both directly and indirectly influenced by DBIs. Partner government ministries view the *DB* indicators as references and benchmarks while implementing newly introduced reforms. Many of the *DB*-informed reforms are adapted appropriately to the country context by prioritizing those objectives that are possible given available resources and capacity, but there are exceptions. An example involves starting a business: An entrepreneur must go through three procedures that take seven days on average, but women face an additional procedure of obtaining their husband's approval to leave home, a legal reality that many businesswomen consider to be misinterpreted and outdated.

Stakeholders use the DBIs as a reputable source, discussion driver, indicator, and objective. Many evaluation documents by outside entities (for example, Asian Development Bank) also reference DBIs as a reputable source. Complementary data and analytic work enhance the relevance of DBIs in designing or selecting business environment reforms and in following up on them.

DBIs are often the root source or discussion driver behind reforms and are used in the design phase of reforms as background documents for gap analyses and baseline assessments.

Limits to the DBIs' relevance emerge in considering the limited improvements have yielded for investment. For instance, the country climbed 16 places in 2018's *DB* ranking. As mentioned in the United Nations Development Programme country report (UNDP Afghanistan 2021), Bangladesh was ranked nine places below Afghanistan and scored 20 percent lower. Despite that, Bangladesh has a more dynamic economy and is more successful in attracting investment. This example raises important points on relevance and effectiveness of DBI-related reforms, as well as concerns about the empirical evidence for them. It shows that numerical assessments can at times be misleading regarding the status and potential of an economy.

» Doing things right: Is *DB* being used by clients and the Bank Group in ways to achieve the best effect for business environment reform?

DBI-related reforms (both supported by the Bank Group and not) contributed to improvements in country positions in some indicator rankings during the evaluation period, but others did not improve. Since 2015, the government has made efforts to create a more dynamic environment for private sector development (mostly composed of small and medium enterprises, SMEs), but policy formulation and implementation still require further attention. The government made significant efforts over the past years to reduce the cost to register a company (starting a business was the government's focus area). Private stakeholders indicated that since a recent decrease in business registration fees, the burden was overcome. Indeed, that is reflected in the country's 52nd ranking in the indicator (*DB2020*). Nonetheless, the process to register a business is still comparatively costly, as all businesses must pay an annual license fee corresponding to 82 percent of income per capita (much higher than the regional average of 21 percent).

Clients and the Bank Group using *DB* have been able to achieve some improved outcomes for business environment reform, but much remains to be done. The limited measurable outcomes in such dimensions as formal investment and employment are cautionary. Despite International Finance

Corporation (IFC) advice to PriSEC (Executive Committee for the Private Sector) on paying taxes, technical and institutional support on trading across borders, and support on getting credit, there is no firm evidence that all this made a difference on the ground (through, for example, businesses finding it easier to pay taxes, trade, or get credit; an increase in taxes paid, imports, and exports; or loans to private firms). Reliable data availability would be needed to assess whether the work done has been effective. According to Bank Group data, which are only available until 2017, tax revenue as a percentage of gross domestic product (GDP) increased from 2014 until then. As for trading across borders, there are not enough publicly available data that might show the impact of reforms on imports and exports.

Lessons

A monitoring and evaluation framework and identification of risks at appraisal has been perceived by many ministerial directorates as major factors that helped ensure specific DBI-informed reforms or interventions were successful. During the implementation phase, the framework has helped stakeholders to carry out activities in a timely manner. It was particularly effective when multiple ministries were involved in implementing a specific DBI-informed reform, reducing friction among them and with outside entities including the Bank Group. Some external factors such as public sector institutional strength and sophistication, private sector capacity, and agency coordination have proved to be primary challenges facing the successful implementation of DBI-informed reforms. For instance, activities under the starting a business indicator require implementing a full online business registration system, which is not realistic given the country's private and public sector capacity. Governance capacity is limited in Afghanistan, perhaps indicating that a great deal of simplification and hand-holding is required in DBI-related reform. Lack of sufficient human resources is a notable gap in the government's capacity to implement and sustain reforms and regulations. To address this issue in the short term, continuous capacity building of human resources is needed. In the long term, the focus should be on strengthening the educational system in the country to help raise a generation with the necessary culture and technical skills to help bring about sustainable economic development. Stakeholders seem to perceive that the current institutional arrangements in the Bank Group do try to separate indicator generation from project work, including reimbursable advisory services (RAS). There has thus not been any reported conflict of interest. Yet these undoubted achievements were made at the cost of some friction between different stakeholders.

China

» Doing the right things: Is *DB* doing the right things in terms of indicators and the country context?

Reflecting its early rapid growth of preceding decades, China became the world's second-largest economy, with great success with poverty reduction and virtually all Millennium Development Goals. China's GDP growth remained spectacular over the start of the evaluation period in 2010 (continuing from 1983), but growth slowed gradually after 2012, decelerating from 7.8 percent in 2013 to 6.6 percent in 2018, and further to 5.8 percent in 2019. Yet China's market reforms remained incomplete, and poverty continued to be a major challenge. As early as in China's 11th Five-Year Plan (2005–10), it was recognized that the country's growth—led by a pattern of moves from agriculture to industry, followed by partial market reforms coupled with heavy state-owned enterprise (SOE) investment—would likely weaken. China's 12th Five-Year Plan (2011–15) sought to address some of these issues, with a new emphasis on services and energy efficiency, as well as attention to social imbalances.

There is a clear evolution in how *DB* has been viewed by the government. The 2012 Country Partnership Strategy did not emphasize the acceleration of market reforms or the private sector. China's 2018 Systematic Country Diagnostic (SCD) described the economy as rebalancing toward a new lower-growth equilibrium with structural shifts, away from its combined focus on heavy-industrial investments and low-wage and energy-intensive manufacturing and construction toward consumption, and from manufacturing to services. A comprehensive reform agenda was laid out in the 13th Five-Year Plan (2016–20) to facilitate the economic transition. The 2019 Country Partnership Framework (CPF) for the period 2020–25 brought attention to fiscal, institutional, and governance issues and systematic market reform. It emphasized improving the environment for competition and private sector development and sustainable subnational fiscal management.

The *DB* indicators have been of enormous influence in China since 2017. The country did seek rank improvement, but there grew to be a genuine and critical appreciation of the value of *DB* as a diagnostic and benchmarking tool that would help cities within China to assess their performance and identify areas for change. City-wide reform plans were modeled on *DB* findings and recommendations. The Ministry of Finance mobilized staff at the highest levels in Beijing and Shanghai (the two cities tracked by *DB*). That ministry and World Bank China also guided uptake of some indicators in Guangzhou and Shenzhen. The World Bank's subnational *DB* independently conducted a study of select indicators in Chongqing. The civil service displayed a critical and detailed knowledge of the indicators and their limitations. The National Development and Reform Commission began exploring possible Chinese indicators and applications outside the principal cities. Relevant areas were identified, but their formalization as actual indicators is not yet evident.

The 2012 CPF did not emphasize the acceleration of market reforms or the private sector. However, the IFC had focused in the previous Country Assistance Strategy on *DB* reforms. The 2006–11 Country Partnership Strategy included simplified business entry and regulation as an outcome and activities (covering 29 provinces). The different approach toward *DB* was influenced by a combination of forces. First, internal to China, there was a growth slowdown after the financial crisis, recognized low SOE productivity, a high-level recognition of the need to find new drivers of growth, and a recognition of the need for a better-regulated business environment for more orderly private sector growth. *DB*'s potential for aiding this was beginning to be recognized, together with the value of an improvement in China's *DB* rankings in the international arena. Second, external to China, the World Bank recognized the potential for new engagement in this area and elevated *DB* in country dialogue. A close relationship developed starting in 2017, initially with World Bank technical assistance and soon with a rapidly growing RAS program. The World Bank's Beijing office provided significant support to China. World Bank experts produced high-quality RAS reports.

Thus, *DB* became a reform motivator in recent years, but pivotal support for the private sector had already begun years before. A comparison with a China enterprise survey undertaken by the World Bank around the start of the evaluation period, over a broad geographic sample, suggests that *DB* did not cover many issues perceived to be important to the enterprise sector at a micro level, such as access to finance.

China's Ministry of Finance officials point to areas in which the *DB* indicators may be intrinsically limited as tools of measurement, ill adapted to the Chinese context, outdated, or missing key elements. Efforts have been made to identify and include such areas in cities' business plans even if not formalized into measurable indicators. External investors do not use *DB* indicators to gauge the business environment. They launch their own surveys and use other statistical sources. They point to the lack of coverage of critical themes: a level playing field, whether by ownership (state/private, domestic/foreign), size, and sector of operation, given the negative lists of areas where foreign participation is not permitted. Partners in aid point to other missing areas: law enforcement, an autonomous judiciary system, and intellectual property rights. Other experts highlighted labor market, financial sector or macroeconomic factors outside the scope of the DB indicators.

Experts interviewed by IEG considered that *DB* does not capture many factors critical to China's business environment. It is unclear if there is any correlation of China's *DB* scores with other measures of business confidence, such as the Organisation for Economic Co-operation and Development's (OECD's), or the World Economic Forum indexes.

» Doing things right: Is *DB* being used by clients and the Bank Group in ways to achieve the best effect for business environment reform?

Despite recent striking improvements in *DB* rankings, the generally expressed view by expert observers is that the last five years have been an uneven process of reform of the business environment, with some reversals and unclear trends, alongside some areas such as starting a business, where there was some undoubted improvement. By contrast, in earlier years, when China was trailing in *DB*, foreign confidence was high and foreign investment poured in. During an earlier period of rapid private sector growth up to 2014, improvements were not guided by *DB*.

Some changes were achieved at a national level, though others remained in the realm of the city governments. Conferences were held with participants from other cities to foster rollout. The message was spread through local offices of the National Development and Reform Commission. Performance evaluation incentives were also applied. The World Bank Country Office guided the uptake of some indicators in Guangzhou and Shenzhen. The World Bank's subnational *DB* independently conducted a study of select indicators in Chongqing. The World Bank subnational *DB* of 2008 and the World Bank enterprise survey of 2012 point to significant regional differences. Although only 30 reforms were counted in the *DB* database over the evaluation period, local governments claim many more—Beijing claims over 400 reform measures, Shanghai over 300, and Chongqing over 200. There is some preponderance of reforms with easy procedural simplification through one-stop shops, reducing time, fees, and costs. *DB* China reaped the digital dividends of connectivity, the internet, big data, and thus accessible information sharing across agencies and online procedures. Some changes that appear more significant are very recent and are yet to be assessed by *DB*. Authorities were aware of the changes that would influence rankings, even if this was not the only motivating factor.

Lessons

For World Bank country offices where *DB* is seeking to expand its traction, important factors are buy-in and overlap of the official agenda with *DB*. State resources, motivation, and competent officials are a part of this. Support from the World Bank, elevation of *DB* in the country's own agenda, the provision of technical assistance, building a RAS pipeline, and doing high-quality work are also critical. For *DB* to remain relevant at a deeper level, there is a need for micro change in the indicators, model cases, and respondents; more universally appropriate settings; and much more regional representation. This implies difficult trade-offs in terms of comparability across countries, costs, and comparisons over time. The loss of *DB* relevance has accelerated with sea changes in business environments thanks to big data and the internet. Moreover, *DB* is intrinsically susceptible to focus shift by highly trained officials to those areas of change that are low-hanging fruit. There is a need for *DB* to be aware of this. Even more fundamental for the relevance of *DB* is the larger question of what it takes to create a competitive business environment and whether *DB* indicators can be used as a gauge for this. China illustrates that many other factors are needed to gauge business competitiveness even if *DB* measures are helpful in a limited sphere. If *DB* is to be used as a more universal measure of the business environment, it will need at a minimum an expansion of theme, incorporation of enterprise sentiment, and regional extension. The resulting product, however, may be unrecognizable as a part of *DB* today.

Colombia

» Doing the right things: Is *DB* doing the right things in terms of indicators and the country context?

Colombia is an upper-middle-income country with a strong policy framework but deep-rooted challenges. Its economy is the fourth largest in Latin America as measured by GDP, and its population is over 50 million. Its uneven territorial development, an armed conflict that went on over 50 years, and a recent emergence of extractive industries have deep historical roots that condition the achievement of poverty eradication and shared prosperity in a sustainable manner. (SCD 2015) Since the mid-2000s, administrations have made business competitiveness and productivity growth an explicit policy objective, enjoying continuous political support. They were initially focused on reducing businesses' transaction costs through simplifying procedures. Although with fading momentum until later in the decade, these types of reforms continued during 2010–20, and they were accompanied by a gradual shift toward strengthening regulatory institutions and processes aimed at promoting high-quality, rational regulations. More complex and expensive reforms of legal institutions, such as bankruptcy systems and investor protection, were also carried out during the decade.

DB was used as a reference and supporting tool to inform Colombia's business environment diagnoses and as a monitoring and communication tool to strengthen its national and international image. Due to DBIs' narrow scope, *DB* is monitored in combination with other sources (for example, World Economic Forum's *Global Competitiveness Report*, International Institute for Management Development's *World Competitiveness Yearbook*).

The government has monitored and socialized *DB*-measured progress in its goal to achieve a more dynamic business environment at the national and subnational levels. National documents mention progress achieved as mirrored in *DB* improvements and use some DBIs as results indicators. The rapid feedback and simple nature of the DBIs has also provided backing for policy proposals and a means to keep reform momentum. *DB* has also served as a reform dialogue starter in public-private sector conversations and within branches of government. Globally known, DBIs are typically discussed by the national and local press and used by the government to showcase reforms internationally. Relevance of DBIs in Colombia is limited by the fact that the *DB* case study is not representative of the Colombian business sector reality both in terms of size (90 percent of businesses in Colombia are micro and small) and location (as Bogotá concentrates largest firms).

» Doing things right: Is *DB* being used by clients and the Bank Group in ways to achieve the best effect for business environment reform?

Paying taxes, trading across borders, and starting a business were the areas with the largest number of reforms, in some cases accompanied by score increases. The paying taxes score improved during the period as total tax contribution decreased by 14 percent and the number of payments were halved as a result of tax reforms implemented during the second half of the period. In the area of trading across borders, despite several administrative reforms, there was almost no change in the corresponding *DB* score, which is mostly affected by high transportation costs due to infrastructure gaps not affected by these types of administrative reforms. Finally, Colombia's starting a business score continued to increase. However, after improving rapidly in *DB2009* and *DB2010*, it continued to grow at a slower pace than in other economies, which led to a fall in its ranking. (Colombia is ranked 95th by DBI.) A key event was the creation, in 2008, of the "simplified corporation," a new type of company operating under a law independent of the commercial code, which allowed for a reduction in transaction costs, time, and procedures to register a business. This "simplified" form is not captured by *DB*'s base case scenario that describes "a limited liability company" that "has five business owners."

Two reforms were accompanied by a significant increase in Colombia's getting credit and resolving insolvency scores and rankings. The most important reform in the getting credit area, as measured by *DB*, was the new secured transactions law establishing a functional secured transactions system launched along with a centralized, notice-based collateral registry. As described in the *DB2015* report, the law broadened the range of assets that can be used as collateral, allowed a general description of assets granted as collateral, and established clear priority rules inside bankruptcy for secured creditors. Its adoption resulted in a significant increase in Colombia's getting credit score and ranking, which jumped from top 40 percent in *DB*2010–*DB2014* to top 1–6 percent since *DB2015*. Regarding resolving insolvency, an amendment of the regulations governing insolvency proceedings to simplify the proceedings and reduce their time and cost also had a significant impact in terms of *DB* score (from 58 in *DB2010* to 71 in *DB2020*) and ranking (from 32nd in 2010 to 12th in 2012). These improvements contrast with those of Colombia's starting a business score after the large regulatory framework change, creating the SAS, which is a corporation type that offers greater flexibility than a standard LLC (Marechal et al. 2020).

Lessons

Colombia has successfully used *DB* to its advantage as a result of, in part, (i) long-term commitment and continuity, as Colombia has followed a regulation simplification strategy throughout several administrations; (ii) institutional capacity, since the government has a high-level understanding of the indicators and their scope and generally uses DBIs to inform specific policies; and (iii) strong political and technical support of *DB*-related reforms. Yet there are some challenges for the indicators to remain relevant: (i) tracing of the impact of reforms beyond DBIs has been limited, as changes were not accompanied by an evaluation strategy to follow up on reform impact beyond what *DB* allows; (ii) inconsistencies and opacities in the DBI methodology has generated frustration among users, eroding some trust in the indicators, which could render them less relevant in the future; and (iii) inconsistencies with independent indicators and anomalous results have raised questions about the validity of some *DB* subindicators. As a result of reforms to getting credit, Colombia became one of the highest-ranking countries globally in this *DB* business area. This success, however, contrasts with some other access-to-credit indicators, based on which Colombia would be ranked below peer countries. Important reforms in other areas (for example, starting a business) have not translated into such significant score and ranking improvements.

Democratic Republic of Congo

» Doing the right things: Is *DB* doing the right things in terms of indicators and the country context?

The Democratic Republic of Congo's business climate remains a difficult one due to a wide range of factors, including administrative burdens, complexity of taxes, and regulatory uncertainty. A significant business environment challenge is the gap between regulatory requirements (de jure) and real practices undertaken by firms on a regular basis (de facto). Businesses also face challenges due to poor infrastructure and a weak and corrupt bureaucracy. In addition, the Democratic Republic of Congo court system is often very slow to make decisions or follow the law, allowing numerous investment disputes to last for years. Property rights and contract enforceability pose severe limitations to investment, particularly for new investors trying to enter the market. Enterprise development in the country is heavily hampered by cumbersome and costly administrative procedures. In addition, a weak level of investor protection resulting from poor mechanisms enforcing contracts is a critical constraint to attracting private sector investments.

The government's motivation to engage in *DB* reforms was informed by goals to build the Democratic Republic of Congo's brand image regionally and internationally, attract foreign direct investment, promote the domestic economy, enhance status, and improve the business environment. Based on stakeholder discussions, the key motivations for *DB* reforms include the desire to improve the country's business environment in order to (i) build the Democratic Republic of Congo's image regionally and internationally, especially as the country emerged from decades of conflict; (ii) make the country attractive to potential foreign investors; and (iii) contribute to the development of domestic investors. The National Private Sector Development

Plan (2018–22) also confirmed the government's commitment to fostering a sustainable and inclusive growth.

Over the years, the government's leadership on *DB*-related reforms has been evolving. From 2009 to 2015, reforms were led by the Steering Committee for Improvement of the Business and Investment Climate (CPCAI). From 2015, the Investment Promotion Agency (ANAPI) assumed leadership. In addition, President Félix Tshisekedi created a presidential unit to lead business reform and improve the Democratic Republic of Congo's standing of 183rd out of 190 countries (*DB2019*).

DBIs have been instrumental in identifying key constraints to the business environment and have influenced debates. DBIs have been used to influence business environment reforms primarily as a justification, discussion driver, and reputable source. Indeed, the DBIs played a key role in influencing discussions on business constraints, as highlighted by President Tshisekedi during a State of the Union address in 2019: "I will ensure that we improve the business climate by introducing an institution to monitor indicators."

» Doing things right: Is *DB* being used by clients and the Bank Group in ways to achieve the best effect for business environment reform?

Despite enacting many reforms during the evaluation period, the Democratic Republic of Congo's ranking on the ease of doing business (EoDB) indicator largely remained the same. The lackluster performance in EoDB (from 182nd in 2010 to 183rd in 2020) resulted in part from negative reforms. As the country enacted positive reforms, it also recorded negative ones that slowed down its momentum. In the period between 2009 and 2019, along with the 31 positive reforms recognized by the *DB* report (*DB2010* and *DB2020*), the country regrettably recorded eight negative reforms. Other explaining factors might be changes in *DB* methodology, which did not reward complementary reforms (FY13–16 Country Assistance Strategy).

Starting a business is the area in which the Democratic Republic of Congo has made the most progress. The country rose 100 places in this business area from being ranked 154th (*DB2010*) to 54th (*DB2020*), as a result of the large number of reforms recognized by *DB*. For context, informal micro, small, and medium enterprises dominate the country's private sector and face significant barriers to growth and competitiveness. Over 90 percent of firms are small (one to nine employees), and nearly half of them have been on the market for less than five years. Yet firms six years and older contribute most to employment in the Democratic Republic of Congo (around 60 percent). Young firms account for over 35 percent of total employment.

Reforms in the area of dealing with construction permits were focused on reducing the time and cost of processes and introducing the use of electronic systems to computerize processes. Reforms included improving building quality control and reducing the time it takes to obtain a building permit (*DB2016*). The country also made the process less expensive by halving the cost to obtain a building permit in *DB2016*, following similar reforms in *DB2011* to reduce the cost of a building permit from 1 percent of the estimated construction cost to 0.6 percent and imposing a time limit for issuing building permits. Despite Bank Group and Democratic Republic of Congo attempts, there were limited reforms tracked in the area of enforcing contracts.

Lessons

Some relevant factors that explain the country's performance were political and institutional instability, the consequential loss of reform champions within the government, and a public health crisis. National-level political instability led to two main consequences. One was high-level client disengagement from reform, and the other the loss of a business environment reforms supporting high-level leader. Meanwhile, important external factors included public health crises (Ebola and COVID-19). Together, those led to the discontinuation of reforms, mainly impacting the enforcing contracts business area. Factors of success that contributed to the implementation of reforms in the Democratic Republic of Congo, on the other hand, include (i) institutional ownership, whereby ANAPI is directly responsible for the reform process; (ii) the presence of reform champions at all levels; and (iii) constructive public-private dialogue.

India

» Doing the right things: Is *DB* doing the right things in terms of indicators and the country context?

India is a lower-middle-income country with increasing relevance and persistent development challenges. It is the eighth-largest country in the world and the second most populous, with 1.3 million inhabitants and a per capita gross national income of $2,120 as of 2019. For the period of this evaluation, the government of India promoted fiscally conservative policies, registering steady economic growth and resilience, including through the 2009 global economic crisis. While the country developed space technology, high-quality information technology services, and pharmaceutical industries, most of its population still work on small subsistence farms and in informal, basic, low-skill workshops. Other important development challenges are low access to finance and to land, and high corruption levels.

The *DB* indicators have spurred reforms in India, especially since 2014. The current government has focused its efforts on improving India's global rank in *DB* and has set a specific target of being among the top 50 countries in the world. To achieve that, it asked a department in the Ministry of Commerce and Industry—the Department of Industrial Policy and Promotion (DIPP)—to liaise and work with the Bank Group. With its specific focus, DIPP gained a deeper appreciation of the value of *DB* as a diagnostic and a benchmarking tool. The World Bank subnational *DB* of 2009 and the World Bank enterprise survey pointed to big differences among the states in India. In 2015, DIPP rolled out the Business Reforms Action Plan for state governments and union territories in India to improve the EoDB and the ease of regulatory compliance for businesses across the entire country. The program for reforms, in partnership with state governments, aimed to make it easier, simpler, and quicker for businesses to operate, and inspired by *DB*, the states and their reforms are rated annually and the states are ranked. Both the World Bank and IFC carried out advisory programs to help the central and state governments improve their EoDB.

Despite recent controversies about *DB* and its methodology, in India *DB* has a reputation for being objective and specific. However, as in other case countries, critics have pointed to the limitations of the DB indicators in covering key constraints facing businesses in the field, and the limitations of DB's approach of representing conditions in only two cities (as it does elsewhere) given such diverse conditions nationwide.

» Doing things right: Is *DB* being used by clients and the Bank Group in ways to achieve the best effect for business environment reform?

While the rapid rise of India in rankings—from 142nd in 2014 to 63rd in 2020—is welcomed, some experts expressed concern that, while some of the reforms implemented met the specifications of the DB indicators, the actual progress in the field may not have matched the movement in the indicators.

India implemented 59 reforms, many of which were linked to national plans for increased digitization of the economy. There was a preponderance of reforms with easy procedural simplification in starting a business, paying taxes, trading across borders, and dealing with construction permits, which reduced the time and the costs involved. There were fewer reforms successfully implemented in the more difficult areas involving legal processes, such as in resolving insolvency, registering property, and employing workers. However, one complex reform area highlighted in interviews was resolving insolvency, where a new legal framework was developed and introduced. Indicative of the long-term nature of these challenges, despite major reforms to improve India's insolvency framework, business associations reported the persistence of slow, cumbersome, and inefficient resolution in court. *DB* also helped the government develop specific targets and the means to monitor them. The long-term relationships between Bank Group staff and DIPP officials have been a positive factor for the reforms.

For many business stakeholders consulted in India, the *DB* reforms were adequate but not very helpful. They welcome that *DB* has motivated relevant reforms but, in their opinion, *DB* does not cover many issues they perceived to be important to them, such as poor infrastructure, problems with land, labor, and governance. Foreign investors pointed out that they do not base their investment decisions solely on the *DB* indicators as a gauge of the business environment. They point to the lack of coverage in *DB* of critical themes including a level playing field, the role of the state in business and the support for SOEs, and the negative lists of areas where foreign participation is not permitted. They indicated that their focus was on the predictability of the legal process in the country, repatriation of their earnings, civil unrest and macro-economic factors including the volatility and trend of exchange rates.

Lessons

Five main lessons can be derived from the experience in the country. One, specificity offered by the *DB* (sub)indicators was critical to drive medium- and long-term reform, as they would guide policy making. Two, even simple reforms may require interministerial coordination and high-level oversight, as many of the reforms had to be implemented by two different state and municipal governments and across different ministries. Three, simply implementing reform is not sufficient, as monitoring, feedback, and public-private dialogue would enhance adequate rollout, design, and awareness. Four, ambitious reform programs required flexibility in design and implementation, as they often involved separate ministries, departments, and even interest groups. Five, competition is good. Ranking states enhanced incentives for reform. Competition between the two cities captured in *DB* helped drive the reform process.

Indonesia

» Doing the right things: Is *DB* doing the right things in terms of indicators and the country context?

Indonesia has consolidated as an upper-middle-income economy with a fast-growing private sector and regional influence, but also with regional and income inequalities. Since 2000, boosted by a surge in the price of key commodities, Indonesia has emerged as a vibrant and stable democracy. In 2019, Indonesia had a total population of 270 million, with a life expectancy of 71.5 years. The country's GDP has increased by more than 400 percent since 2000, with a subsequent decline in the poverty rate from 24 percent in 1999 to 10 percent in 2018. However, the rapid economic growth has led to increased inequality, with large geographical disparities and a Gini index of 38. The distribution of inequality remains highly concentrated. There are more than 300 ethnic groups, with the Javanese being the largest group (42 percent), followed by the Sundanese (15 percent).

In this context, Indonesia's business environment is marked by a combination of micro, small, and medium enterprises and large SOEs. Both types suffer from low productivity and exhibit limited integration into regional and global value chains. The SOE sector plays a significant role in the economy, and SOEs' interests greatly influence economic policy. SOEs receive subsidies and operate as monopolists or dominant players in key sectors. Furthermore, Indonesia has some of the tightest restrictions on foreign direct investment among middle-income countries surveyed by the OECD, which inhibit market entry, diminish commercial performance, and increase prices. Indonesia's weak competition framework prevents authorities from effectively discouraging anticompetitive behavior.

DB has strongly influenced national development planning. In 2017, President Joko Widodo reaffirmed his EoDB 40th rank goal and instructed ministries to draft detailed plans to achieve it. As a response, in 2019, the head of the Ministry of National Development Planning (Bappenas) announced a gradual transition into e-bureaucracy, reflecting particularly on the licensing process for the investment sector. Furthermore, in recent years Indonesia has introduced an online platform for business licensing, replacing hard copies with electronic certificates. The country also introduced online systems to file and pay major taxes, process export customs declarations, and manage cases for judges supporting contract enforcement. Recently, the Congress approved the Omnibus Law on job creation. Primarily, it streamlines the complex regulatory environment in 11 critical areas, including labor law, capital investment, business licensing, corporate tax, and land acquisition.

The influence of *DB* in the Bank Group portfolio in Indonesia is unique. It is highly concentrated in volume by a sequence of development policy loans (DPLs) supporting an agreed reform program, clearly defined in both the CPF and the government's planning documents. Additionally, DPLs are complemented by significant support in a high number of advisory services and analytics and analytical work projects. DBIs have been useful for identifying business climate constraints related to several procedures, time, and costs. From the 1960s to the late '80s, interest groups in Indonesia pushed the reform agenda into specific political and economic directions, many of them highly ideologically weighted. Since its inception, *DB* has provided an international benchmark that has influenced the main political stakeholders to support a more pragmatic reform program, smoothing the policy dialogue on the country's priorities and the best way to address them. The most recent example was the mentioned Omnibus Law, supported by a diverse majority of political forces.

However, Indonesia has focused its business-oriented reforms on those measured by DBIs, marginalizing crucial and more comprehensive development components such as security, macroeconomic stability, reduced corruption, labor skills, quality of institutions and infrastructure, economic competition, investment, and trade policies (other than import/export time and cost). Although DBIs appear to have helped pave the way for a solid path of reforms, this has been a risky approach, enhancing a biased view of a successful reformist case and diverting attention away from anticompetitive public rules and practices which should have been addressed. The limited *DB* scope has failed to grasp the whole performance of the country's business environment.

» Doing things right: Is *DB* being used by clients and the Bank Group in ways to achieve the best effect for business environment reform?

Although *DB* has helped as an entry point with government, its rankings might be overshadowing business areas in need of policy reforms. For instance, DBIs have raised concerns in their accuracy of capturing the country's situation regarding insolvency issues. In the last five years, Indonesia's score in resolving insolvency has remained almost the same (67.7 on average) and well ranked (38th in 2020). While achievements in this regard can be identified (for example, the 2004 Bankruptcy Law), in practice improvements in the legal framework and law implementation are still pending. The government's priority of enhancing investment attraction has become increasingly translated into improving Indonesia's position in the *DB* ranking, which has proved to be a misleading path for identifying priorities in reform areas and improving the business environment.

This situation is also confirmed by the divergence of results on *DB* in Indonesia presented in other indexes (for example, the Japan Bank for International Cooperation survey). Contributions of *DB*-related reforms to the business environment might be difficult to associate from a causal perspective. However, normative changes followed by movement in indicators might capture a part of the *DB* expected effects. Empirical analysis suggests that reformed areas have directly improved DBIs. Getting credit, starting a business, and paying taxes are among the indicators reflecting a major improvement from 2015 to 2020. These indicators alone amount to 52 percent of *DB*-related reforms since 2010. However, it should be noted that trading across borders reforms added 10 percent of total reforms for the same period, but only registered a 4.7-point improvement in the last five years.

Lessons

In Indonesia, *DB* has been highly successful as a discussion driver between the Bank Group and policy makers, and between the government and the main political stakeholders in the country. The controversy on the practical results of reforms influenced by *DB* points out a usage problem that goes beyond the *DB* scope as an instrument. Empirical evidence indicates that in the absence of *DB*, other indicators and rankings, such as the World Economic Forum's *Global Competitiveness Report* (which is considered to be methodologically less rigorous), would have been used to guide and prioritize specific topics within the country's reform agenda. Most of the stakeholders interviewed by the Independent Evaluation Group (IEG) agree that considering that the *DB* scope is limited, other Bank Group products (that currently have a lower profile compared to the *DB*) should complement it to capture a more comprehensive analysis of the business environment. Instruments such as the Country Policy and Institutional Assessment and the enterprise surveys are generally reliable and can correlate with DBIs, strengthening the analysis and providing a better understanding for Bank Group staff and clients.

Jordan

» Doing the right things: Is *DB* doing the right things in terms of indicators and the country context?

Jordan is an emerging market economy with slowing growth levels, increasing population, and rising public debt, leading to worsening poverty and unemployment. Indeed, unemployment has risen to almost 25 percent in 2020 and affects youth, university degree holders, and women much more negatively, further contributing to inequalities. Jordan's economic resource base centers on phosphates, potash, and fertilizer derivatives; tourism; overseas remittances; and foreign aid. These are its principal sources of hard currency earnings. Lacking alternative energy and water supplies, Jordan relies on natural gas for 93 percent of its domestic energy needs and suffers from regional instability. Nevertheless, it has benefited from international aid as the country has become a central element of stability in the region, ensuring peace on the borders it shares with its neighboring countries. Jordan also has multiple industrial zones producing goods in the textile, aerospace, defense, information and communication technology, pharmaceutical, and cosmetic sectors. Jordan has an emerging knowledge economy.

Jordan's ranking in EoDB remained relatively stable during the whole decade, oscillating between 105th and 126th position. Similarly, the EoDB score slowly and gradually increased from 56.3 in 2010, when the country's ranking was 108th, to 61.3 in 2019, with a ranking of 102nd. In the 2020 EoDB, Jordan marked a record performance by going up 29 ranks (from 102nd in 2019 to 75th in 2020) and was recognized as one of the 10 most improved economies. This progress has mainly been led by improvements in the getting credit, paying taxes, and resolving insolvency indicators. The getting credit score increased from 35 in 2019 to 95 in 2020 (moving Jordan's country rank for getting credit from 134th to 4th), mainly thanks to the implementation of the Movable Collateral Law, which improved the legal rights index of the indicator from 0 to 11, and the Insolvency Law, which improved the credit information index.

Overall, international rankings, reform plans, and executive directives are often detached from the actual needs of the private sector. (EBRD) This indicates that though the country needs to reform its legal framework and create incentives to stimulate Jordan's private lending environment, the reforms implemented or proposed through the Bank Group's operations do not tackle the correct issues. This also means that, though the projects target areas that need to be reformed, the reforms proposed mainly focused on increasing the country's ranking on the DBIs rather than being in line with the private sector's needs.

» Doing things right: Is *DB* being used by clients and the Bank Group in ways to achieve the best effect for business environment reform?

Efforts to improve starting a business fell short, in spite of support from a 2009 DPL and two subsequent ones. The 2012 and 2014 DPLs did not fully reach their starting a business–related goal of cutting the time and required licenses. It is unclear which of the implemented reforms would impact this target. On the other hand, reforms related to paying taxes and getting credit led to good results. Jordanian tax authorities gradually adopted an electronic system for filing and paying taxes, making its use mandatory from 2018. This has significantly improved its annual hours per tax payment subindicator. Further, through IFC's 2020 advisory operation, Jordan will also adopt a risk-based audit by creating an engine based on risk management. This will contribute to improving the country's postfiling subindicator. In addition, the government started keeping a unified registry for collateral that is notice based. This simplifies the process and improves the quality of registration by minimizing errors due to fewer documentation requirements. The laws also allow the country to adopt a functional approach to secured transactions, according to which rights of movable assets that secure the payment or performance of an obligation become functional equivalents to traditional types of securities. Regarding the credit information index, the 2010 Credit Information Law and the 2016 private Credit Bureau introduced all the good practices laid out on the *DB* website, such as reporting both good and bad information and eliminating minimum loan thresholds. Since 2018 the bureau also started receiving data from retailers to establish a good credit history for those who do not have previous bank loans or credit cards and providing credit scores as an additional service offered.

Jordan made good reforms in getting credit and starting a business, despite the challenging context. Jordan adopted several different good practices through the 2018 Movable Property Law and Insolvency Law, allowing a general description of collateral, maintaining a unified registry, and protecting secured creditors' rights. To improve conditions to start a business, it reduced or eliminated the paid-in minimum capital requirement; created or improved one-stop shops; and simplified registration processes, using electronic services.

Lessons

During the whole evaluation period, Jordan was subject to numerous exogenous shocks that delayed implementation of *DB*-related reforms. An economic slowdown, caused by the global recession and regional crisis, shifted near-term priorities and moved government focus to other areas, especially management of public investments, taking attention away from *DB*-related issues. As well, cabinet reshuffling increased the difficulty of quickly adopting reform. On the other hand, committed, dynamic, and forward-looking ministers in relevant ministries were crucial in working with the Parliament to push for the implementation of reforms related to getting credit. Above all, a big success factor was the perseverance shown by both the Bank Group team and the government in pushing for these reforms in a time difficult for Jordan, reforms that were eventually implemented.

Failures identified in projects related to starting a business include timing of analysis and design. Much of the background analysis on which the 2009 DPL was based was carried out years before the global financial crisis and economic slowdown. This applied to both starting a business and paying taxes reforms. Failures in subsequent DPLs of 2012 and 2014 could derive from the design of the projects: either choice of a target that did not absorb the effects of the implemented reforms, or choice of reforms that did not focus on decreasing the time needed to start a business.

Morocco

» Doing the right things: Is *DB* doing the right things in terms of indicators and the country context?

Morocco is a lower-middle-income North African nation with the second-largest economy in the Arab world. Traditionally rural and agricultural, it has transitioned to a majority urban economy. Over the past 20 years, it has achieved relatively strong economic and social progress thanks to reforms that helped to stabilize its macroeconomic framework. These reforms include phasing out energy and food subsidies, improving fiscal and financial policy frameworks, and promoting economic diversification and competitiveness. Morocco also achieved some success in promoting high-value-added manufacturing sectors (for example, pharmaceuticals).

The country's business environment remains bureaucratic, subject to arbitrary decision-making, and lacking in competition. Heavy and opaque administrative formalities lead firms in enterprise surveys to identify corruption, tax administration, and informal competition as leading constraints. The surveys indicate substantial constraints to SMEs; for example, they spend two to three times as much of their management's time dealing with government regulations as do large firms and are more likely to find informal competition. In the broader economy, oligopoly and lack of competition are important constraints, making it difficult for new firms to enter sectors that elsewhere are typically characterized by low market concentration, such as manufacturing. Finally, weak governance is a persistent constraint.

After having sharply criticized *DB* until around 2007, the country enthusiastically embraced *DB*-informed reforms and from 2010 to 2020 is credited with an impressive 33 positive reforms as captured in the indicators. Observers found *DB* rankings highly motivating to their counterparts, to the extent that it was prioritized over more tangible economic outcomes. The government established an objective to be among the top 50 countries for EoDB by 2021. While reforms covered many areas, they prioritized starting a business and paying taxes. Morocco advanced in its EoDB ranking from 128th in *DB2010* to 53rd in *DB2020*.

The World Bank Group has provided technical and financial support for Morocco's *DB*-related reforms through eight identified projects over the evaluation period. The *DB* agenda was also treated in broader country strategy and economic documents. Several activities were both broader and deeper than the *DB* agenda.

The FY19–24 CPF echoes the findings of the SCD and the Country Private Sector Diagnostic (CPSD), emphasizing areas mostly beyond the *DB* agenda: corruption, lack of a level playing field, competition from the informal sector, low workforce education levels, and difficulties in accessing financing. It notes the government's 2021 EoDB goal but establishes a strategy well outside of this. Under the CPF, *DB* forms a clearly acknowledged but small part of an ambitious agenda. The CPF speaks of a new generation of reform: "A combination of lending, advisory and analytical engagements across IFC and World Bank will seek to facilitate second generation business regulatory reforms to reduce further the cost of doing business, support the digitization of business services, enable fairer competition, support contestability and strengthen implementation capacity of policy making."

A theme is one of diminishing relevance of the DBIs over time. Through much of the evaluation period, the National Business Environment Committee (CNEA) saw great benefit to the DBIs as a focal point of reform and saw improving Morocco's standing as a "bottom line" for reforms. It saw the DBIs' improvement as a clear way to communicate reform success to foreign investors and donors. Thus, *DB* was initially quite useful in initiating dialogue, opening areas of reform, providing agreed metrics and monitoring standards, and coordinating efforts through the leadership of CNEA. It provided entrées in some cases to broader reforms in areas covered by *DB*.

Certain limitations both to *DB* and to CNEA's policy motivation became of greater concern. First, some Bank staff raise a question about the contradiction between *DB*'s focus on the experience of a typical SME described in its cases and the government's effort to attract foreign investors, who generally did not operate under the regimes described. As low-hanging fruit was progressively addressed, the remaining *DB* agenda became one of longer-term or less politically palatable actions, including work on the legal and judiciary system. In addition, as the business-government interface became increasingly digitized, the static measures of *DB* became less relevant to the underlying procedures they were trying to capture. Finally, and most importantly, there was the recurring critique that the *DB* agenda was mostly orthogonal to the most pressing constraints on domestic businesses (CPF, CPSD, SCD, World Bank staff interviewed).

Doing things right: Is *DB* being used by clients and the Bank Group in ways to achieve the best effect for business environment reform?

Morocco's reforms yielded strong advances in its *DB* ranking (in 2020, 53rd in EoDB), and *DB* is understood to have uniquely influenced the government's reform agenda, easing procedural compliance in multiple areas. *DB* motivated a great deal of reform activity, enhanced government coordination, and laid the groundwork for more systemic monitoring of reforms. By *DB2020*, Morocco was ranked 16th in getting construction permits and 24th in paying taxes. Observers pointed to the influence of *DB* in engaging reforms, noting "there is nothing similar" among other indicators or diagnostics. At the same time, experts observe that it remains difficult for SMEs to enter many markets, access key inputs, and contend with bureaucratic and legal procedures.

Lessons

Overall, Morocco has used *DB* to its advantage as a result, in part, of internal and external factors. These included the following:

Internal: (i) *Concrete targets*. In general, the DBIs are seen to give specific targets that are useful to government in setting targets and monitoring progress. The measured progress of *DB* at the national level has now spawned support for subnational reforms extending to the Marrakesh region and beyond. And the recent pilot extension of *DB* to contracting with government has facilitated engagement on such issues as government payment arrears to private businesses. Yet the rigidity of targets could be limiting in what reforms were credited or even supported by monitoring. (ii) *Mobilizing specialized expertise*. The central indicators-based reform team developed experts who could be mobilized to assist various national reform efforts. In some cases, specialized expertise was mobilized to help develop digital/

information technology systems to support reforms. (iii) *Addressing appropriate levels of government*. Given that *DB* measures a main city or cities, the appropriate forum for effecting change for several indicators was in fact regional or municipal government. (iv) *Continuity*. The Bank Group's continuous presence and dialogue across various instruments and periods seems to have been a positive factor. Long-term relationships, trust, and communication developed between key staff and their counterparts. (v) *Coordination*. IFC and World Bank staff working on the business environment were part of joint units and, as such, were able to mobilize complementary instruments (for example, development policy operations, analytics, advisory support) within a common strategic framework. The recent split of IFC advisory services staff from joint practices has somewhat weakened this ability.

External: (i) *Client capacity*. The counterpart developed a sophisticated understanding of how to move Morocco's *DB* rankings and how to use the indicators to motivate, coordinate, and monitor reforms. CNEA was created with encouragement from the Bank Group, which also advocated for public-private consultation. CNEA became skilled at incorporating public-private dialogue into the reform process (broadening ownership), constructing action plans with defined and assigned tasks and deliverables, overseeing implementation, and evaluating progress. Public-private dialogue in itself was credited as a source of reform success, bringing greater consensus and stronger ownership of reforms. (ii) *Client commitment*. The strong motivation of the counterpart to improve *DB* rankings gave substantial impetus to related reforms. It came from "the highest level" of government, and with it came accountability, coordination, and the ability to overcome many obstacles to implementation, mobilizing actors and speeding adoption of new laws and regulations. At the same time, limitations to counterpart commitment meant some difficult issues were not addressed. (iii) *Cultural change*. One benefit of *DB*, according to a key staffer, is that "*DB* is contributing to a new way of doing. A *DB*-like dynamic could be extended to other sectors. You could have units similar to CNEA with clear indicators and objectives [although this is] not common." Said another staffer, "There is not in Morocco a culture of close monitoring and evaluation in anything. Other Bank Group products don't have the same influence and power in convincing government, in creating a special delivery unit."

Russian Federation

» Doing the right things: Is *DB* doing the right things in terms of indicators and the country context?

The Russian Federation is an upper-middle-income non-OECD country characterized by global economic relevance and governance-related challenges. The country has the largest surface area in the world, holds the 11th-biggest GDP, and has the 9th-biggest population, with outstanding natural resources that stem from its vast geography. It is a major emerging economy with significant international influence and a diversity also characterized by an uneven territorial development. Russia is also the third-biggest oil and gas producer and exports other commodities such as coal and wheat, which generates income while also characterizing a resource-based economy. Meanwhile, it is home to deep-rooted oligarchs who maintain close ties with the government. Indeed, some of the country's main vulnerabilities relate to governance, and recent conflicts. These were aggravated by 2014's conflicts over Crimea and the consequential set of international sanctions imposed by major developed economies, which also affects the economy at other levels such as foreign investment.

Russia counted on both the national and Bank Group plans aligned with the improvement regulatory environment. The Bank Group's Systematic Country Diagnosis (2012–16) outlined priorities including streamlining regulatory requirements to enhance conditions for entrepreneurship, competition, and SME growth. That resonated with the presidency's target in the 2012 "May decrees" of improving the Russian *DB* rankings.

Wide support from higher government officials was complemented by the role of the Ministry of Economic Development in leading the process along with a nongovernmental organization, the Agency for Strategic Initiatives (ASI). While led by the presidency, they coordinated internal and external actors as well as public-private dialogue, including experts and the Bank Group. Until recently, the framework was organized around 12 yearly roadmaps (7 related to DBIs), tools that carried mutual agreement of parts involved and that worked for transparency, implementation, and follow-up measures.

World Bank support was mainly delivered through a flexible programmatic assistance package comprising technical assistance, RAS, and just-in-time (or ad hoc) interventions. Major support was provided by World Bank local and central offices, often focused on the electricity and construction permits indicators. The support given was largely based on a pipeline of assistances that provided the country with reform memos guiding reforms, regular support to clarify methodologies (in some periods, daily calls with ASI), introduction to best performers with contexts that were analogous to the Russian, and attendance at roadmap-related meetings. Areas supported by the World Bank were mainly *DB* related but were not limited to them. The World Bank has identified the risk of over-focusing on *DB* and developed mitigation efforts, which include clarifying that the mere improvement of the rankings would not lead to business environment improvements, and developing support on other fronts such as SME development and competition policies.

» Doing things right: Is *DB* being used by clients and the Bank Group in ways to achieve the best effect for business environment reform?

The country implemented a striking total of 53 reforms, structured around a highly hierarchical, organized, and inclusive framework. Russian rankings and government effectiveness increased strikingly, but despite such improvements, external trust in the business climate is still affected by governance issues and sanctions. The Russian EoDB had a 77 percentage point increase in the period, an impressive result of its coordinated efforts in several areas, led by getting electricity and dealing with construction permits. Similarly, its United Nations Development Programme government effectiveness rating also increased 46 percent in the period. However, Russia still faces internal challenges related to corruption and governance. Externally, its GDP and investment levels face an exogenous force that *DB* cannot influence: the sanctions imposed by the United States and European Union in 2014 following the armed conflict over Crimea.

The Russian government has also developed its own adapted subnational yearly *DB* report and awards. During the evaluation period, the executive branch of the federal government has implemented a strategy of coordination and incentives' alignment of subnational leaders to improve the business climate. Along with the ASI it established a national ranking similar to

DB but adapted to the Russian subnational context. With yearly recognition of best state performers, it gained a lot of attention from competing governors and the public. It can be said that the business environment reforms in Russia ended up outgrowing the *DB*, adapting themselves to local development challenges and to mitigating regional inequalities.

Lessons

DB worked as a tool to inspire change, open dialogue, identify constraints, and monitor progress. Success factors were the complete buy-in from the presidency (including setting targets and plans by decree) in coordination with lower levels of national and regional governments; high-level frequent monitoring of midlevel implementation; the agenda overlap between *DB* and the government's plans; the ASI's convening of the public-private dialogue; the engagement of educated civil servants; the inclusion of other, non-*DB* dimensions in business environment reforms; the capacity-building efforts with just-in-time (or ad hoc) support (including methodology clarifications and simulation of reforms' effects over scores), peer learning, and business reform memorandums; the pipeline of flexible and responsive RAS projects; and the virtuous competition that was established. The positive effects of peer-to-peer learning with government agents from well-performing countries identified by the Bank Group were emphasized by government members of different *DB* areas as a vital success factor allowing the agencies to find advice and inspiration from other reformers. World Bank local officials complained of a lack of resources for support to reforms, which led to an executive decision for a team focus on dealing with construction permits and getting electricity. Stakeholders repeatedly confirmed not perceiving conflict of interest in the *DB* measurement and operation.

Rwanda

» Doing the right things: Is *DB* doing the right things in terms of indicators and the country context?

Some of Rwanda's structural characteristics constitute major constraints in the path toward development. The country is landlocked, with the highest population density in mainland Africa. The International Monetary Fund expects Rwanda will reach a gross national income per capita of US$821 in 2021, ahead of 12 of the 48 countries in Sub-Saharan Africa, but it is still a low-income country. While urbanization efforts in the past years have been particularly directed toward Kigali, its capital city, around 80 percent of its population live in rural areas.

Reducing dependence on foreign funding represents a major challenge for the country. In the aftermath of the genocide that took place in 1994, the government focused its efforts on rebuilding the country, thus making continuous public investment the major driver of economic growth. At the same time, it became a highly favored recipient of foreign development assistance, which has been declining in the last years; consequently, private investment and domestic savings must increase as well as tax revenue. In addition, creating productive jobs constitutes Rwanda's main development challenge (CPSD 2019). High population growth highlights the need for creating productive jobs to prevent higher unemployment and poverty rates. To address these challenges, the government needs to promote the business environment.

The government's strategic development agenda has been fundamental for Rwanda's progress in the past two decades. Economic prosperity has been the cornerstone of the strategy, as it has contributed to legitimizing the political system and gaining international recognition. During the evaluation period, different plans and strategies were adopted, generally embracing a broad development agenda, such as the United Nation's Millennium Development Goals and Sustainable Development Goals. All of them recognize the importance of the private sector in leading the country's economic growth.

The influence of the *DB* report is clear in some national plans and strategies. Official documents (for example, the Economic Development and Poverty Reduction Strategy [EDPRS] and Vision 2050) targeted reducing the average number of days to deal with licenses, strengthening "Rwanda's Doing Business Brand," and getting ranked in 10th place by *DB2035* and maintaining the status afterward.

The *DB* report has been used as a tool for prioritizing reforms, although its influence has decreased in recent years. Government officials use the *DB* report as a roadmap to recognize pressing issues and corresponding good practices, including peer countries' benchmarking. Nevertheless, they also see the scope of reform guidance broadened beyond the *DB* report in recent years. Other sources of information are the National Institute of Statistics Rwanda, the Global Competitiveness Index (World Economic Forum), and the Financial Freedom Index (The Heritage Foundation).

Country strategies have been aligned with national plans, with a strong focus on improving the business environment. For instance, the Bank Group's Country Assistance Strategy for Rwanda for FY09–12 was framed around the EDPRS strategic flagships and had a strong emphasis on supporting investment climate reforms as measured by the *DB* report.

In the IEG-identified, *DB*-relevant portfolio, the Bank Group financed six projects during 2010–20, totaling US$171.9 million in commitments. Most projects (five) were lending operations, while one was an advisory service provided by IFC. Most of the Bank Group's support was directed toward getting electricity (four projects), paying taxes (two projects), and trading across borders (two projects).

» Doing things right: Is *DB* being used by clients and the Bank Group in ways to achieve the best effect for business environment reform?

DB reports recorded 51 major reforms that made it easier to do business in the country. Rwanda was among the top reformers during the evaluation period. Reforms were focused on getting credit (14 percent), starting a business (14 percent), and dealing with construction permits (12 percent), while employing workers was the area with the fewest reforms (2 percent). The most common interventions addressed improving business laws and regulations (35 percent), supporting the use of electronic systems or automation (19 percent), and the reengineering of processes (19 percent).

A positive relationship between *DB*-related reforms and immediate outcomes is clear, but this does not hold for higher-level outcomes. *DB* reforms were effective in enhancing DBIs, score and ranking. Rwanda ranked 38th in *DB2020*, jumping 29 positions since *DB2010*. The country is now the second-easiest place to do business in Africa behind Mauritius. Although it is unquestionable that progress has been made in terms of domestic investment and savings, credit to the private sector, foreign direct investment, tax revenue, and exports, the 2019 CPSD points out that some key cross-cutting obstacles (related or not to *DB*) have not been overcome yet. Persistent structural constraints are low skill levels, limited access to and high costs of energy, high costs of transportation and information and communication technology, and restricted access to land. In addition, income per capita has not grown at the same pace as GDP, and some indicators suggest that the benefits of economic growth are still concentrated in a few segments of the population.

Lessons

While political will and strong coordination between public institutions were the most important factors behind reforms' success, limited state capacity was a challenge. Government commitment was constant during the evaluation period, which helped to direct resources toward *DB* reforms. At the same time, the Rwanda Development Board played a fundamental role in coordinating such reforms between the executive, legislative, and judiciary powers, and with development partners as well. Yet Rwanda needs to improve the capacity of public agencies. According to the 2019 SCD, low levels of human capital in the country are reflected in an insufficiently trained bureaucracy, which negatively affects projects' implementation. Likewise, the government's top-down decision-making approach could be backfiring as it hinders innovation among public servants.

Addendum on *Doing Business* Reform Memorandum Analysis

IEG examined the most recent available *DB* reform memorandums of the countries selected for case studies; hence, this "sample" is not necessarily representative of all the *DB* reform memorandums published in the last decade. However, aligning our selection with the case studies enhanced IEG's learning potential. The quality of the memorandums was reviewed using primarily qualitative criteria—for example, analytical frameworks used to make recommendations, adaptation of the recommendations to the national conditions, coverage depth beyond DBIs, best practices cited, and the specificity of the factors mentioned as shortcomings faced by countries.

The memorandums have evolved over the last decade and display a more structured and standard format. The standardized presentation presents a trade-off. On one hand, the information is presented more clearly, allowing it to reach a broader number of policy makers and enhancing comparability among countries. On the other hand, that structure seems to encourage a cookie-cutter approach, which poses a risk to the recommendations' depth and appropriateness.

Only 3 of the 10 *DB* reform memorandums reviewed include a systematic use of non-*DB* analytical frameworks to support *DB*-oriented reforms and law regulations.[1] These frameworks were mostly used as justification and as complementary evidence to support recommendations.[2] However, the memorandums that included non-*DB* analytical frameworks were able to provide recommendations strengthened by a broader set of information.

There is a high variance in the adaptation of *DB* reform memorandums to country conditions. Within the small sample, large countries, such as China, Russia, and India, benefited from a more tailored framework and a more comprehensive approach than smaller countries, such as Jordan, Morocco, and the Democratic Republic of Congo. Another aspect of tailoring is the use of best-practice examples in various sections of the *DB* reform memorandums. Some examples offered seem not to represent the level of administrative capacity of the client. Examples include the case of the electronic identification in Estonia; the experience of Ontario, Canada, in developing a risk classification; and the "FastTrack" platform in Portugal that allows users to select a pre-approved name from the registry's website. While the repetition of these cases is not necessarily incorrect, there is no clear indication of the way in which very diverse countries can benefit from these experiences or whether there is a particular logic in the repeated use of the same illustrations.

Moreover, there is an evident discrepancy in the approach used by *DB* reform memorandums across different indicators. For some indicators, such as getting credit, the memo offers a broad set of similar recommendations for all countries. By contrast, other indicator recommendations, such as protecting minority investors, are adapted entirely to the country's context.

In sum, *DB* reform memorandums present many useful and practical recommendations and tools to help improve DBI scores. However, many of these recommendations seem isolated and not linked to a deeper framework that would fully capture the challenges in each country's overall business environment and within each *DB* area of focus.

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[1] The three reform memorandums are for China, Russia, and India.

[2] Mainly the World Bank enterprise survey, Logistics Performance Index and Global Competitiveness Index, Country Partnership Strategy, International Monetary Fund reports and working papers, Organisation for Economic Co-operation and Development Trade Facilitation Indicators, research papers.

Appendix D. Indicator Area Deep Dives

Deep dives were developed regarding five specific Doing Business (DB) indicators: dealing with construction permits, getting credit, paying taxes, starting a business, and trading across borders. They allow a careful probing of evidence on each business area and whether and how the indicators or reforms based on those indicators have been shaped by evidence and experience. Each deep dive explores indicator features, construct and content validity, the relevant portfolio's design and effectiveness characteristics, and the role of other stakeholders at the country or global level. Each deep dive draws from a review of relevant findings from the portfolio review, the two literature reviews (desk and structured), the 10 country case studies, and interviews with subject matter experts and practitioners. Following the templates used for the evaluation deep dives, each background note is summarized in this appendix addressing, whenever possible, the following:

- Doing the right things: Is *DB* doing the right things in terms of specific business areas?
  - Indicators' features and content validity
  - Main types of country reforms and World Bank Group interventions
  - Uses in drawing attention to reform, identifying and prioritizing reforms, guiding design, and monitoring and evaluation (M&E)
- Doing things right: Is *DB* being used by governments and the World Bank Group in ways to achieve the best effect for business environment reforms?
  - Effectiveness
  - Factors of success and failure
    - Internal
    - External

Cross-cutting findings from the case studies and deep dives are summarized in table D.1 at the end of this appendix.

Dealing with Construction Permits

The *DB* dealing with construction permits (DWCP) indicator measures the procedures, time, and cost to build a warehouse—including obtaining the necessary licenses and permits, submitting all required notifications, requesting and receiving all the required inspections, and obtaining utility connections. Additionally, it gathers data on quality control based on six indexes. The methodology is based on a highly stylized case study (a warehouse construction) to create comparable data around the globe for assessing countries' construction permit systems. Limited evidence exists directly verifying the effects of reforms changing construction permit regulations for warehouse construction. It is unclear how well the construction of a warehouse represents other aspects of planning regulation (for example, concerning retail and office buildings).

The literature review on DWCP highlights the issue of the methodology depending on a highly stylized case study, as it has become unclear how representative it is of the requirements of most modern businesses across the globe. Therefore, it is unclear how useful the case study might be to capture broader aspects of planning regulation. The review suggests that indicator extensions could consider drawing comparisons with other common building types "such as retail and office buildings, often required by modern businesses" (CITATION, PG#). Likewise, the Independent Evaluation Group's (IEG's) desk review of literature identifies studies "indicating that the time and cost of getting construction permits are not correlated with economic growth and that the indicator itself does not align with the experience of surveyed firms" (CITATION, PG#).

The DWCP portfolio included 121 projects and 167 interventions, adding up to US$304 million. For this indicator, the distribution of projects is balanced between the three types of advisory services: World Bank advisory services and analytics (ASA), World Bank reimbursable advisory services, and International Finance Corporation advisory services (IFC AS). For the period in consideration, advisory services represent most Bank Group actions (77 percent) related to DWCP. The advisory services combined portfolio amounts to US$24 million. Advisory projects represent 8 percent of the total amount of resources dedicated to the area considered in the analysis, but they represent nearly 80 percent of total projects and interventions related to the indicator. On average, financing projects associated with DWCP have remained the same over the last decade (three lending projects per year). On the other hand, nonlending services show a constant growth in the previous decade. Regarding country reforms related to this indicator, most of them can be considered as positive regulatory changes (80 percent). Those positive reforms tend to concentrate in low-middle- and upper-middle-income countries.

It has been a relevant tool for some country actors as an entry point for promoting sectoral reforms enhancing the efficiency of the construction sector. Some stakeholders suggested it would be better for DWCP if *DB* would only ascribe scores without explicit rankings or cluster countries by tier groups contingent on their score. Also, in terms of public policy decisions, DWCP scores between cities (where available) seem to be a positive factor enhancing local reforms and promoting competition within countries.

In general, DWCP interventions are effective. Areas with higher rates of success are "raising support for and awareness of reform" (100 percent, n = 3), "streamlined procedures" (86 percent, n = 74), and "improve business laws or regulations" (83 percent, n = 115). Among the key factors that influenced project outcomes were analytical work, design complexity, proactive client engagement, effective coordination with partners and donors, overall M&E considerations, client commitment, and collaboration with external donors. External and internal outcomes that facilitated implementation and led to positive results (rated as adequate) include "effective coordination with partners or donors," "analytical work," and "collaboration with external actors or donors." Overall, social and environmental incidence is weakly associated with DWCP projects; only 30 percent of the evaluated projects considered social and environmental goals as part of their objectives.

The analysis of the distribution of objectives for DWCP-related projects reveals a missed opportunity for addressing associated process risks, corruption, and informality/evasion of rules. As noted in the literature review and further in the stakeholder analysis, the construction sector is mentioned as one of the most corrupt business areas, with important challenges regarding informality and rule compliance. An examination of the objectives for DWCP projects shows that countries might be focusing on projects that improve a score in the DWCP ranking, rather than those needed to overcome persistent industry obstacles. In this regard, the World Bank Group could play an active role by adapting its measurements to create new incentives for projects associated with those challenging areas in the construction sector. Regarding quality control, World Bank analysis shows that economies with a more efficient construction permitting system also tend to have better quality control and safety mechanisms. An example of how key regulatory implementations can help the DWCP area is Macedonia, where the number of procedures and time to build a warehouse were considerably reduced following the introduction of a private third-party building plan review.

Finally, from the stakeholder analysis, some general conclusions about DWCP can be drawn. Consistent with the literature review, the warehouse model fails to capture broader aspects of construction permits for many countries. This criticism suggests that the indicator might be inappropriate in some contexts and major cities with established industrial areas, such as Beijing and Moscow. For example, in Russia, because enterprises seek relevant information to guide their business decisions, the indicator limitation has led them to develop a separate roadmap only for industrial facilities. Through this parallel roadmap, dialogue between the Ministry of Construction and the Russian Union of Entrepreneurs has taken place. The indicator presented some measurement concerns in Russia, as finding a typical warehouse that corresponded to the case considered in its methodology was challenging. Consequently, the warehouse model was abandoned and substituted by a housing model. An additional methodological limitation of the indicator is the high level of knowledge required to answer the questionnaire, which is hard even for experts in the construction sector. Also, the DWCP indicator is seen as one of the most complex *DB* measures since many agencies from different government levels get involved. Deeper scrutiny is needed, but a preliminary overview suggests that DWCP could be one of the less cost-efficient indicators in the *DB* report. Additional shortcomings to consider about the

DWCP indicator include the absence of consideration of additional measures for fire safety, the use of nonconvenient (potentially hazardous) materials for construction, country geological conditions, and informality.

Getting Credit

The *DB* getting credit (GC) indicator measures two things considered to be crucial to a country's financial infrastructure: the legal rights of borrowers and lenders (strength of legal rights index) and the availability of credit information about firms and individuals (depth of credit information index). The strength of legal rights index measures how well collateral and bankruptcy laws facilitate lending. It assigns a country one point for each of ten attributes of collateral law and two for attributes of bankruptcy law, based on information provided by financial lawyers. The depth of credit information index measures the quality, scope, and accessibility of credit information through public and private credit registries. The data are derived from banking supervision authorities and credit registries. Additionally, *DB* gathers data on the share of the population covered by public credit registries and private bureaus, but these data are not included in the calculation of the overall ease of doing business index.

The GC indicator does not weight each of the 20 subindicators equally, which, for example, means that the collateral law is five times as important as the bankruptcy law in terms of legal rights. Furthermore, the indicator appears to be geared toward consumer credit and not small and medium enterprises or corporate credit, thereby making it somewhat unreflective of access to finance for firms. On the legal rights aspect of the indicator, experts revealed that the first point related to the existence of an integrated or unified legal framework which, despite shortcomings in the wording and interpretation, is perhaps the most important element and follows international best practices.

Empirical evidence identified in the structured literature review on the effects of reforms strengthening credit reporting systems and collateral laws is mixed, but it does support the idea of increasing lending and improving borrowers' performance. There was notable reform activity with 371 reforms recorded in 154 countries in *DB* reports between 2010 and 2020. By country, Rwanda was the top reformer with seven positive reforms recorded during this period. In 2010, Rwanda strengthened its secured transactions system by allowing a wider range of assets to be used as collateral, permitting a general description of debts and obligations in the security agreement, allowing out-of-court enforcement of collateral, granting secured creditors absolute priority within bankruptcy, and creating a new collateral registry. Other top reformers included Kenya, Vietnam, Indonesia, Azerbaijan, Mauritania, and the United Arab Emirates.

Over the evaluation period, the World Bank Group GC-related portfolio comprised 126 operations with a total of 195 interventions and US$1.348 billion committed. Most of these (71 percent) were advisory projects together valued at US$45 million. IFC AS projects represented just under half of the portfolio (42 percent), while World Bank nonreimbursable ASAs and reimbursable advisory services accounted for about a third (30 percent) of operations. Lending operations came only from the World Bank and represented the lowest share of projects (29 percent).

World Bank GC-related projects were most prevalent in lower-middle-income countries, with 46 projects approved over the evaluation period, representing 39 percent of the portfolio. This was followed by upper-middle-income and then low-income countries with 31 percent and 21 percent respectively. High-income countries accounted for 9 percent. However, while World Bank lending and IFC AS projects were mostly in lower-middle-income countries, ASAs were mostly used in upper-middle-income countries (45 percent).

In terms of relevance, this indicator remains very influential to motivate government interest in carrying out legal and regulatory reforms related to secured transactions and credit information systems. However, some shortcomings in the indicator constrain relevance. For example, the depth of credit information index does not distinguish countries with both credit bureaus and credit registries from those with only a credit registry, despite their increasingly different functions. Other exogenous factors can affect access to finance beyond what is captured by the GC indicator. For example, an Ernst and Young analysis regarding the effect of sanctions, based on a survey of 95 firms on the ease of doing business in Russia, showed that 27 percent have found it more difficult to finance Russian projects.

The usefulness of the GC indicator in motivating government interest in embarking on reforms to their credit infrastructure was sometimes overshadowed by the interest in improving rankings. Project design has been sometimes driven by client interest in simply improving the rankings, which limited the depth of reforms. In some instances, the minimum possible reforms were carried out to improve rankings.

The GC-related *DB* operations supported by the World Bank Group and evaluated by IEG were mostly rated as successful. World Bank lending and development policy operation projects had the larger share of successful interventions at 70 percent, while investment project financing projects had the lowest share of successful interventions at 50 percent. However, IFC interventions had a lower success rate, as about half of advisory interventions (54 percent) were rated as successful.

The most successful interventions were targeted at streamlining procedures and raising support for and awareness of reforms. The highest number of interventions (19) was aimed at improving business laws or regulations, especially with regard to secured transactions and credit information systems. An example of such was in Pakistan, where a 2016 approved World Bank development policy operation (P157207) supported an amendment to the Financial Institutions Bill that facilitated the use of inventories and receivables as collateral and strengthened lenders' claims on collateral.

Regarding immediate outcomes, successful interventions aimed to streamline procedures; however, there was limited success in realizing intermediate outcomes in GC. Other successful interventions also included those that aimed to improve administrative systems (75 percent), while interventions to improve collateral laws and credit information systems had moderate success (67 percent). Limited success in GC was realized in interventions that aimed to reduce the cost of doing business, for which just over half of interventions were successful (56 percent). This result raises concerns about the overall effectiveness of interventions in this area, in realizing important outcomes for stakeholders such as increased lending.

Factors that facilitated effectiveness and outcomes of World Bank Group GC interventions included adequate use of analytical work in project design and identification of risks at appraisal. However, at the design stage, effectiveness was constrained when projects were not designed to suit the client's capacity and consider political and institutional capacity for reforms. At the project supervision stage, proactive client engagement and follow-up are examples of internal factors that facilitated implementation, effectiveness, and outcomes in GC. Expert interviews also revealed the presence of parallel systems in practice as a factor that explains the limited benefits of reforms. They pointed to the fact that in certain cases, countries pass legislation and develop collateral registry systems in line with *DB* to get score points on the indicator but have alternative systems in practice.

Suggestions to improve the indicator's relevance include recognizing the differences between countries with credit bureaus and credit registries from those with just public credit registries, recognizing the use of credit scores, adapting to capture rapid technological changes, and considering queries received. Experts raised several suggestions to improve the relevance of the indicator. For example, in recognizing the use of credit scores, experts have suggested incorporating a question that checks whether the bureau/registry produces scores. The need for the indicator to be adapted to capture rapid technological changes was also highlighted in expert discussions, given the data-intensive nature of credit infrastructure systems and the advent of alternative forms of data. For example, in advanced economies, credit bureaus should also consider financial transactions via mobile payments and media subscriptions (for example, Netflix).

Key lessons from the evaluation period include identifying a champion to lead the project, with regulators (especially central banks) being one of the most interested stakeholders in embarking on reforms in this area. Other lessons include agreeing on a clear medium-term strategy, pursuing clear and consistent communication between the project team and the regulator, and relying on best practices. Finally, the deep dive highlighted the need to leverage technology in the adoption of new products, given rapid technological changes in credit infrastructure systems; create incentives to use newly established credit registries; and link the registry with other systems already in place.

Paying Taxes

Introduced in 2006, the *DB* paying taxes (PT) indicator aims to record the cost of taxes and mandatory contributions a medium-size company must pay each year, as well as the firm's administrative burden of paying them. It comprises four subindicators that can be classified under two main components, tax policy and tax administration. Under tax policy is the subindicator (i) total tax and contribution rate, and under tax administration are (ii) tax payments, (iii) time, and (iv) postfiling index (added in *DB2017*). The subindicators are aggregated in an overall score, computed as the simple average of the scores for each of the two component indicators, with a threshold and a nonlinear transformation applied to the total tax and contribution rate.

The tax policy component has raised concerns regarding its measurement of the businesses' effective rate. The indicator leads to a focus on the legal incidence of taxes (who writes the check to the government), instead of the more relevant economic incidence (who bears the financial burden), which depends on the relative elasticities of supply and demand. The model case also does not consider tax policy instruments that influence firms' decisions and impact their final tax rate (for example, tax rates segmented by industry or size, tax subsidies, special economic zones, and other tax incentives and exceptions). In Jordan, for instance, the PT indicator did not capture the expansion in tax exemptions and zero-rated commodities introduced in 2008 and its consequences for tax integrity, revenue base, and taxpayer and administrative compliance.

Additionally, it imposes a judgment about the social preferences embodied in what it measures. Tax rates reflect social preferences and other factors embodied in fiscal policy. The rating essentially penalizes a country for making potentially smart choices reflecting social preferences about fiscal policy (irrespective of how well fiscal resources are used). This was observed by previous assessments, as the component goes beyond the measurement of compliance costs, reflecting countries' overall fiscal policy decisions derived from social preferences, enforcement and collection capacity constraints, and political considerations. Hence, the component does not allow for meaningful benchmarking across economies.

While experts have observed the general adequacy of the indicator regarding tax administration, there are unaddressed challenges, especially when it comes to digitization. Experts and users of the PT indicator have noted that the indicators are a simple and fairly complete snapshot measure of firms' administrative burden of complying with tax obligations. The inclusion of the postfiling subindicator in *DB2017* was welcomed; nonetheless, tax administration trends are changing rapidly with the surge of new technologies and availability of information. The PT indicator does not fully take into account digitization in shortening time to pay taxes. More importantly, it does not incorporate emerging digital solutions that are disrupting the way tax administration is done globally (for example, compliance-by-design and third-party-collection approaches made available by technology).

With a total of 531 reforms related to PT tracked in the reports published from 2010 to 2020, it was one of the most reformed *DB* areas. While almost all countries had at least one PT reform (170), the low-income group was the least frequently reformed (14 percent). The reforms were related to tax policy (60 percent) or tax administration (40 percent). The Europe and Central Asia region was the one with most reforms (36 percent), followed by Africa (21 percent). PT is also the business area with most negative reforms tracked (after labor regulations/employing workers).

Tracked PT reforms were mainly policy focused and less frequently took place in low-income countries. The *DB* team tracked 531 national-level PT reforms in 170 countries, making it the second-most-reformed business area after starting a business. The reforms were related to tax policy (60 percent) or tax administration (40 percent). The Europe and Central Asia region was the one with most reforms (36 percent), followed by Africa (21 percent). The country with the most tracked reforms was Vietnam, with eight, followed by Indonesia, Hungary, and Brunei Darussalam. High-income countries were the most frequently reformed. PT is also the business area with most negative reforms tracked (after labor regulations). While PT reforms related to the administrative component were generally positive (95 percent), the ones related to the policy component were 46 percent negative.

In PT-related reforms supported by the World Bank, the *DB* indicators were mainly used as subsidiary elements in the justification for the projects. Almost half of the approved operations and slightly over half of the approved interventions used *DB* to justify the operation. At the same time, over a quarter of both projects and interventions used them as a results indicator.

The *DB* PT indicator was mainly relevant for the World Bank to open a channel of dialogue with governments. IEG conducted interviews with tax specialists and government officials that yielded examples of the role that the PT indicator has played in relevant reform processes: warning leaders of the executive branch of their national tax policy and administration limitations. In some cases, the PT ranking was the country's key driver of the dialogue and reform (for example, in Kazakhstan). In others, the ranking improvement was expected to be a side effect of it (for example, Armenia or Vietnam). It is worth mentioning that tax experts from other multilateral organizations (namely the International Monetary Fund and the Inter-American Development Bank) stated that this beneficial effect (improvement in rank) was not perceptible in their projects. Another use of the *DB* indicators has been to communicate policy improvements to constituents. The history of the *DB* report helps explain why its indicators became a main tool for official communication in some countries. The simplicity of its ranking logic was instrumental when communicating targets more broadly. An example of it is Russia, which by 2012, when occupying the 120th rank of 189 overall in ease of doing business, approved a presidential decree with ranking targets of attaining 50th place by 2015 and 20th by 2020.

Despite the strong criticisms of the policy component of the PT indicator potentially incentivizing countries to seek improvements of *DB* performance by decreasing tax rates (a race to the bottom), government officials interviewed did not report to have been affected by that pressure. Yet the incentives in place allow for countries, in trying to position themselves internationally in the *DB* rankings, to cut tax rates, potentially making suboptimal policy decisions and even undermining their capacity to finance basic public services. Having said that, government officials interviewed did not report feeling pressured to make policy-related reforms to improve the county's score. When there was enough state capacity to follow smart policy decisions, the policy aspect of the PT indicator's composition did not lead to pressure for different tax-level decisions.

There is some disconnect between the PT indicator and what businesses report. Notwithstanding Russia's successful experience in improving the indicator's ranking, moving from 103rd in 2010 to 58th in 2020, the Business Environment and Enterprise Performance Survey shows that enterprises considered corporate tax rates their biggest constraint in both years. In Colombia, the indicator was in fact used as evidence that corporate tax rates are high (the country ranked 148th in *DB2020* with a total tax contribution rate of 71.2 percent), and there were reforms including tax cuts during the period. However, government officials reported that while *DB* was a tool to support such a shift, tax rate decisions and reforms were not based on *DB* alone.

Best practices found evidence of good use of the indicator when the country understands the limitations of the indicator, both in terms of policy and of its potential for design, and has public and private digital technology capacity developed to adopt new features. The indicator did undergo some changes feeding back from experts' critics. A first lesson was that stakeholders of the *DB* PT indicator should understand its limitations when using it. In the World Bank Group, operations often use the PT indicator as a M&E tool, and that can become an issue when improving the indicator becomes a priority over improving real outcomes of the system. In the countries, it is important for authorities to understand that decreasing corporate taxes should not be used as a fast-track, easy-to-implement way to earn score improvements in the PT ranking. In Colombia, authorities were aware of the changes that would influence rankings, but this was not the only motivating factor. In Georgia, where the ranking was the main goal, the social and economic consequences in terms of the government's ability to finance public services were reportedly negative. When designing reforms, countries should and often do combine different sources of information along with the PT indicator to make policy and administrative decisions. Using other indicators (for example, the Tax Administration Diagnostic Assessment Tool) may improve the intervention's design, as that is the PT's main deficiency. A second lesson is that digital technologies, automation of data collection, and improved taxation by design are growing trends, and countries that count on widespread internet connection may be ahead in their capacity to improve tax administration and avoid tax evasion. The PT indicator's current design does not account for those trends.

Regarding indicator improvements, the PT indicator did undergo design changes to its policy component to address expert feedback received, including the addition of postfiling performance. *DB* also established a minimum rate threshold, to respond to the criticism regarding incentives to decrease tax rates leading to zero, making small tax-free islands top performers. The changes were not meaningful for most countries, however, since the threshold rate below which countries were not penalized by the indicator was set very low.

Starting a Business

The starting a business (SB) indicator measures the burden of opening a limited liability company, including for women-led businesses. The SB indicator focuses on the number of procedures, days to register, and the costs of registration required to formalize a business, with a specific measurement of that from women-led businesses. A number of assumptions are made for the base case, such as engaging in domestic business activities without importing or exporting, and having five national "sane" shareholders with no criminal records that are monogamously married. This indicator has been shown to be a significant motivating factor for reform, and it has featured prominently in World Bank Group assistance, both financial and advisory, for its developing member countries. Some 17 percent of all Bank Group interventions involving the *DB* indicators have featured reforms related to SB, one of the highest percentages among the *DB* business areas.

The *DB* report claims that the SB indicator captures public policy objectives related to promoting private sector development. The indicator has influenced policy makers' perceptions regarding the need for reforming the framework for starting a business. In this sense SB has played an important role among the whole set of indicators.

The framework for business creation and operation is of central importance for the business environment that supports private sector development, but there are important limitations to it. The narrow focus of the SB indicator does not capture essential elements of the legal and regulatory processes that are part of the institutional framework that relates to how businesses are started, how they operate, and how they are closed. Furthermore, SB does not provide sufficient information to identify reform priorities beyond giving a very general indication based on the number of days and costs to register a business and how this relates to other countries. In many cases SB issues are not significant constraints and do not reflect far deeper problems with the legal framework for business operation.

Despite some of them not being considered in the SB indicator, laws surrounding business creation and operation are central to the institutional framework for private sector development. The simple measures that compose the SB indicator are far too general to provide guidance on how to reform, although they could indicate that reform might be necessary. Simply reducing costs and steps in business formation in order to improve the ranking of the SB may make the reforms ineffective. The components of the SB indicator that are used to calculate the rankings of the ease of starting a business are also widely disparate in their importance. For example, eliminating the need for a company seal is equally rewarded in terms of reform effectiveness as reducing the number of agencies with which an entrepreneur must register.

This focus has led to reforms inspired by SB frequently emphasizing the establishment of one-stop shops to reduce the time, cost, and number of procedures involved in starting a business despite evidence of their effectiveness being weak. A further methodological issue is whether it is a realistic assumption that entrepreneurs undertake all the steps themselves and whether it reflects the actual situation facing an entrepreneur. In most countries where registration processes are complicated, lawyers, accountants, and professional "fixers" provide this service for a fee. While the SB indicator has been shown to motivate reform, there is little evidence that a higher SB ranking necessarily means that the framework for starting a business has improved, or that there have been more business registrations.

In addition, the "typical" company on which the analysis of SB is based seems to be unrealistic. The SB criteria require that this typical company have five shareholders, either all men or all women, each with an equal shareholding. A further requirement is that the typical company neither exports nor imports, which is at odds with the trading across borders component of the indicators. At the same time, much of the focus of the SB indicator appears to be on formalizing low-productivity, informal businesses. Research has shown that these businesses fail at a disproportionately high rate, in contrast to businesses that formalize without a period in the informal sector.

Another important issue, which the SB indicator does not address, is how the costs of formalization relate to the benefits of being formal. Formalization subjects businesses to taxation and regulations that raise the cost of doing business. If these costs are not offset by benefits, including having access to finance, being able to use the legal system, and being able to engage in cross-border trade, incentives to formalize are weak.

The very general nature of the SB indicator provides little indication of exactly how to reform the SB framework. To achieve far-reaching reforms, in-depth analysis of the laws and regulations governing the establishment of different types of businesses is an essential step in developing a reform strategy. This involves drafting, passing, and implementing meaningful legislation and associated regulations that relate to the various types of business organization, such as sole proprietorships, limited liability corporations, and public companies. The process is complex and can take an extended period to come to fruition. Furthermore, there is no “one size fits all” type of legislation. Particularly in developing countries, such legislation must be adapted to specific country circumstances. None of this essential information is reflected in the SB indicator. There is limited evidence that the indicator has promoted necessary changes in the legal and institutional framework governing businesses, beyond perhaps identifying that reform is necessary. An open question is whether SB is focusing on the wrong priorities—eliminating procedures and costs may well have little impact on poverty alleviation and growth.

While there is a paucity of evidence that shows the beneficial impact of improving the SB ranking, there is evidence that SB fails to reward fundamental reform. Case studies on the framework for SB in Colombia and Pacific Island countries show that deep-seated reforms of the institutional framework for business formation and operation lead to longer-term sustainable business creation but that these have not been reflected in the rankings, which disproportionally reward the establishment of one-stop shops. Reforms in Rwanda and Timor-Leste involving one-stop shops have led them to being ranked among the leading reformers in the world. However, there is little evidence that these reforms led to a higher rate of business creation. It is therefore highly uncertain that an improvement in the SB indicator leads to an improvement in the business environment.

Trading across Borders

The *DB* indicator for trading across borders (TAB) measures the time and cost associated with the logistical process of exporting and importing a standardized shipment. It is assumed that each economy imports a standardized shipment of 15 metric tons of containerized auto parts (worth approximately $50,000) from its natural import partner—the economy from which it imports the largest value (price times quantity) of auto parts. It is also assumed that each economy exports the product of its comparative advantage (defined by the largest export value) to its natural export partner—the economy that is the largest purchaser of this product. For example, for Armenia, their hypothetical export case is based on the export of "beverages, spirits and vinegar" to the Russian Federation, and the hypothetical import is auto parts from Russia, its leading trade partner.

IEG's prior structured literature review finds that the TAB indicator captures some of the less directly observed trade cost elements. It finds that TAB and the indicators of the separate Logistics Performance Index have the benefit of broad coverage and comparability across countries and are thus used in a large number of research studies on trade facilitation. Nonetheless, these metrics have inherent limitations. For instance, the TAB indicator relies on the responses of freight forwarders and, in a smaller proportion, customs and ports authorities. In the same manner, the Logistics Performance Index is based on perception scores given by freight forwarders and express carriers (World Bank 2016). As such, these metrics are not as free from cultural biases of the respondents compared with sources like information from administrative records. Finally, the two sets of indicators likewise go through regular refinements that attempt to improve sample representativeness and the coverage of the indicators (World Bank 2016, 2017). Hence, users ought to exercise care in ensuring comparability across time.

Studies also show that the *DB* TAB indicator is positively correlated with countries' export performance (for example, see Iwanow and Kirkpatrick 2009). In addition, several studies indicate that faster transit times are correlated with increased trade (Djankov et al. 2010; Hoekman and Nicita 2011; Rocha 2011) and lower levels of trade-related corruption (Shepherd 2009), and that countries with quicker export times are more likely to export more time-sensitive goods (Li 2019).

TAB cannot always capture the degree of implementation. Frequently, reforms implemented in the main port of the main city of a country take far longer to be implemented elsewhere. Sometimes, *DB* picks up reforms when enacted as regulations rather than when implemented. Further, the hypothetical case structure can miss a lot and cover only a small percentage of total trade. It is hugely sensitive to changes affecting the hypothetical case. For example, after Armenia joined a customs union with Russia, its *DB* TAB ranking jumped from 110th to 29th in a single year based on the focus of the hypothetical case. Finally, TAB measures only compliance costs and the speed of procedures, ignoring whether trade regulations are achieving their objectives (that is, detection rates, revenue collection, public health and safety, and so on).

Support for TAB reforms has been quite common in the Bank Group portfolio, even though World Bank lending tailed off in the latter part of the period. While encompassing elements of 195 projects, lending slowly dropped and advisory support remained steady.

TAB is used for multiple purposes, but most commonly for process reengineering (simplification, harmonization, and streamlining), improving business laws and regulations, conducting diagnostics, formulating new regulatory strategies and policies, or capacity building. While World Bank lending and IFC AS most often focused on reengineering processes and improving business laws and regulations, World Bank ASA and reimbursable advisory services often supported diagnostics and new business regulation strategies or policies. This suggests a complementarity of instruments.

IEG's trade facilitation evaluation (2019) found that the *DB* indicators were generally very motivating for reforms and generally understood by clients but did not provide granular enough information to guide the design of reforms or monitor their progress and outcomes. Common interventions require a detailed mapping of procedures and identification of sources of delay or excess cost. They should involve attention to managing risks of noncompliance with border regulations, such as adverse environmental, health, social, and security outcomes. The Bank Group and clients need to generate and monitor accurate and timely data to identify and address performance challenges and to measure outcomes.

TAB-informed projects in the Bank Group portfolio were generally successful. Institutionally, World Bank lending had the highest success rate at 83 percent, with development policy lending (86 percent) considerably outperforming investment lending (67 percent). IFC's advisory services succeeded 71 percent of the time. Project success paralleled country income levels, with a 63 percent success rate in low-income countries compared with 79 percent in lower-middle-income and 82 percent in upper-middle-income countries. Regionally, the lowest success rate was in Sub-Saharan Africa. By objectives, efforts to improve laws, procedures, policies, and strategies were the most successful, while efforts to streamline procedures were distinctly less successful. Data were not collected consistently across projects that would allow comparison of outcomes. Among 20 project evaluations that examined data on trade flows, 15 percent (3) showed a positive outcome. One of only three projects examining costs to businesses found that interventions lowered them.

Nevertheless, much like other *DB* indicators, TAB cannot reflect the importance of trade in an economy nor the priority of trade facilitation reforms relative to other constraints. Further, it is focused primarily on simplification of rules and procedures, leaving out many other aspects of trade facilitation reforms and logistics. It only sometimes catches reforms and thus is a weak metric for reform activity. For example, it reflects only two of Laos's multiple trade facilitation reforms (*DB2008* and *DB2013*). IEG's econometric analysis shows a poor fit between Bank Group–supported reform activity and most *DB* TAB indicators. On top of this, its changes in methodology have created substantial discontinuities in apparent country performance in some cases.

IEG's trade facilitation evaluation (2019) found significant and beneficial relationships between Bank Group trade facilitation interventions and outcomes as measured by the time to export and time to import TAB sub-indicators. It did not find a significant relationship between Bank Group trade facilitation interventions and TAB subindicators measuring the cost to import and export. That analysis suggested different comparative advantages of IFC and the World Bank—with IFC especially effective at supporting improvements in border infrastructure, and the World Bank especially effective at supporting improved border function and technology, building capacity of border agencies, and supporting improvements in rules.

The same evaluation found clear synergies between the different areas of trade facilitation reform, except border infrastructure. It advocated a more systematic approach combining simultaneous or sequential interventions in several areas of trade facilitation reforms and combinations of various Bank Group instruments. Yet it found that "few Bank Group projects reference the adoption of a programmatic approach to trade facilitation reforms." It stated that the Bank Group, "recognizing its resource constraints, can optimize by coordinating with other donors and giving priority to clients where trade facilitation is a priority and where [the Bank Group] has comparative advantages" (CITATION, PG#).

External factors did not figure as prominently in explaining individual project outcomes as did factors under the Bank Group's direct control. Quality at entry was the leading factor for development policy loans; M&E and results frameworks were the most common success factors for investment projects; and project supervision figured most prominently in explaining outcomes of IFC AS. At project entry, prior analytic work was a key quality factor for success, as was the suitability of project design to client capacity. For project supervision, two leading factors were proactive engagement and follow-up with the client and effective coordination with other development partners and donors. M&E factors included how (and whether) the monitoring system was implemented, as well as the design and utilization of the M&E system. Not surprisingly, the two external factors that mattered the most commonly for success were client commitment and agency coordination, including political economy aspects.

Table D.1. Summary of Case Studies and Deep Dives

Evaluation Question	Line of Inquiry	Explicit Hypotheses	Findings from Case Studies and Deep Dives	Recommendations
1. What is the relevance of *DB* indicators to a. The business environment priorities of client countries? b. The substantive dimensions within each indicator's focus area? c. World Bank Group strategic and operational priorities?	Whether all *DB* indicators are relevant to constraints influencing business dynamics and economic contribution of policy reforms.	1. *DB* indicators vary in their relevance to the key constraints influencing business dynamics, hence the economic contribution of reforms, based on the area and the country context.	» Many stakeholders reported that while they found *DB* useful in informing, supporting, and motivating aspects of country reform priorities, DB does not capture key components needed in structural reforms, focusing on a fixed agenda of legal and regulatory issues often complementary to critical priorities. » In some countries, such as China after 2017, *DB* had an enormous influence on reform plans and activities of some central and local authorities. In other cases, such as Russia, some of the main country constraints (corruption, governance, rule of law, better labor market allocation) were not addressed by *DB*, and hence it had limited effect on business dynamics. » The trading across borders indicator was generally very motivating and understood by clients but was not granular enough to guide the design of reforms or monitor their progress and outcomes.	Linked to the following findings: » Experience shows many instances where indicators are not granular enough to reflect reform progress that is developmentally effective. • It is desirable for the *DB* approach to capture a fuller range of regulatory, legal, and institutional conditions that influence the life cycle of enterprises. » Currently, indicators suffer from inadequate feedback loops between their design and application on the one hand, and research and field experience on the other.

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Evaluation Question	Line of Inquiry	Explicit Hypotheses	Findings from Case Studies and Deep Dives	Recommendations
. and	Whether (i) client institutional capacity and ability (high vs. low) to tailor the use of *DB* indicators to its development priorities and framework and (ii) client motivation (for example, to achieve policy reform vs. improve *DB* ranking) are key influences on the use and appropriateness of *DB* indicators.	2. Client institutional capacity and capability is a key factor influencing how *DB* indicators should be used and whether their use is effective.	» Even simple reforms may require interministerial coordination and high-level oversight, and coordination between central and local governments. » In countries such as Rwanda, *DB*-informed projects were delayed due to lack of sufficient capability of project implementation units. In Indonesia, institutional capacity was also mentioned as one of the factors affecting project implementation. » In some countries, leaders were motivated more by appealing to donors and foreign investors than by placing a priority on SME dynamics. » Dealing with construction permits is seen as one of the most complex *DB* measures since many agencies from different government levels get involved, and its accurate implementation involves capacities not easy to find even in experts in the construction sector. » Paying taxes requires progressively more sophisticated steps, requiring deeper technical capacity to design and implement.	» *DB* methodology and base case scenario may not necessarily reflect local conditions. The Bank Group needs to provide such context in its guidance, not only in textual caveats in *DB* reports, but at all stages of engagement, in part by tailoring guidance to local context and drawing from multiple sources of evidence and analytic frameworks.

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Evaluation Question	Line of Inquiry	Explicit Hypotheses	Findings from Case Studies and Deep Dives	Recommendations
2b. Are clients using *DB* to achieve improved outcomes for business environment reform in line with the country's development policy priorities?		3. Client motivation is a key factor influencing how *DB* indicators should be used and whether their use is effective.	» The importance of client motivation for reform success was evident in China, Russia, India, Indonesia, Rwanda, and Morocco. » *DB* has been very successful as an entry point in the policy dialogue and a very effective tool to launch reforms.	» In line with existing good practice, continue using *DB* to motivate client engagement and to assist in focusing reforms within *DB*'s menu of regulatory areas, where the priority is confirmed by additional analytics.
1a, 1b, 2b.	Whether *DB* indicators are useful to (i) draw attention and resources to business environment reform in areas they measure directly, (ii) draw attention and resources to business environment reform beyond the areas they measure directly, (iii) correctly identify and order priority reform areas, and (iv) monitor and evaluate reform implementation.	4. *DB* indicators are useful to draw attention and resources to legal and regulatory reforms in the areas they directly measure.	» *DB* indicators draw attention and resources to legal and regulatory reforms in the areas they measure, because rankings matter to country leaders. » Having high-level engagement makes a difference, opening doors to reforms beyond the *DB* indicators.	» Continue using *DB* to motivate client engagement on the business environment.

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Evaluation Question	Line of Inquiry	Explicit Hypotheses	Findings from Case Studies and Deep Dives	Recommendations
		5. *DB* indicators are useful to motivate broader processes of business environment reform.	» Multiple country experiences confirm this, with a couple of exceptions. » Often broader processes involve adaptation to country conditions or replication of initial reforms in additional cities. Subnational *DB* reforms are an avenue often pursued.	» Indicates utility of building capacity and of using additional sources of evidence and frameworks to engage in broader reform programs addressing binding country constraints.
		6. *DB* indicators are useful for identifying binding constraints and priority reforms.	» Overall, most countries have binding constraints that are not captured by the *DB* indicators. These include corruption, access to other services (for example, water), competition challenges, and more. » In some cases, *DB* indicator coverage (trading across borders and paying taxes) does not capture the real challenges experienced by SMEs.	» The evaluation finds verification is needed before framing recommendations solely based on *DB*. Such reforms are limited in scope and depth, and may miss binding factors. » The Independent Evaluation Group also encourages the Development Economics Vice Presidency to conduct research to fill gaps in the evidence about the relationship of indicators to outcomes.

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Evaluation Question	Line of Inquiry	Explicit Hypotheses	Findings from Case Studies and Deep Dives	Recommendations
		7. *DB* indicators are useful to monitor and evaluate reform progress.	» Due to their powerful motivating nature, many countries and projects have included *DB*-rated performance in national planning and reform objectives. » There are serious gaps between country movements in the indicators and project and development outcomes. » More sophisticated users, most International Finance Corporation advisory services, and many World Bank projects develop more tailored indicators to better outcomes and to adapt to local context.	» Discontinue using *DB* indicators as project indicators and objectives due to their lack of granularity and weak connection to project outcomes.
1a, 1b, 2a, 2b	Whether complementary data and guidance enhance the relevance of *DB* indicators to business environment reforms and the ability to follow with complementary or deepening reforms.	8. *DB* indicators are more effectively used in conjunction with complementary data and guidance to enhance the relevance, comprehensiveness, and depth of corresponding business environment reforms.	» Good practice is to use other indicators and analytic frameworks (for example, WEF, WGI, OECD, UNCITRAL, TADAT), both to diagnose and to design solutions. » Additional sources of knowledge were mobilized in many *DB*-informed projects, including through peer-to-peer learning and global subject specialists.	» Use additional evidence and diagnostics to complement and contextualize *DB*.

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Evaluation Question	Line of Inquiry	Explicit Hypotheses	Findings from Case Studies and Deep Dives	Recommendations
2a. Is *DB* reform achieving desired outcomes? And derives from feedback loop in theory of change.	Whether the feedback loops between available empirical evidence and *DB* indicator design and use are robust.	9. *DB* benefits from robust feedback loops between empirical evidence (research and evaluative data) and indicator design.	» Feedback loops are insufficient. While indicator changes have reflected some feedback, there is a lot of evidence, lack of evidence, and country experience that has not been addressed. » Deep dives underscored the limited relevance or validity of some indicators (for example, dealing with construction permits and starting a business), as well as the adverse guidance they may provide (for example, paying taxes policy component). » Some country stakeholders criticized the inapplicability of base case scenarios to the real conditions for firms in local context. » Deep dives and case studies provide examples of where technological change is not well reflected in *DB* indicators and where *DB* agenda loses relevance over time.	» Strengthen learning and feedback loops. » Fill gaps in the evidence with a strategic research agenda. » Update indicators in line with a review of rigorous evidence, feedback from M&E, and technological changes in underlying processes. » The *DB* approach should capture a fuller range of regulatory, legal, and institutional conditions that influence the life cycle of enterprises, to assure the framework includes and rewards the key attributes of a legal and regulatory system for SME development.

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Evaluation Question	Line of Inquiry	Explicit Hypotheses	Findings from Case Studies and Deep Dives	Recommendations
1c. and derives from challenges regarding data integrity.	Whether current institutional arrangements separating indicator generation from project work (including reimbursable assistance) are adequate to prevent a perception of conflict of interest within the World Bank Group.	10. Current institutional arrangements separating *DB* indicator generation from *DB* reform project work (including reimbursable assistance) are adequate to prevent a perception of conflict of interest within the World Bank Group.	» Stakeholders, unlike some Bank Group staff, did not express a perception of conflict of interest within the Bank Group and were often motivated to engage by a perceived ability of the Bank Group to help move indicators.	» This topic is addressed more squarely by the process audit of the Group Internal Audit Vice Presidency and by other internal Bank Group reviews.

Source: Independent Evaluation Group.

Note: DB = *Doing Business;* M&E = monitoring and evaluation; OECD = Organisation for Economic Co-operation and Development; SME = small and medium enterprise; TADAT = Tax Administration Diagnostic Assessment Tool; UNCITRAL = United Nations Commission on International Trade Law; WEF = World Economic Forum; WGI = .

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Appendix E. Desk Review of Literature

As initially presented in this macro evaluation Issues Paper, the first literature review conducted by IEG took stock of evidence on the DB effectiveness through a desk review of 426 articles shared with IEG by the DB team derived from 100 leading journals. The database was organized by indicator. Some areas had abundant coverage (starting a business, protecting minority investors, and trading across borders) but many others had much sparser coverage (e.g., dealing with construction permits and getting electricity). The desk review did not assess the methodological rigor each article. Instead, IEG did that in a separate Structured Literature Review, which also cast a broad net to capture academic literature beyond the DB database shedding light on the relation of DB indicators and related reforms to outcomes (Annex F). IEG but did consider whether the article shed light on the relationship of what is measured by a DB indicator with an outcome, so its reporting is limited to 75 articles found to have strong relevance.

The desk review identified relevant articles and, according to the frequency of the evidence found, classified the strength of the association found between DB indicators with specific outcomes as strong, modest, or mixed. The articles indeed related to the indicator and which specifically researched the Doing Business indicators were considered relevant. They were the sources of a listing of the evidence found on the association of all indicators with development and economic outcomes for businesses and economies. Findings confirmed by three or more articles was considered to have "strong evidence." (table E.1) For example, there was strong evidence that improved trade facilitation is associated with increased trade flows. Most of the "modest evidence" findings were supported by a single article, such as the finding that Greater costs and procedures in enforcing contracts linked to lower economic growth. Where articles had contradicting findings, the evidence was classified as 'mixed." Much of this literature finds significant associations of DB indicator measures with outcomes, without necessarily establishing causation.

Table E.1. Summary of findings IEG Desk Review of DB Literature Database

Indicator	Strong Evidence	Modest Evidence	Mixed Evidence
Starting a Business (79 papers)	Higher entry costs or more steps or documents are associated with less firm creation, growth or profitability.[1]	Lowering entry cost associated with larger SME sector, trade.[2]	Lower entry costs encourage formalization. Reduced complexity encourages entry. High entry costs increase/ reduce productivity, employment.[3]
Getting Credit (29 papers)	Stronger legal rights associated with more lending, more financial activity, lower interest rates.[4]	More credit information associated with more private credit, better lending terms, reduced defaults/delinquencies.[5]	Credit information sharing reduces the likelihood of banking crises.[6]
Paying Taxes (28 papers)	Higher tax rates constrain entrepreneurship, investment.[7]	Tax complexity, number of payments reduce formal entry, investment, innovation.[8]	Progressivity of tax rates encourages entry.[9]
Enforcing Contracts (41 papers)		Better contract enforcement encourages investment in asset-specific (customized) inputs.[10] Greater costs and procedures in enforcing contracts linked to lower economic growth.[11] Lower contract enforcement costs reduce chance of early liquidation.[12] Countries with more FDI and debt finance have lower contract enforcement costs.[13]	

(continued)

Indicator	Strong Evidence	Modest Evidence	Mixed Evidence
Trading Across Borders (69 papers)	Better trade facilitation measured by DB (and LPI) shows correlation with increased trade flows.[14]	Countries with lengthy export times are less likely to export more time-sensitive goods.[15] Faster customs clearance can offset the impact of being a landlocked or smaller country.[16] Export gains from better trade facilitation outweigh gains of tariff cuts in importing African countries.[17] Longer trade times are associated with higher levels of trade-related corruption.[18]	
Construction Permits (17 papers)		Time and cost of getting construction permits are not related to economic growth.[19] No relationship between DB construction permit indicators and the presence of corruption/bribery.[20] Construction permit indicators do not permit identification of policies that matter systematically.[21] Indicators do not align with the experience of surveyed firms, which report huge variation within countries.[22]	
Registering Property (22 papers)		Higher burden of registering property associated with reduced benefit of trade opening on national income.[23] Registering property indicators have no relation to FDI inflows into Sub-Saharan African countries.[24] Registering property indicators are inconsistent with actual experiences of firms reported in enterprise surveys.[25]	

(continued)

Indicator	Strong Evidence	Modest Evidence	Mixed Evidence
Protecting minority investors (60 papers)		Country-level minority investors' protection policies matter more than firm-level decisions for improving corporate governance.[26] Lower levels of disclosure discourage investment and affect corporate governance.[27]	
Getting Electricity (16 papers)		Getting electricity indicators have little predictive power for a country's electrification rate and the level of technical and non-technical losses in the system.[28] A better rank on ease of getting electricity is associated with greater perceived quality of electricity supply.[29] Electricity connection processes tend to be lengthier and more cumbersome in countries where other administrative processes are also burdensome.[30] Administrative reforms to reduce the number of days to get electricity can improve the rankings of the country.[31] DB measures of electricity constraints are negatively associated with measures of energy consumption.[32] Frequency of outages are correlated with difficulty of connection process, while electricity tariffs are not associated with either measure.[33]	

(continued)

Indicator	Strong Evidence	Modest Evidence	Mixed Evidence
Resolving Insolvency (34 papers)		Longer time to resolve insolvency in some sectors is negatively associated to net job contribution by start-ups and, to a much lesser extent, by incumbents.[34] Inefficient bankruptcy is associated with less bond issuance by risky, but not by safe, borrowers.[35] Legal infrastructure facilitating the resolution of insolvencies mitigates the negative effect that limited supply of long-term finance has on economic volatility.[36] DB's recovery rate indicator correlated with availability of domestic credit from a country's banking sector.[37] Good insolvency regimes are negatively associated with stock of NPLs and their rate of increase.[38] Good insolvency regimes associated with a lower frequency of insolvencies.[39]	

(continued)

Indicator	Strong Evidence	Modest Evidence	Mixed Evidence
Employing Workers (31 papers)	Developing countries with rigid employment laws tend to have larger informal sectors and higher unemployment, especially among young workers.[40]	Greater likelihood of positive impact of Trade liberalization on employment and wages in countries with flexible labor markets and vice versa.[41] More regulated labor markets tend to have higher wages at the expense of sector wide employment.[42] There is an economically significant association between digital technology use by businesses and a country's statutory minimum wage and its employment protection regulations.[43] There is a negative correlation between the stringency of labor regulation and the intensity of its enforcement.[44] Strong negative consequences of labor regulation on labor market outcomes, are based entirely on measures of de jure stringency of regulations.[45] Significant association between digital technology use by businesses and a country's statutory minimum wage and employment protection regulations.[46] Dismissal laws can prevent employers from arbitrarily discharging employees and thereby enhance employees' innovative efforts and encourage firms to invest in technology and innovation projects.[47]	

Source: Independent Evaluation Group.

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Appendix F. Structured Literature Review (SLR)

Introduction: The DB project and its rankings are now widely credited with influencing business regulations worldwide, dominating market share among business climate indicators and motivating many regulatory changes as countries vie for improved status in its rankings (Doshi et al. 2019; Besley 2015). Is there evidence that the types of regulatory reforms promoted by the DB project have an impact on economic and development outcomes? This has become a particularly salient issue in recent years given many experts' scepticism of DB's narrative that reforms targeting the factors captured by the indicators improve economic development and growth.

Some studies show that the correlations between the DB indicators and development outcome variables are unstable (Kraay and Tawara, 2013) or suffer from omitted variable bias (Pinotti, 2008). These issues begin to shed light on some of the broader *attribution* problems associated with concluding the effects of reforms from correlations between outcome variables and the DB indicators. Ccorrelation alone is not sufficient to assess the likely consequence of regulatory reform inspired by or related to the indicators (Branstetter et al. 2014; Altenburg et al., 2017). Endogeneity and measurement issues limit the causal claims associated with such correlations (de Mel et al., 2013). Furthermore, parts of the indicators can be determined by changes in external contextual factors that may have nothing to do with the regulatory process, so it is not always possible to attribute changes in the index solely to regulatory adjustments or the outcomes of reforms promoted by DB (Chemin, 2009 and Branstetter et al. 2014). Overall, while DB indicators enable countries to compare regulatory environments and may also help to identify contexts where businesses experience a more onerous regulatory process, they do not provide precise evidence of the effects of reforms seeking to alleviate these issues.

Approach: This review aims to draw together more direct and rigorous evidence of the effects of changes in regulatory arrangements. These studies exploit natural experiments or variations in the implementation of reforms (such as the variation in the time or region of the reform) to evaluate their effects. Prior reviews often only draw on a selective range of the literature or focus on small sections of DB's total regulatory portfolio. This review seeks to provide an updated view of this literature, taking stock of the evidence available on the effects of business regulatory reforms in each of the DB regulatory categories.

By identifying the current state of knowledge, this SLR seeks to help to critically appraise the relevance of theories, to provide a basis for interventions, to guide future studies and to summarize information and understanding in 10 areas of DB coverage. A systematic [structured] literature review aims to minimize researcher bias by collating and appraising all available research that has been identified using an explicit literature search strategy and meets pre-specified eligibility criteria (Higgins et al, 2019). IEG's structured literature review approach reflects a rapid evidence review guided by the concept of a systematic review but tailored to meet the constraints of a typical WBG evaluation project.

Summary of inclusion and exclusion criteria. This structured literature review adheres to pre-specified criteria defining the characteristics of an includible study, the method of data (information) extraction and synthesis and reports a specific search strategy. The study inclusion criteria follow the PICOS(LY) approach common to many systematic reviews [Table 1] (Littell and White, 2017). The PICOS(LY) approach specifies the characteristics of eligible studies; outlining includable populations, interventions, comparison groups (effectiveness studies only), outcomes, study designs, the written language of the study, and year of study (see more below). Reflecting its short timeframes and resource constraints, both the search strategy and analytic methods applied in this SLR were more limited than in a full systematic literature review.

Table F.1. Inclusion and exclusion criteria for empirical studies: PICOS(LY) summary table.

Criteria	Description
Population	No limit – studies may focus on population groups in any country.
Intervention	See intervention framework in Appendix 1. This review includes studies examining regulatory reforms and interventions related to the Doing Business project based on a review of the Doing Business Reform Database. It excludes empirical studies which do not examine the effects of a specific intervention or reform[1].
Comparison	Control groups may be subject to no intervention, on a waitlist, or part of an alternative intervention or condition.
Outcome	The review does not exclude based on the outcome of a study, except when considering related infrastructure projects. Studies examining the impact of infrastructure projects (e.g., in the getting electricity domain) are limited to business outcomes, recognizing the broader societal effects they may also have which may not necessarily be attributable to changes in the business environment.
Study Design	Includes studies where allocation to intervention and control groups are random or selection bias has been addressed by design. It excludes simple before-and-after comparisons and simulation and forecast models.
Language	Includes studies written in English only.
Year	No limit – but the latest search date was February 2021.

Source: Independent Evaluation Group.

The DB reform framework used does not capture all possible types of interventions that may be being implemented in each regulatory category. Interventions outside of the immediate focus of the DB project (as identified in the DB reform database) are omitted from the review. The SLR also does not capture all interventions within DB topic areas that do not meet the assumptions of its stylized business case model (such as reforms to special investment or tax regimes or export processing zones). The review includes studies no matter what populations are examined -- (e.g., high-, middle-, or low-income economies) and whether or not it has been published in an academic peer-reviewed journal or exists as a working paper or institutional report. It includes all years of study until Feb. 2021 (the date of the final search). In other words, it looks at historic evidence of the effects of relevant regulatory reforms, as well as more recent evaluations. It screens only articles written in English.

The SLR includes quantitative studies addressing reforms effects by applying one of the following approaches:

a. Allocation of participants to intervention and control groups using a randomized or quasi-randomized mechanism at individual or cluster levels.

b. Non-randomized designs with selection on unobservables. This includes natural experiments using a sharp or fuzzy regression discontinuity design, studies using panel or pseudo-panel data with estimation strategies to account for time-invariant unobservables (e.g. fixed-effects models), and cross-sectional studies using multi-stage or multivariate approaches to account for unobservables (inc. instrumental variable and Heckman two-step type estimation approaches).

c. Non-randomized designs with selection on observables. This includes cross-sectional or panel (i.e. controlled before and after) studies that use a method to statistically match or weight observations in the intervention and comparison groups. For example, includes studies using a form of propensity score matching or entropy balancing.

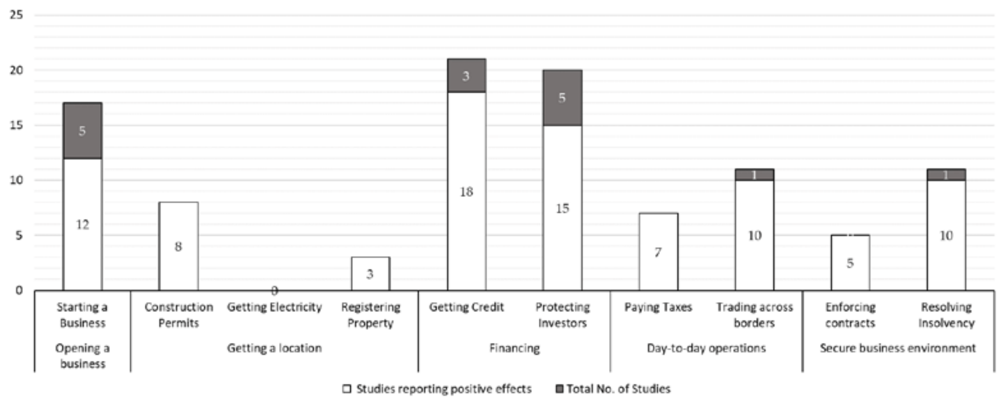
Our definition for the comparison condition of a control group is not strict and may comprise of observations subject to no intervention, on a wait-list, or a member of an alternative intervention or condition. Excluded are studies that use simulation or forecast models and case studies that do not satisfy the methodological conditions described above. The methodological criteria described here is consistent with norms established by leading practitioners of systematic reviews, including the International Initiative for Impact Evaluation (3ie) and the Campbell Collaboration.

Search strategy: Identifying a comprehensive list of studies for this review is challenging because of the scope and breadth of the various aspects of the regulatory environment covered by the DB project. Taking into consideration the review's resource constraint and to maximize the likelihood of finding relevant studies, the search started by screening two databases with a high probability of providing relevant studies. The first was the DB team's own database on studies related to the DB project. At the time of the search, December 2020 to February 2021, this database provided a selection of 426 topic-specific research papers. The included papers had a strong bias towards studies from outlets ranked in the top 100 economic journals and working papers by RePEc (Research Papers in Economics) and consisted of a broad range of literature reviews, econometric studies, and case studies related to the topics covered by the doing business indicators. The second database searched is the online evidence portal provided by 3ie, a database of more than 3,500 research papers identified through a long-term project searching for studies meeting the study design criteria discussed above. 3ie's project has screened more than 150,000 records from academic databases in health, economics, public policy and the social sciences listed on platforms such as Ovid, EbscoHost and ProQuest. It has also searched library databases and websites from select research organizations, repositories, and academic institutions (such as the World Bank, Inter-American Development Bank, African Development Bank, Social Science Research Network, IDEAS, etc.). Studies from sectors that are not relevant (e.g. education, health, etc.) were omitted, leaving 1206 records from relevant sectors (e.g. industry trade and services and public administration) to examine (figure 1). To supplement the search for relevant literature the references listed were of the included papers (i.e. conducted backwards citation tracking) and a selection of relevant literature reviews on Doing Business and its related reforms. This was also complemented with citation tracking using Google Scholar's electronic citation tracking system to identify studies referencing each of these studies (i.e. forward citation tracking).

In total, after removing duplicate records, 9,221 records were screened for relevance based on their title and abstract and 1,894 records at full text (see Figure 1). Screening at title and abstract removed studies with no clear relevance to the topic being reviewed (e.g. studies not related to business regulation or the reforms identified in appendix 1). Full-text screening removed studies that did not specifically meet the inclusion criteria outlined in section 2.1 (e.g., because they did not meet the study design criteria). Of the 1,894 manuscripts screened at full-text, 103 records met the inclusion criteria.

Data Extraction and Synthesis: Data was extracted from each record included in the review. The data consists of bibliographic information (such as author names, study title, year of publication, and publications status) and study characteristics. The details of the study characteristics coded include information on their main findings, type of intervention or regulatory reform, geographic focus and method of analysis.

Figure F.1. Distribution of Evidence and Findings of Positive Effects, by DB Area

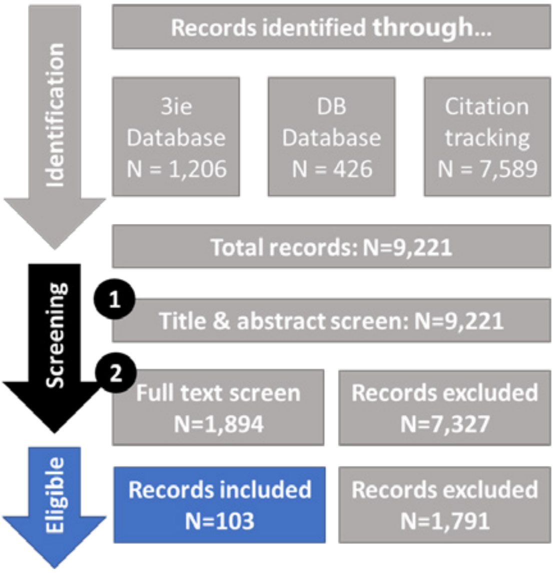


Source: Independent Evaluation Group.

Summary of findings: This review finds a relatively rich and growing body of evidence on the effects of business regulatory reforms as a whole, including at least 103 studies (see reference list). Figure F1 depicts the highly uneven distribution of identified studies across the Doing Business topics. Evidence is concentrated in a few areas, such as starting a business, getting credit, and protecting minority investors. Evidence gaps, where the reforms have little or no rigorous evidence, appear on the topics of registering property and getting electricity. Of the evidence available, several evaluations report instances where reforms making starting a business simpler, cheaper, and less demanding in its requirements have helped to promote firm formalization, increase growth, and improve competition.

Similarly, studies also point to the important contributions of reforms improving credit information and collateral laws on firms access to finance, the trade enhancing effects of reforms promoting expedited trade regimes, and the value of tax administration reforms to governments efforts to improve the rate or efficiency of tax collection.

Figure F.2. PRISMA diagram (summary of the flow of records in the review)



Source: Independent Evaluation Group.

Figure F.2 shows a large proportion of the total number of studies (88 of 103 studies or 85%) provide evidence of the positive outcomes of reforms. Overall, this evidence emphasizes both the relevance and potential significance of the DB project.

However, the evidence identified also highlights there is currently an imbalance in the treatment of theory and evidence reported by the DB reports. The reports mainly cite studies favoring the reforms they promote; creating an advocacy tool rather than providing an adequate piece of research or an evaluation of the issues they are concerned with. The project requires more transparent and systematic reporting of the available evidence, with more attention to nuance and complexity in this literature. The following three points currently receive almost no attention in DB's own literature reviews:

1. The indicators imply reforms that improve the cost and speed of factors are always beneficial, but this neglects that many regulations are also intended to serve socially valuable purposes (e.g. enhancing public health,

safety, the environment and reducing corruption). The findings for the Enforcing Contracts topic provide an interesting example; highlighting that in some instances judicial reforms may be balancing a trade-off between judicial efficiency and the quality of judicial decisions (Kondylis and Stein, 2015). Whether the DB indicators motivate countries to create reforms that prioritize the factors captured by the indicator to an extent that may also be harmful to other aspects of public policy is an important point that requires further research.

2. Despite the positive outcomes reported in many evaluations and emphasized in the DB annual reports, the literature also highlights the possibility of several unintended (adverse) effects of these reforms. 14 of the 103 studies identified highlighted a potentially adverse effect of reforms. For example, the findings for the Starting a Business topic points to examples of the possible negative consequences of reforms on factors such as the gender pay gap and environmental outcomes. Evidence is limited on such issues and further research is required to confirm and replicate these findings.

3. Cases of flagship interventions with evaluations reporting encouraging outcomes do not mean that all similar reforms in other countries or contexts will have the same or similar effects. Greater consideration of the external validity of findings is required before generalizing individual findings to a broad range of contexts. In some instances, DB regulatory reforms may also need to be coupled with changes in additional factors not covered by the indicators to make a meaningful or material difference. For example, the evidence identified for the Starting a Business topic discusses problems related to entrepreneurs' land tenancy rights undermining efforts to encourage formality (de Mel et al., 2013). DB provides little to no insight into how countries can identify or integrate such broader reform priorities.

Box F.1. Limitations

1. This review's literature search has screened many more studies than most full systematic reviews, yet the breadth of the potentially relevant literature means that inevitably some unidentified evidence may still exist. Future research should focus on continuing to record and expand on the available evidence on the effects of reforms. The rich database of studies provided by this review offers a valuable resource for future work to start from.

2. While this analysis focused on recording studies' main findings using a descriptive synthesis, another approach would extend to reporting and aggregating estimates of the effects of reforms in a statistical meta-analysis. However, any extensions should also consider that a meta-analysis only really provides meaningful results if the underlying studies being aggregated represent something that are comparable or the same. (Duvendack et al., 2012). The DB reform portfolio covers many different types of reforms targeting very different types of intermediate outcomes introduced under very different conditions. Lumping together very different types of reforms or outcomes to approximate some average effect of reforms may ignore important degrees of heterogeneity.

3. An extension of this synthesis could comprise systematic appraisals of the included studies' risk of bias. This is to assert the confidence we might place in a particular study's findings (see Moyer and Finney, 2005; Sterne et al., 2016; Fenton Villar and Waddington, 2019). Appraisals would be ideally completed with two independent assessors and a trained expert adjudicator. Currently, very little effort has been made to thoroughly appraise this evidence base. Further research would be needed to rigorously appraise the available evidence while also confirming the original assessments with the most recent line of expert appraisal guidelines.

Source: Independent Evaluation Group.

Finally, evidence of the positive impacts of reforms does not say much about how well the indicators measure or represent the issues these reforms are trying to address. The review raises questions about how well the Construction Permits indicator (based on the construction of a warehouse) represents other aspects of planning regulation, or if it is representative of the requirements of modern businesses across different types of economies and industries (or the growing service economy). Other examples concern the method used to calculate the time taken to complete procedures and whether this reflects the amount of time taken in reality (e.g. see Cappiello, 2014). The aggregation and implicit weighting scheme the indicators apply will inevitably attract attention too.[2]

Conclusion: This structured literature review screened 9,221 studies and identified 103 evaluations of relevant reforms where allocation to intervention and control groups are random or selection bias has been addressed by design (including natural experiments and non-randomized designs). These findings point to a rich and growing literature on the effects of business regulatory reforms relevant to the DB project. However, the identified evidence is distributed highly unevenly across DB topic areas. This review also highlights the imbalance in the treatment of theory and evidence reported by the DB reports (mainly citing studies favoring the reforms they promote) and the need for more transparent and systematic reporting of the available literature. The existing DB literature pays insufficient attention to the complexity of reforms and their relationships with outcomes. A more nuanced understanding is required of the potential trade-offs reforms make between public policy goals, the context of the reform and the generalizability of the findings from individual studies, and the risk of adverse effects arising from reforms.

Table F.2. Summary of Rigorous Findings from Structured Literature Review

Area	What is Measured	Positive Outcomes	Cautions
Starting a Business	Procedures, time, cost, and paid-in minimum capital to start a limited liability company for men and women	» The evidence highlights some of the benefits associated with reforms making starting a business simpler, cheaper, and the requirements less demanding including: they can help to promote firm formalization, increase growth, and improve competition.	» The literature indicates these reforms may also have several relatively unexplored unintended consequences (e.g. increasing the gender pay gap and environmental pollution).
Construction Permits	Procedures, time, and cost to complete all formalities to build a warehouse and the quality control and safety mechanisms in the construction permitting system	» The broader literature on planning regulation reforms supports that less stringent planning regulation can support both local economic outcomes (such as employment) and market competition.	» Limited evidence exists directly verifying the effects of reforms changing construction permit regulations for warehouse construction. » It is unclear how well the construction of a warehouse represents other aspects of planning regulation (e.g. concerning retail and office buildings).

(continued)

Area	What is Measured	Positive Outcomes	Cautions
Getting Electricity	Procedures, time, and cost to get connected to the electrical grid; the reliability of the electricity supply; and the transparency of tariffs	» Several studies emphasize the importance of the indicators underlying construct concerning access to a reliable electricity supply to businesses. The ease of getting electricity rankings also appear to be positively correlated with the perceptions of the quality of the electricity supply.	» This review did not identify any evidence of the effects of reforms on this topic. The paucity of identifiable evidence in the major publications, literature reviews, and the database on Doing Business (which has also been supplemented by the 3ie database) highlights this area warrants further research.
Registering a Property	Procedures, time, and cost to transfer a property and the quality of the land administration system for men and women	» The limited evidence available indicates reforms intending to improve the accessibility of land services and the process determining the transfer of property may help increase activity on commercial rental and property markets, as well as access to credit.	» The evidence on the effects of reforms is relatively sparse and very little evidence has been identified on the effects of reforms on broader outcomes (such as output or firm growth).

(continued)

Area	What is Measured	Positive Outcomes	Cautions
Getting Credit	Movable collateral laws and credit information systems	» The evidence is mixed but generally points to the credit enhancing effects of reforms expanding credit bureaus, registries, and the menu of moveable assets that may be used as collateral. » Evidence of the expansion of credit information systems particularly highlights their benefits of improving firms' repayments and delinquency, although their effects only seem to appear with time, as the system expands.	» Credit information reforms may benefit high-quality borrowers while low-quality borrowers (ones with a weaker credit history) may find credit harder to come by. This raises the question whether these information reforms stifle financial inclusion in favour of improved terms for already favored borrowers. » More expansive collateral laws seem to increase credit to otherwise financially constrained businesses, but a trade-off exists that these regulations do not promote over-indebtedness (risking greater volatility and financial distress).

(continued)

Area	What is Measured	Positive Outcomes	Cautions
Protecting minority investors	Minority shareholders' rights in related-party transactions and in corporate governance	» Reforms strengthening investor protection have several potential economic benefits (inc. increasing firm value and shareholder dividends and curbing exploitive business power and tunneling activities).	» Reforms economic effects are ambiguous; in some contexts, they may increase the cost of equity, debt, and audit fees. » Evidence on DB's array of 'policy prescriptions' informing the indicator is limited.
Paying Taxes	Payments, time, and total tax and contribution rate for a firm to comply with all tax regulations as well as post-filing processes	» Tax administration reforms increased tax payments and helped to reduced tax evasion. » Some evidence also exists they improve the perception of tax administration as an obstacle to firms' operation and growth.	» Market and institutional factors may be important determinants of reforms outcomes (e.g. small effects, if any, in sectors with low incentives to formalize and where tax compliance is already high).
Trading across borders	Time and cost to export the product of comparative advantage and to import a standardized cargo of goods by sea	» Evidence points to the trade enhancing effects of reforms promoting expedited trade regimes.	» Insufficient attention has been given to the implications of reforms on other public objectives (e.g. public health, safety, the environment and reducing informality).

(continued)

Area	What is Measured	Positive Outcomes	Cautions
Enforcing contracts	Time and cost to resolve a commercial dispute and the quality of judicial processes for men and women	» Evaluations of the effects of reforms to improve contract enforcement point to the positive effects they can have on improving judicial efficiency and firms experience with the judicial process. » Evidence indicates this may impact several broader outcomes, such as firm investment, productivity, and returns.	» The performance measures currently captured by the *DB* indicators do not account for the potential efficiency-quality trade-off caused by judicial reforms. » Evidence on the various 'good practices' promoted by the DB indicator is limited.

(continued)

Area	What is Measured	Positive Outcomes	Cautions
Resolving insolvency	Time, cost, outcome, and recovery rate for commercial insolvency and the strength of the legal framework for insolvency	» Evidence on the effects of reforms that improve the efficiency of the insolvency process indicates that they may have a significant effect on the cost of borrowing and firms access to finance.	» The literature also highlights the trade-off between increasing creditors strength in the insolvency process and deterring firms from borrowing. Currently, the weighting scheme applied within the DB indicator means that it places greater emphasis on reforms that improve creditors protection. » Some evidence exists showing reforms outcomes may be subject to a substitution effect between firms' labor and capital investment. It is unclear whether in some contexts the labor market effects of these reforms can contradict social policy objectives (such as increasing incomes or alleviating poverty).

Source: Independent Evaluation Group.

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[1] This also excludes studies which examine correlations between the DB indicators and outcome that do not relate to a specific intervention or reform. This issue relates to the attribution problem discussed above; changes in the indicators can also be determined by changes in external contextual factors that are not related to regulatory reforms.

[2] How well the indicators reflect the factors they measure or, at least, provide intuitive and insightful information into these issues is a methodological question that extends beyond the scope of this current review.

Appendix G. Summary of the Analysis of WBG Country Strategies and Frameworks

IEG analyzed the extent to which the World Bank's country strategies and frameworks were informed or motivated by the Doing Business. It also assessed whether they achieved the desired outcomes and what lessons are drown from it. To do so, IEG reviewed samples or delimited populations of Country Partnership Frameworks (CPFs), Country Assistance Strategies (CASs) or Country Partnership Strategies (CPSs), and their corresponding Country Strategies Completion Learning Review (CLRRs), Country Private Sector Diagnosis (CPSDs), and Systematic Country Diagnostics (SCDs), presented below.

Country Partnership Frameworks (CPF)

IEG reviewed all CPFs documents approved after FY15 (corresponding to a total of 65 countries), with a focus on those that refer explicitly to reforms measured by DB in their program focus areas and objectives or used any of the DB indicators in their results matrices.

IEG's review revealed that 45 CPFs (69%) make at least one reference to a reform measured by DB in their focus areas and objectives or used at least one of the DB indicators in their results matrices. Among these, 60% use the DB to motivate business environment related reforms, while 84% use DB indicators or sub indicators to monitor progress, and 9% to inform the design of reforms. Furthermore, 35 CPFs out of the 45 include DB indicators in their matrix framework, with 17 using the measure of distance to frontier and 24 the score for the indicator.

IEG also identified whether the CPFs refer to the different DB areas, as well as to the overall EoDB. Half of the CPFs referenced the overarching EoDB category, while 36% of the CPFs mentioned trading across borders and starting a business, respectively. Dealing with construction permits (20%), paying taxes (18%), and getting credit (16%) were more frequently referenced in CPFs than registering property (13%) and resolving insolvency (7%), while getting electricity, enforcing contracts and protecting minority investors were each referenced by only one CPF (2%).

Among the CPFs that discussed DB reforms, 15 proposed a work plan that included DB-related investment interventions (4% supported by World Bank adjustment programs, 24% by World Bank investment projects, and 9% by IFC). Also, 22 of CPFs planned advisory support on DB topics (38% through WB ASA and 25% through IFC AS).

Review of CAS/CPS and CLRR

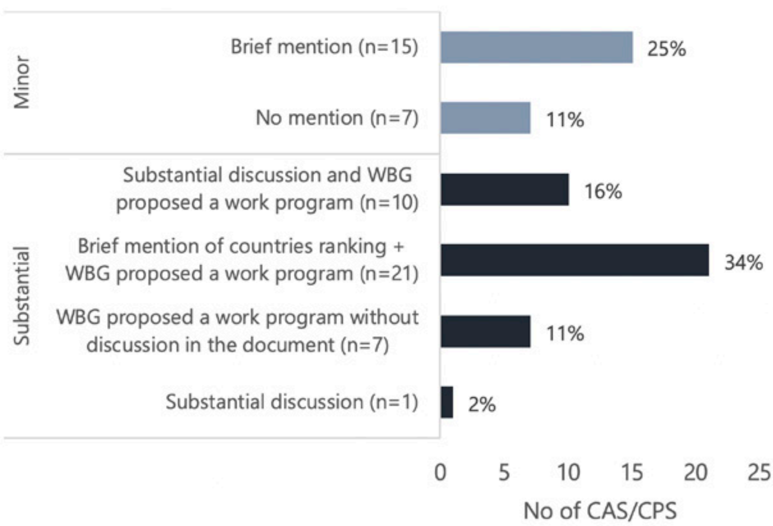
The review assessed how the countries are incorporating the DB report or indicators into its strategic documents, identifying the type of DB interventions proposed and their level of achievement. For that, IEG first rated the presence of DB in country strategies (whether a Country Assistance Strategy - CAS or a Country Partnership Strategy - CPS), classifying the document in a relevance range that went from "not mentioning the DB at all" to "lists reforms and includes substantial discussion related to DB". After that, it compared the documents with the latest corresponding Country Strategies Completion Learning Review (CLRRs).

Table G.1. Rating methodology for country strategy coverage of Doing Business issues

Rating	Description
None or minor	Country Strategy does not mention *DB* reform/indicator issue at all.
	Country Strategy briefly mentions country's *DB* ranking/indicators
Substantial or Priority for Reform	Country Strategy substantially discusses *DB* rankings/indicators (one or two paragraphs of contexts with multiple *DB* indicator or areas cited), but DB are not a top priority in the proposed reforms
	Country Strategy lists *DB* reform priorities without discussion in the document
	Country Strategy lists *DB* related reforms + brief discussion of the *DB* country rankings and indicators
	Country Strategy lists *DB* related reforms + substantial discussion of the DB country rankings and indicators

Source: Independent Evaluation Group Review

Figure G.1. Degree of discussion of DB reform issues in CAS/CPS



Source: Independent Evaluation Group Review

The country strategies (CAS/CPS) sample was composed of 61 documents of lower- and middle-income countries and International Development Association or blend support-eligible countries. Lower and middle-income countries together account for 73% of the reviewed documents (38 and 35% each), and more than half of the strategies reviewed correspond to International Development Association or blend-support-eligible countries. Some 15% were FCV countries and most are in Sub-Saharan Africa (30%), East Asia and the Pacific (25%) and Latin America and the Caribbean (21%). Some 85% of the documents were elaborated between FY10 and FY2015, while the rest were from earlier fiscal years.

The review revealed that 64% of the country strategies (39 countries) substantially discuss or proposed DB related reform priorities. Only seven countries (Laos, Vietnam, Guatemala, Belize, Brazil, Maldives and Nepal) did not mention DB issues and 15 countries briefly discussed DB ratings and/or indicators. One country substantially discussed DB issues but did not take into consideration for reform proposals and 38 countries considered reforms measured or justified using the DB report regardless of the level of discussion of DB in the document.

Half of the reviewed CAS/CPS used the DB as an indicator and 28% as a justification. At the same time, in 28 percent of the revised country strategies, the DB report provided a justification for the proposed work program, and in 10 percent it provided a description of business environment. The CAS/CPS use the Doing Business in various ways. For example, in the 2014-2017 country strategy for Poland justified the proposal that IBRD would focus on reducing regulatory burdens for private sector development in the areas where the country is lagging the most in the Doing Business. This CPS measured results for this objective using several DB indicators such as reducing the time to start a business from 32 days to 21 days, the time to obtain construction permits from 32 to 21 days, and the time to get electricity from 186 to 123 days. From the different type of DB indicators, the scores were the most often cited (52 percent of documents), rankings were cited in 33 percent of country strategies and distance to frontier in only 8 percent of the strategies.

Most of the country strategies referenced the overarching Ease of Doing Business category (44%) and starting a business (43%). Meanwhile, registering property was mentioned in a quarter of them and trading across borders and dealing with construction permits in a fifth. In comparison, employing workers and contracting with the government were not referred to in any country strategy. Starting a business is the predominant theme in SSA and LAC, while, in ECA, it is dealing with construction permits (18%). Starting a business and paying taxes were predominant in lower-income countries. In lower-middle and upper-income countries, mentions of the different DB areas are similarly distributed. The share of resolving insolvency and getting electricity is higher in high-income countries compared to the other income group levels. Comparing FCV and non-FCV countries shows that while both focus on starting a business and trading across borders, the first group is more likely to include enforcing contracts while the second is more likely to include registering property.

Roughly sixty percent of the documents proposed a work plan that discussed DB reforms and there was little evidence of cooperation between WBG institutions. Almost all of them (37/39) included advisory services and 20 included lending support. In Cabo Verde, the analysis on the interaction between institutions shows limited substantive evidence of cooperation. The CLR notes that IFC worked closely with the Bank on the investment climate and Doing Business indicators, which led to a Doing Business Task Force and adoption of a national Action Plan for investment climate reforms. The CLR also notes that information sharing between the Bank, IFC, and MIGA was adequate, but that coordination on the MSME agenda and access to financing was weak (CLR, IEG 2019).

The interventions identified in DB-related projects included in CAS/CPS are heavily focused on two types: improving business laws (38%) and streamlining procedures (34%). This shows how the DB can influence at a higher through laws and regulations and also at the implementation level through the efficiency of business procedures and requirements. Unexpectedly, interventions related to capacity building account for just 3 percent. In the Seychelles, an upstream and downstream strategy was implemented: the DPL series supported the government's establishment of an operational online system to register companies and a virtual one-stop shop for starting a business, and the introduction of a flat fee structure for services associated with company registration. The CLR reports that the introduction of the one-stop shop and of a flat fee structure led to a decrease in the costs involved in registering a business and this was reflected in a drop in DB measures of the time, cost and procedures to start a business.

Effectiveness

The review of the CLRR reveals that among the 38 CAS/CPS that proposed a DB related work program, 74% of them achieved or mostly achieved the DB corresponding objectives. By income level, DB-informed interventions in low-income countries were more successful with 86% of interventions achieving their objective at some degree, this number decreases to 79% for lower-income countries, 64% in middle-income countries, and 80% in high-income countries (although low in number (5)). The success rate shows a significant disparity across regions. While regions such as LAC, SSA and ECA have more than 75% of their interventions with their objective achieved, in SAR this number decreases to 67%, 50% in MNA and drastically to 33% in EAP. Note that in some countries, indicators such as DB have provided support for reform. For example, the Georgian experience indicates that while the Government did many things right, the success was made possible by putting better governance front and center in its program. The various international indexes of governance, transparency, doing business, investment climate and competitiveness have played an importing supporting role in providing a metric for government achievements and being able to communicate the value of this and the progress that has been made to the electorate (CPSPR, IEG 2014).

Although 74% of the 38 countries with a DB-related program achieved or mostly achieved their objectives that sought to improve the business environment, only 45% of the countries also showed improvements in DB indicators. The above makes us suppose that achievement of objectives does not necessarily translate into improvements in DB indicators.

According to the Tunisia CPE 2005-2013, the DB survey may be an accurate reflection of business regulations de-jure, but they do not accurately reflect the very difficult de facto business environment. Tunisia's overall ranking with respect to ease of doing business improved throughout 2014, however, the evaluation raised questions about the accuracy of DB indicators in assessing the investment climate in the circumstances prevailing in Tunisia prior to the Revolution. Apparently, access of interviewers was guided by the government, directly or indirectly, towards offshore private companies (or facilitators dealing with them). Consequently, the indicators largely reflect the conditions in the offshore regime.

Finally, a review of a sample of the 61 CAS/CPS shows that DB is the leading source of information to measure the business environment. In a sample of 28 countries, 60% referenced DB to measure progress on the business environment, while 40% used alternative sources such as IMF Country Reports, national records used by governments, the WB Enterprise Survey, the Legatum Prosperity Index, WB indicator-based reform, the WEF Global Competitiveness Index, and the Fraser's Institute Economic Freedom Index.

Country Private Sector Diagnosis (CPSD)

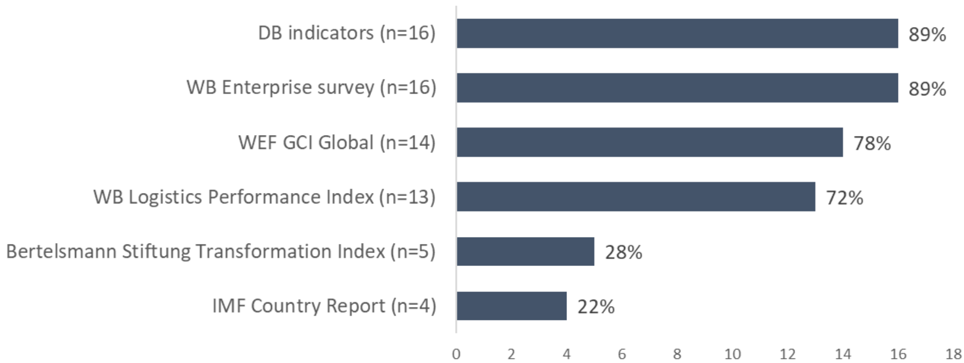
IEG reviewed all the CPSDs published in 2020 (18) and rated the DB coverage of each of them based on the methodology summarized in Table G2.

Table G.2. Rating Methodology for CPSD Coverage of *Doing Business* Issues

Rating	Description
None or minor	CPSD does not mention *DB* reform/indicator issue at all
	CPSD briefly mentions country's *DB* ranking/indicators
Substantial or Priority for Reform	CPSD substantially discusses *DB* rankings/indicators (one or two paragraphs of contexts with multiple *DB* indicators or areas cited), but the discussion does not translate into a reform recommendation
	CPSD lists *DB* reform priorities without discussion in the document
	CPSD lists *DB* related reforms + briefly discusses of the *DB* country rankings and indicators
	CPSD lists *DB* related reforms + substantially discusses the *DB* country rankings and indicators

Source: Independent Evaluation Group Review.

Figure G.2. Indicators used for measuring business environment constraints in CPSDs



Source: Independent Evaluation Group Review

Note: WEF=World Economic Forum; GCI=Global Competitiveness Index, WB=World Bank. Numbers do not add up to 100, as a single CPSD can identify multiple indicators or use the DB report/indicators in several ways.

Most of the CPSDs (14 out of 18) substantially discussed DB related areas or proposed DB related reforms (half of the CPSDs). In 22% of the CPSDs (Indonesia, Rwanda, Kazakhstan, Ghana) DB issues were briefly mentioned, and in five countries (28%), DB issues were substantially discussed but this discussion did not translate into reform recommendations. 89% of the reviewed CPSDs used the DB indicators to provide evidence of constraints to doing business or to describe the business environment in the corresponding countries (72%). 61% used DB indicators as a measure of reform progress. DB indicators were often cited when discussing business environment constraints (89% of documents), along with information from other important WBG and global indicators (figure 1). Among DB indicators, the ranking was cited in 83% of the CPSDs and the DB category scores or other DB sub-indicator scores were present in half of them. CPSDs frequently referenced the overarching EODB indicator (72%). By DB area, trading across borders (78%) came up a significant constraint. It was followed by registering property (61%), paying taxes and starting a business (56% each), and dealing with construction permits (44%). In contrast, employing workers and protecting minority investors were only cited in one CPSD (6% each). IEG identified constraints based on DB indicators that were heavily focused on inadequate infrastructure and inefficient government bureaucracy (50% of CPSDs, respectively). Followed by access and cost of financing and inadequate regulatory framework (28% each of them). Inefficiencies in the tax administration, lengthy court proceedings, and informality were also frequently cited (22%).

Systematic Country Diagnostics (SCD)

IEG also analyzed the use and treatment of DB indicators in the Systematic Country Diagnostics (SCDs) and. A total of 63 SCDs were reviewed from a random sample stratified by income level, region, and fragility conflict and violence (FCV) status of 107 SCDs, drawn from a population of 106 countries. The team rated each SCD based on the coverage of DB areas using a similar rating methodology than the one followed in the CPSDs review.

Half of the SCDs substantially discussed and/or proposed DB related reform priorities. Only in three countries (5%) (Nepal, Uruguay, and Tajikistan) were DB issues not mentioned, and in 27 countries (43%), DB ratings and/or indicators were briefly discussed. In 10 countries (16%), DB issues were substantially discussed but not in reference to related reforms. However, in 23 countries (36%), the SCDs considered reforms measured or justified using the DB report regardless of whether the issue was discussed briefly or substantially.

Most of the SCDs referenced the overarching EoDB category (65%), while half of them mentioned trading across borders (52%), followed by starting a business, getting credit and getting electricity (40% each of them), and enforcing contracts (38%). Employing workers and contracting with the government were referenced in eight SCDs (13%). Nearly all mentions of DB discussed indicators (92%), while slightly less than half of mentions discussed reform (48%), with 46% of mentions including discussion of both.

The analysis also revealed that SCDs more frequently use the DB indicators to describe countries' business environments (27%) or to provide evidence of constraints (25%). Also, 13% of the SCDs used the DB as an indicator for measuring reform progress. SCDs tend to slightly favor citing multiple types of indicators, though DB rankings were not only the most commonly cited of all types, they were the most likely to be cited alone. 52% of SCDs cited multiple types of indicators with 35% citing an overall indicator and a DB ranking, 16% adding a distance-to-frontier measure as well, and 2% citing only rank and DTF. Rank was cited most often (84% of documents) while DTF was the least cited type of indicator (19%).

Over half of the 279 DB references in the sample of 63 SCDs came from just two regions, Sub-Saharan Africa (SSA) and Europe and Central Asia (ECA). When broken down regionally, SCDs from SSA were the most likely to cite DB areas (29%) with ECA a close second (24%). The rest were spread across East Asia and Pacific (19%), and Middle East and North Africa (11%), Latin America (10%), and South (6%).

Appendix H. Summary of Econometrical Findings

Part 1: Relevance[1]

In this section the evaluation team provides evidence on the reliability of the DB indicators. It does so by assessing whether the DB indicators accurately measure specific aspects of the regulatory environment, whether the DB aggregate score is able to measure the quality of client countries' regulatory environment, and whether the DB indicators accurately identify the right regulatory policy priorities. The analysis shows that DB measures for which comparable indicators from other sources could be identified generally tend to overestimate regulatory requirements. At the same time, the DB aggregate score is a reasonable measure of the overall quality of the regulatory environment, and DB indicators in general adequately identify regulatory policy priorities within their scope.

How well do the DB indicators measure the regulatory environment?

IEG collected several measures of regulatory environment from different sources to correlate them with the corresponding DB indicators (table H1). To ensure comparability between the DB indicators and the other data sources, the team matched data by country and the year preceding the DB publication date with the corresponding year of the other data source. For example, the data for DB2018 in Ethiopia was compared with the data for the Logistics Performance Index (LPI) in 2017 in Ethiopia, since the data collected for DB2018 was collected in 2017. To further enhance comparability, when the Enterprise Survey (ES) data is used, the sample includes only the responses from SMEs.[2]

Comparing a DB indicator with a similar indicator from a different source can help to establish the strength of their relationship. To determine the accuracy of the DB indicator in measuring the underlying regulatory phenomenon, it is necessary to compare to measures that are reliable. The broad sample base and the orientation towards actual experience of sampled firms gives strong credence to the enterprise or business executive survey approaches of ES and the World Economic Forum (WEF). Likewise, LPI indicators are collected from logistics experts. Experts consulted for the corresponding DB indicators may have a more general scope of knowledge.

Table H.1. Full set of indicators

DB Indicator		Corresponding Indicator			
	Name	Name	Source	Unit	Collection
1	Number of documents to import	Documents needed to import	LPI	Number	Expert survey
2	Number of documents to export	Documents needed to export	LPI	Number	Expert survey
3	Time to get a permit	Time to get a construction permit	ES	Days	Firm survey
4	Time to import	Time to import	ES	Days	Firm survey
5	Time to export	Time to export	ES	Days	Firm survey
6	Days to get electricity connection	Days to obtain electrical connection	ES	Days	Firm survey
7	Trading across Borders score	Obstacle: trade regulations	ES	Likert scale	Firm survey
8	Paying Taxes score	Obstacle: trade administration	ES	Likert scale	Firm survey
9	Overall score	How burdensome is it for companies to comply with public administration's requirements	WEF	Likert scale	Firm survey (face-to-face and online)

Source: IEG statistical analysis.

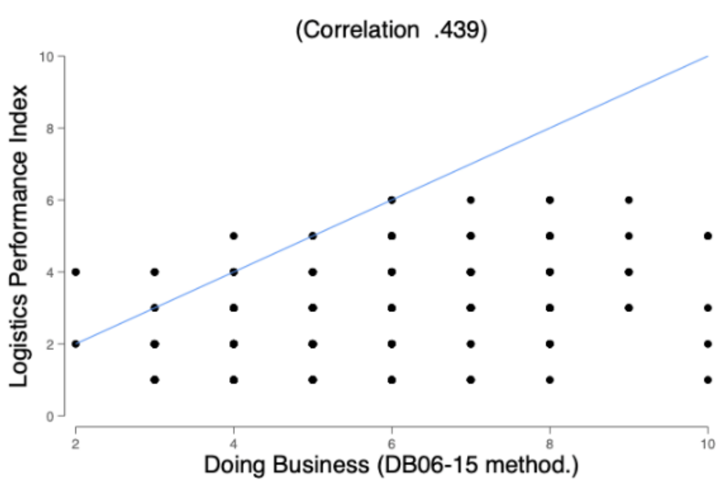
Note: LPI=Logistics Performance Index; ES=Enterprise Surveys, WEF=World Economic Forum.

Figure H1 shows the comparison between DB (until 2015) and LPI data for the number of documents needed to export or import. The Correlation coefficient for documents needed to export (figure H1.A) and documents needed to import (figure H1.B) is low, 44% and 45%, respectively. Graphically, this is evident from the low concentration of observations along the 45-degree line. Given the accuracy of the LPI indicator, the DB indicator appears to over-report the number of documents in both instances.

A second DB indicator analyzed is the time to clear custom for imports, again from the DB and the LPI. In 2015, the DB project changed its methodology to measure this indicator[3]; hence, figure H2 presents the correlation between the two DB methodologies and the corresponding LPI measure. Figure H2.A shows that the methodological change in 2015 marginally improved the (low) correlation with the LPI indicator, moving it from 27% to 43%. While this change has significantly modified the distribution of the observations, it has not altered the underlying tendency of the DB indicators to over-report the intensity of this regulatory phenomenon. Following the approach in Hallward-Driemeier, et al. (2010)[4], figure H3 presents the comparison between DB indicators and their corresponding ES indicators.

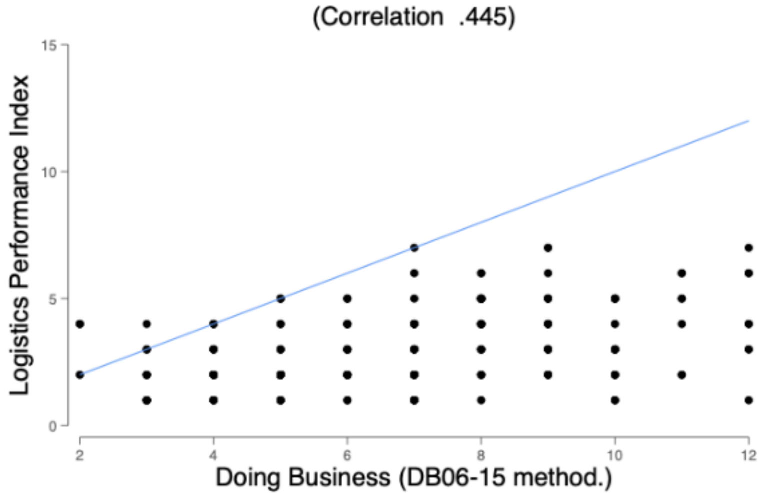
Figure H.1. Correlation between DB and LPI on number of documents needed to export or import[5]

a. LPI Documents to export vs DB Documents to export (DB06-15 method)



Number of documents to export (DB)

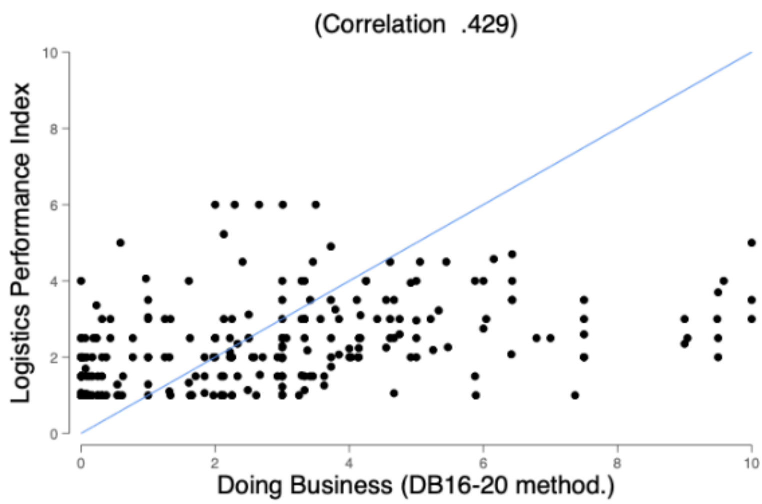
b. LPI Documents to import vs DB Documents to import (DB06-15 method)



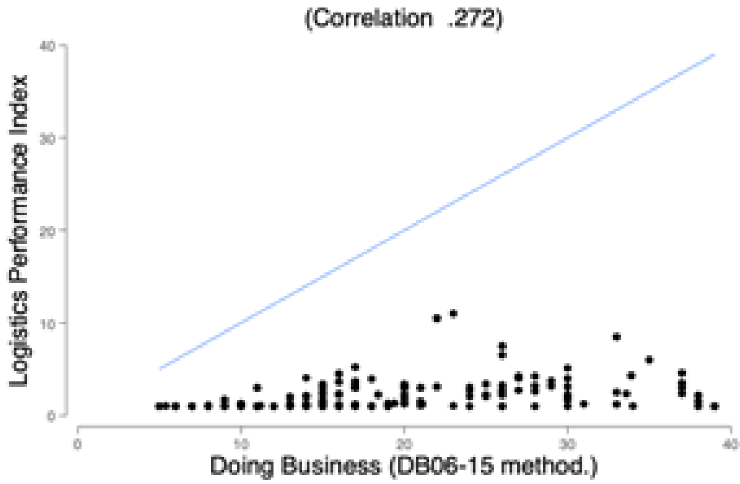
Source: IEG statistical analysis

Figure H.2. Correlation between DB and LPI on time to clear customs for imports using different DB methodologies

a. LPI Days to import vs DB Days to import (New methodology)



b. LPI Days to import vs DB Days to import (Old methodology)

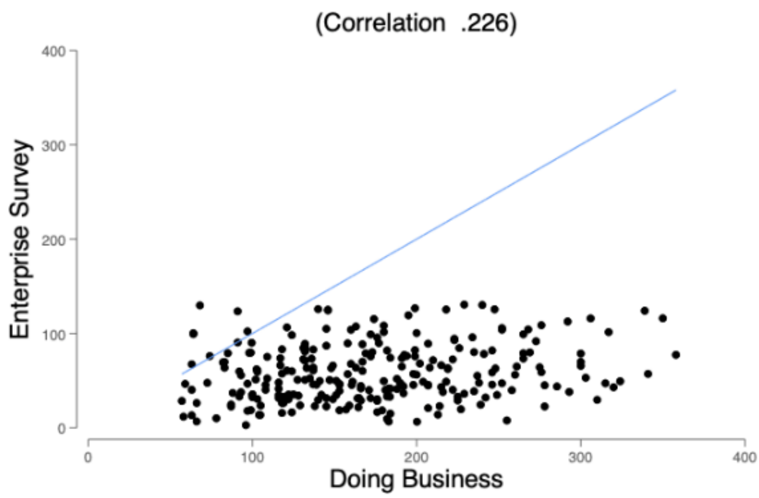


Source: IEG statistical analysis

Figure H3 and table H2 show that most of the DB indicators over-report the regulatory burden. The only exceptions are time to import and time to export when measured with the DB16-20 methodology (figure H3.B and C), which underestimate relative to the comparators. Overall, the comparison between a subset of DB indicators and similar indicators from other regulatory environment sources consistently showed a low level of correlation, with the DB report manifesting the tendency to over-report regulatory requirements of time and number of documents.

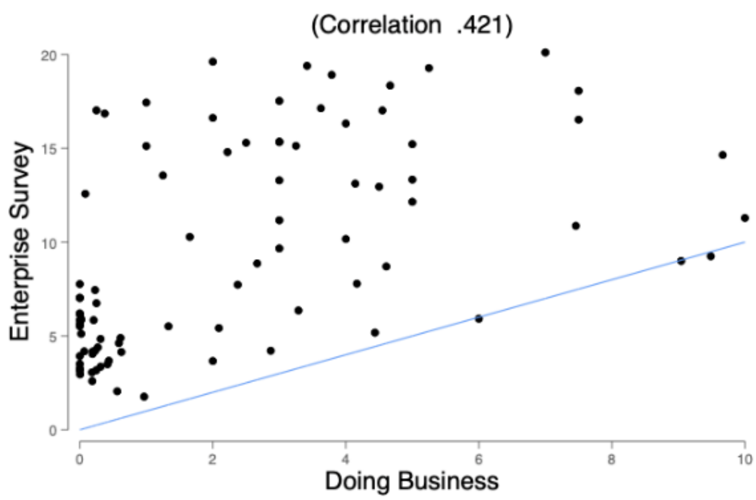
Figure H.3. Correlations between DB and ES indicators

a. ES Time to get a construction permit vs DB Time to get a permit



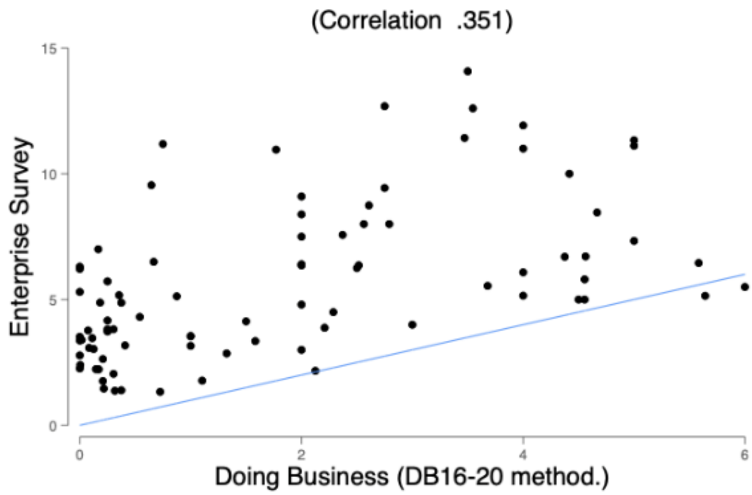
Time (days) to get a permit (DB)

b. ES Time to import vs DB Time to import (DB16-20 method)



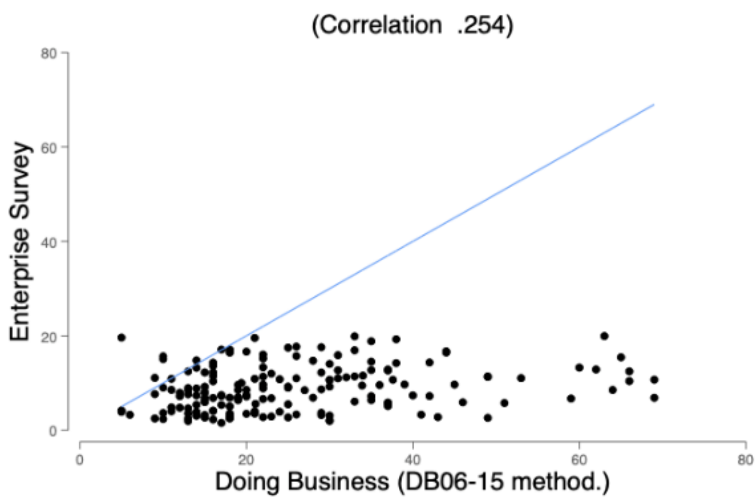
Time (days) to import (DB)

c. ES Time to export vs DB Time to export (DB16-20 method)



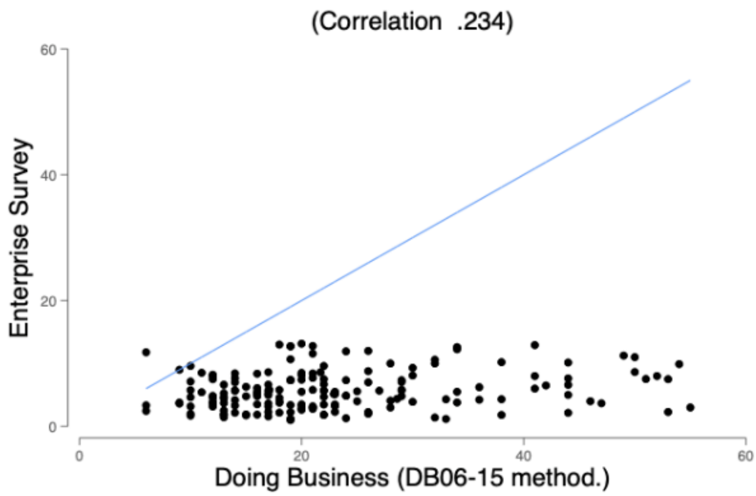
Time (days) to export (DB)

d. ES Time to import vs DB Time to import (DB06-15 method)



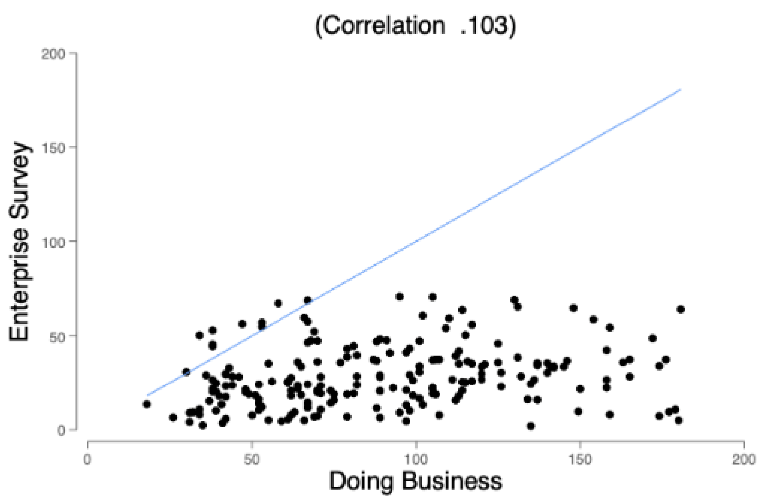
Time (days) to import (DB)

e. ES Time to export vs DB Time to export (DB06-15 method.)



Time (days) to export (DB)

f. ES Days to get electricity connection vs DB Days to obtain electricity connection



Time (days) to get electricity connection (DB)

Source: IEG statistical analysis

Note: ES data refers to SMEs.

Table H.2. Correlations between DB and ES indicators

DB indicator	Corresponding indicator	Correlation coefficient	Over/ Underestimate
Time to get a construction permit	Time to get a construction permit (ES)	23%	Overestimate
Time to import (DB16-20 methodology)	Time to import (ES)	42%	Underestimate
Time to export (DB16-20 methodology)	Time to export (ES)	35%	Underestimate
Time to import (DB06-15 methodology)	Time to import (ES)	25%	Overestimate
Time to export (DB06-15 methodology)	Time to export (ES)	23%	Overestimate
Days to get electricity connection	Days to obtain electrical connection (ES)	10%	Overestimate

Source: IEG statistical analysis

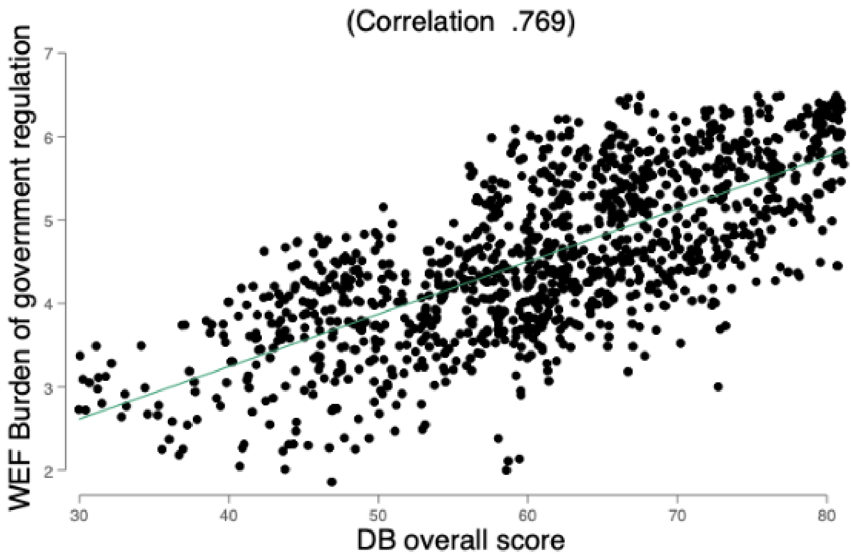
Note ES data refers to SMEs and has been winsorized at the 95% percentile*:*

Is the DB index capable of measuring the quality of the overall regularity environment?

In addition to collecting data on individual aspects of the regulatory environment, the DB report also produces aggregate indices and rankings that aim at measuring the overall quality of the regulatory environment. In what follows, the evaluation team assesses whether the DB aggregate score can discriminate among countries with a better or worse regulatory environment.

To answer this question, the team correlated the overall DB score with an indicator of the general quality of regulatory environment from the WEF, "How burdensome is it for companies to comply with public administration's requirements"[6]. As previously noted, the WEF indicator is considered more accurate than the (constructed) DB score, and hence it is treated as a benchmark.

Figure H.4. Correlation among measures of the overall quality of the regulatory environment, DB and WEF



Source: IEG statistical analysis

Note: Higher values reflect a better business environment for both indicators

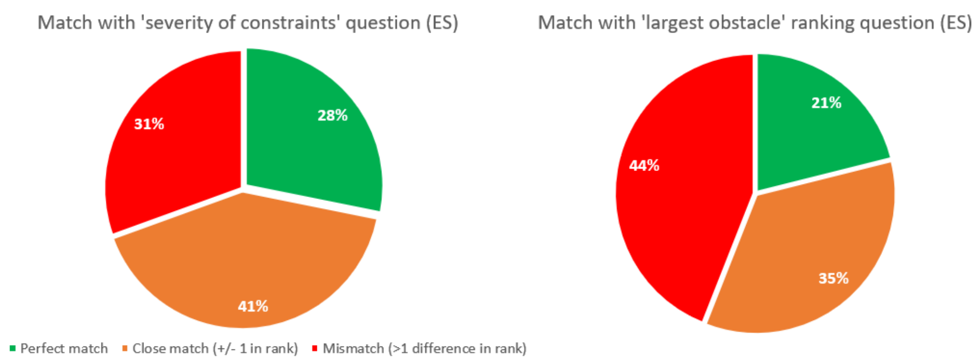
The relationship between the DB score and the entrepreneurs' perception of the overall quality of their country regulatory environment is shown in figure H4. The correlation has the right sign, implying that countries where the business community complains less about the quality of the regulatory environment – as perceived by their own firms and reflected in the WEF indicator - receive also higher scores in the DB report, implying less regulatory burden. Figure H4 also shows that the degree of correlation among firms' perceptions (WEF) and experts' opinions (DB) is high - visually represented by the extent to which observations align along the reported regression line - with a correlation coefficient of 77%. This demonstrates that, in general, the DB score is a good approximation of the quality of the regulatory environment.

Is the DB able to identify the right regulatory reform priorities?

This question refers to the ability of the DB indicators to prioritize the right regulatory policy areas among those it measures. To investigate this, the evaluation team identified four comparable indicators from the DB project and the ES related to tax administration, trade regulations, access to electricity and access to finance. In particular, the ES asks questions in two different ways: one, as a Likert scale ("To what degree are each of the following an obstacle to the current operations of this establishment? None, Minor, Moderate, Major, Very Severe"); and second, as a ranking question among a list of around 10 obstacles ("By looking at the list of elements of the business environment please tell me which one, if any, currently represents the biggest obstacle faced by this establishment.").

To determine the extent to which the DB report can identify the right regulatory policy priorities, the evaluation team compared the firm's reported severity of the four regulatory obstacles from the ES with the corresponding ranking from the DB report. This analysis was conducted within each country and year for which data is available, for a total of 95 occurrences. The results for both types of ES questions are displayed in Figure H5.

Figure H.5. Alignment between DB and ES on policy priorities in four regulatory areas related to tax administration, trade regulations, access to electricity and access to finance



Source: IEG statistical analysis

Results suggest that in 20-30% of occurrences, depending on the ES question used as reference, there is a perfect alignment between the priorities identified by firms in surveys and those identified by the DB scores. In an additional 35-40%, there is a divergence of just one position in the ranking. Overall, in as little as 55% and as much as almost 70% of occurrences, the policy priorities identified by the DB are very close to those identified by entrepreneurs, indicating that the DB score is at least 'better than average' in identifying the more binding regulatory bottlenecks within its scope.

In conclusion, DB scores perform well in ranking the client countries' quality of the regulatory environment and moderately well in identifying regulatory policy priorities within its coverage. However, their capacity to identify the relevant regulatory policy priority can be improved if the assumptions are modeled more closely to the entrepreneurs' reported views.

Part 2: Learning from Factors of Success and Failure[7]

This section studies how internal and external factors might influence the success of DB-related interventions. By estimating a multivariate logistic regression, the team analyses which factors are significantly associated with (or predictive of) the probability of success of DB interventions when controlling for other potential predictors at the project and country level.

Data used in this analysis mainly comes from the database constructed by IEG for the portfolio review. First, the team identified projects related to DB. Then, from IFC AS and WB Lending evaluated projects, it identified 291 interventions and classified them as successful if they achieved or mostly achieved their objectives (World Bank ASA has no validated system of evaluation, so was excluded from this analysis). The team also coded standardized factors of success or failure that could have influenced the achievement of development outcomes at the project level. Those factors were classified as internal or external, depending on whether they were under the Bank Group's control or not. The internal category consists of factors related to quality at entry, project supervision and M&E considerations, while external factors include client commitment and public institutional capacity, among others. The identification of internal and external factors derives from two sources: the descriptive analysis of portfolio data on evaluated projects (appendix B) and the learning from interviews and case studies on factors of project success and failure. Interventions were also assigned a code for the DB area to which they related. Additional variables include the dollar amount devoted to DB interventions and the approval fiscal year of each project. To complement the analysis, the team also considered country level variables, such as income level and several indicators within the Worldwide

Governance Indicators (WGI) -political stability, control of corruption and government effectiveness- which have proved useful in predicting project success in earlier IEG evaluations.

It should be noted that the analysis is subject to two main cautions intrinsically associated to the database construction. The first one is related to a small sample size, while the second one arises from a generally skewed distribution of successful and unsuccessful outcomes (roughly 4:1 in favor of satisfactory outcomes). In general, 82% of the interventions were classified as successful, which in turn could yield insufficient variation relative to outcome. This fact is exacerbated for rarer types of reform; for instance, only 31 evaluated interventions were related to Paying Taxes, out of which 87% (27) turned out to be successful. As it is expected that the estimated standard errors will be influenced by these issues, statistically significant effects presented in this section should be interpreted with caution.[8]

The estimated specification is shown in Equation 1, where the outcome variable, , is a binary variable which takes the value of 1 if the intervention of project in country and in fiscal year was successful, and 0 otherwise. Country income level is represented by the vector , while stands for a set of binary variables of project's approval fiscal year. is a vector for the percentile rating (measured on a scale from 1 to 100) of governance indicators (political stability, control of corruption and government effectiveness). The amount devoted to DB in each intervention, measured in million dollars ($US M), is represented by . is a vector of internal and external factors of success and failure, where factors considered were the ones most frequently identified in the portfolio review (84% of total factors). is a vector of DB areas[9], while is a constant and is the error term.

$$logit(S_{ipct}) = \beta_0 + \beta_1 A_{ipct} + I_{ct}\gamma + Y_{pct}\delta + WGI_{ct}\theta + F_{ipct}\vartheta + DB_{ipct}\varphi + \varepsilon_{ipct} \quad (1)$$

Table H3 shows the average marginal effects resulting from the estimation. Model 1 considers all the variables described in Equation 2, while Model 2 considers a restricted set of variables aimed at gaining precision in factors of success and failure that proved significant in the previous specification. The first column of Table H3 suggests that income levels, fiscal year and region are not statistically associated with the success of interventions. By contrast, political stability is positively and significantly related to the outcome, implying that, on average, an increase of 10 percentage points in the country's percentile rating for political stability is associated with an increase of 4.8 percentage points in the probability of success. Evidence also suggests that, on average, an additional one million dollars in intervention value is related to an increase of 0.5 percentage points in the likelihood of achieving interventions objectives. Regarding factors of success and failure, the extent to which the WBG coordinates and leverages synergies across WBG institutions is positively related to the probability of success. Analytical work, proactive client engagement and follow-up and having the right mix of team expertise are the internal factors which show a positive and statistically significant relation with a successful outcome. However, while team composition is significant at the 1% level, the other two factors are significant only at the 10% level. In contrast, external factors are not significant. The estimated average marginal effect for Registering Property is negative and statistically significant at the 1% level, which implies that, on average, interventions related to that DB area are likely to be less successful by 28 percentage points than interventions in other areas. In contrast, Paying Taxes is positively associated to the probability of success; yet its average marginal effect (9.7 percentage points) is significant only at the 10% level. Most of the results previously described hold when estimating the restricted specification for Model 2. The main difference is related to the MNA region's average marginal effect, which proves significant at the 10% level and suggests that interventions in the MNA region are associated with a lower probability of success (in 30.8 percentage points) than in SAR.

Table H.3. Multivariate Logistic Regression Output, Average Marginal Effects

Explanatory variables	Model 1	Model 2
Income level		
Low	0.0524	0.0445
Lower middle	0.0548	0.0284
Upper middle and High (omitted)		
Year		
2011-2012 (omitted)	-	-

(continued)

Explanatory variables	Model 1	Model 2
2012-2013	-0.0239	-0.0359
2014-2018	0.0033	-0.0290
Region		
SSA	0.1506	0.1221
EAP	-0.0037	-0.0083
ECA	0.1225	0.0938
LAC	0.2049	0.1615
MNA	-0.3446	-0.3085*
SAR (omitted)	-	-
WDI		
Political stability	0.0048**	0.0050***
Control of corruption	-0.0002	-0.0004
Government effectiveness	-0.0027	-0.0006
Amount to DB	0.0051***	0.0051**
Factors of success and failure		
WBG coordination=1	0.1251**	0.1058**
Complementary external interventions=1	0.0177	
QAE: Analytical work=1	0.0931*	0.0879*
QAE: Political and institutional analysis=1	0.0193	
QAE: Risks identification=1	-0.0548	
QAE: Design complexity=1	-0.0434	
QAE: Suited to client capacity=1	0.0179	
Superv: Flexibility of implementation=1	0.0439	
Superv: Client engagement and follow-up=1	0.0848*	0.0859**
Superv: Team composition=1	0.1531***	0.1322***
Superv: Effective coordination with partners=1	0.0825	
M&E: Design=1	-0.0627	
M&E: Implementation=1	-0.0478	
M&E: Utilization=1	0.0760	
Ext: Client commitment=1	-0.0205	
Ext: Agency coord. and political economy=1	-0.0499	
Ext: Public institutional capacity=1	-0.0554	
DB area		
Starting a Business=1	0.0443	
Construct. Permits=1	0.0018	

(continued)

Explanatory variables	Model 1	Model 2
Getting Electricity=1	-0.1238	
Registering Property=1	-0.2811***	
Getting Credit=1	0.0489	
Paying Taxes=1	0.0966*	
Trading across Borders=1	-0.1032	
Enforcing Contracts=1	-0.1463	
Resolving Insolvency=1	-0.0031	
Observations	260	270

Source: IEG econometric analysis.

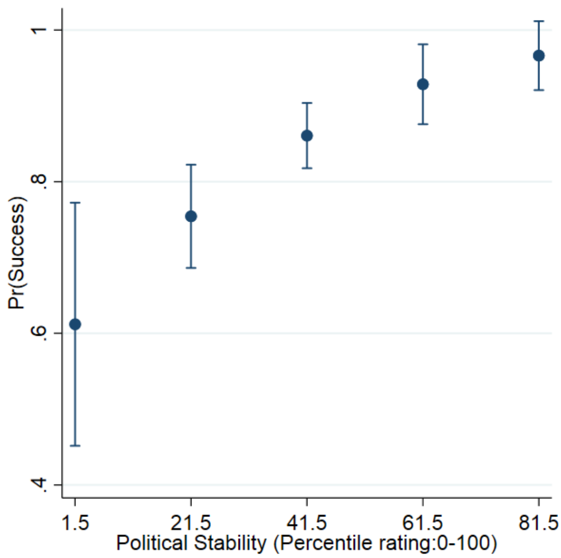
Note: QAE=quality at entry; Superv=project supervision; M&E=monitoring and evaluation; and Ext=external. SSA=Sub-Saharan Africa; ECA=Europe and Central Asia; LAC= Latin America and the Caribbean; EAP=East Asia and the Pacific; MNA= Middle East and North Africa; and SAR=South Asia.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure H6 plots the estimated predictive margins and 95% confidence intervals for the continuous variables that proved significant when estimating Model 2. This facilitates the interpretation of the estimated marginal effects at different levels of each variable and also gives a sense of the magnitude of the estimated standard errors. For instance, Figure H6.A shows how the probability of success increases with a higher country political stability rating. It also shows that standard errors are rather large at low levels of the indicator. In addition, Figure H6.B suggests non-linearities in the relationship between the probability of success and the resources allocated to each intervention. While the first 50 $US M are associated with a relatively large marginal effect, this effect seems to decrease for the next 50 $US M and so on, reaching a precise marginal effect close to zero for higher amounts.

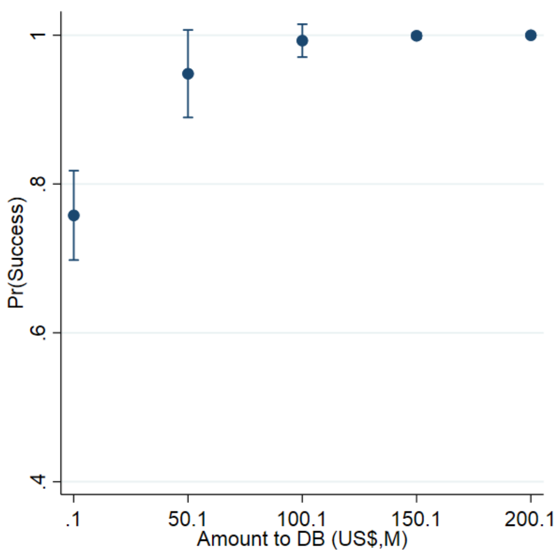
The estimated margins for significant binary variables are shown if figure H7. Panel A suggests that when WBG coordination is absent, the probability of success is 78.6%, while it is 89.3% when this factor is present (the difference is the marginal effect of 10.6 percentage points as reported in table H3). Panels B-D can be interpreted in a similar way.

Figure H.6. Predictive Margins (95% confidence intervals)

a. Political Stability



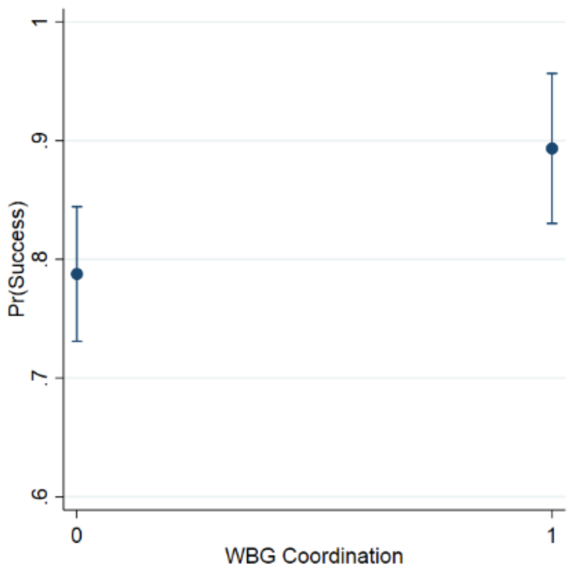
b. Amount to DB



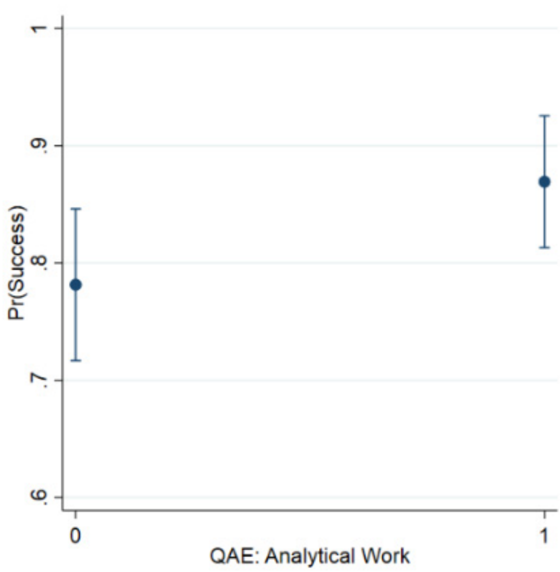
Source: IEG econometric analysis.

Figure H.7. Predictive Margins (95% confidence intervals)

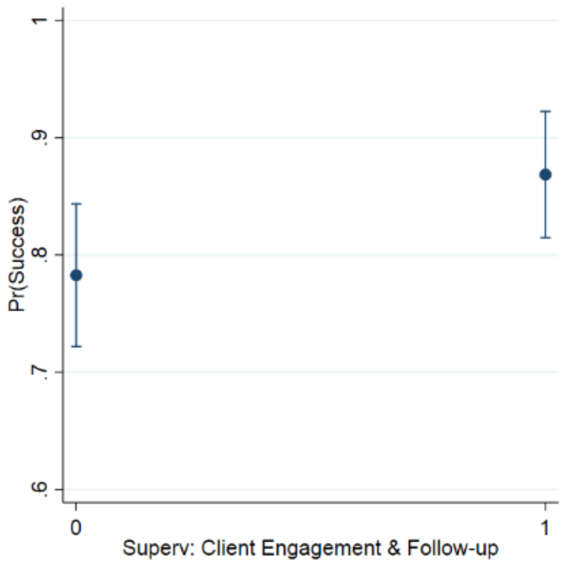
a. WBG Coordination



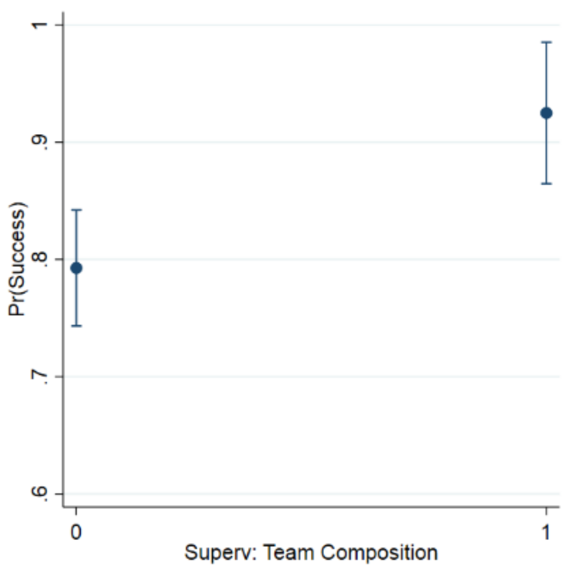
b. Analytical Work



c. Client Engagement and Follow-up



d. Team Composition



Source: IEG econometric analysis

IEG also conducted an exploratory econometric analysis to relate DB-measured country reforms to development outcomes. However, it suggested that it is difficult to find significant, systematic relationships between changes in DB indicators and measurable outcomes such as GDP growth, employment, FDI, trade or labor productivity. There is a high sensitivity to which variables were included (with an implicit sensitivity to omitted variables) and to small changes in model specification. For example, while one model specification showed a significant relationship between protection of minority shareholder rights and FDI, a slightly different model showed no significance. In some cases, DB indicators bore a counterintuitive but significant negative relationship with some outcome variables (e.g., a negative relationship between resolving insolvency and employment, and between registering property and employment). Simple before and after analysis does not control for a host of explanatory factors, yet it can also be hard to specify a control group required to apply more rigorous techniques. For these reasons, IEG is not offering its own econometric treatment of these relationships, deferring instead to the literature.

[1] Part 1 was prepared by Giuseppe Iarossi and modified by Mariana Calderon Cerbon.

[2] IEG notes that in spite of overlapping subject matter, there are differences between the questions and respondents to DB information collection and ES information collection. These include: (i) DB collects information from intermediaries who work with firms. ES collects information from senior managers or owners of firms. (ii) DB uses case scenarios to represent a specific type of firm or transaction. ES collects information on the average or most recent experience of responding firms. (iii) DB attempts to reflect the experience of "domestic SMEs". Enterprise survey samples may include large firms (with over 100 employees), but such firms' responses were excluded for purposes of this comparison.

[3] In 2015, the Trading across Borders indicator was changed to eliminate the number of documents subindicator and to adapt to country comparative advantage, leading trading partner and geographic variation.

[4] Hallward-Driemeier, Mary, Gita Khun-Jush, and Lant Pritchett. 2010. "Deals Versus Rules: Policy Implementation Uncertainty and Why Firms Hate it." Working Paper 16001, NBER. Cambridge, MA USA.

[5] In all graphs, outliers (the top 5% of observations) have been removed for illustration purposes.

[6] Likert scale: 1 = extremely burdensome; 7 = not burdensome at all.

[7] Part 2 was prepared by Mariana Calderon Cerbon incorporating work by Anqing Shi and Ariya Hagh.

[8] To assess the robustness of statistical significance, IEG's methods advisory team estimated a rare event corrected model, which corrects standard errors for biases introduced from a small observed sample. Although estimated standard errors were relatively large, statistical significance remained consistent.

[9] Contracting with the Government, Employing Workers and Protecting Minority Investors were not included in the regression output because there were not enough observations to estimate a coefficient.

Appendix I. Summary of Findings related to IFC AS and WB Lending Evaluations

To enrich the qualitative analysis of the factors of success and failure of WBG projects related to DB, the IEG has reviewed evaluation notes related to IFC AS projects and PPAR. Their main insights are listed in the table below. Subsequently is a summary of the deep dive on IFC AS evaluation notes.

Table I.1. 17 Lessons from WB Lending and IFC AS Projects: Factors of Success and Failure

#	Success	Failure
1	Strong ownership/commitment from the Government, coordinating ministry key needed to overcome inertia, vested interests	DB provides only limited evidence on relevance and priority of reforms
2	Strength of interagency coordination unit key	Lack of focus on binding constraints can limit development effectiveness
3	Capacity is built by learning by doing, sustainable funding mechanisms; timely and appropriate expertise; careful selection of contractors	Mismatch between project complexity and client capacity undermines success
4	Having the right technical expertise at the right time and place matters.	Importance of a proper framework for inter-governmental cooperation across agencies and central/regional government
5	World Bank and IFC can complement each other through collaboration. WBG organizational changes at different times helped or hindered such collaboration	One stop shops and single windows need authority over the functions they combine, requiring process simplification and "back-office re-engineering", not just a simplified interface
6	Deeper reforms require comprehensive and long-term engagement. Repeat interventions can be strategic or merely opportunistic	Discontinuity of counterparts, regime change and shifts in influence of champions can disrupt progress
7	Many IFC AS projects use other primary indicators due to limited DB relevance, timeliness	Global indicator standardization under DB may be out of alignment with industry standards

(continued)

#	Success	Failure
8	Value of knowledge sharing, peer-to-peer learning	Lender preference for immovable collateral, distrust and technical issues may constrain uptake of collateral registries
9	Public-private dialogue can improve ownership, quality of information, implementation success	

Source: Independent Evaluation Group.

IFC AS deep dive summary

The findings below were based on qualitative review of 50 evaluation notes from the IEG on IFC AS operations in the evaluation portfolio, which correspond to some 27% of the total number of IFC AS operations in the portfolio (184). Some The main takeaways are:

» The pool of evaluated projects presents high relevance but unfortunately the evaluation approach in most cases can only test whether the intervention was relevant or not and has limited capacity to determine whether the reform proposed was a priority.

» Most projects do not use DB indicators as their primary source of evidence (when used, it is as secondary evidence), but rely instead on IFC AS standard indicators. The main shortcomings are that prevent the use of DB as primary indicators relate to i) lack of relevance: IFC Projects' scope is broader or deeper than what the indicators measure ii) data collection challenges and iii) changes in DB methodology over time.

» However, DB terminology has influenced the way IFC AS standard indicators are worded e.g., number of documents eliminated, days it takes, cost of procures and similar. Hence, projects overlook indicators that would have been much more relevant and for which data could have easily been provided by the counterparts.

» This "narrow-minded" approach to selection of indicators affects WBG's ability to present the "business case" to Government counterparts but also diminishes WBG's role as a "disseminator" of international best practices;

given that WBG puts the emphasis on collecting information that is not relevant per industry standards.

» Impacts (understood as effects of the reforms on stakeholders) of DB reforms cannot be demonstrated due to: i) de jure versus de facto issues and ii) M&E is designed to capture private benefits but neglects public/social effects.

» Improvements in DB rankings are not the focus of IFC's portfolio. The DB draws attention and resources to the areas they measure directly but the IFC AS projects also cover themes and conduct activities that are not directly related to or would not be picked up by the DB reports.

» The type of activities delivered by IFC that potentially add value to the country beyond what's measured in the DB reports include: PPDs [Public-Private Dialogues?], Capacity Building and IT improvements.

» IFC's portfolio presents instances of repeat interventions in the same country over time which might suggest the intention either to deepen previously introduced reforms or to expand reforms to more areas. Hence countries with repeat interventions provide a good opportunity to explore the depth of reforms, their evolution over time and the extent to which repeat interventions were ad hoc or strategically planned.

» External factors that most affected projects' implementation and performance are: i) weak interagency coordinating unit, ii) lack of client commitment due to pollical economy or failure to present the "business case" iii) vested interests or shifting power and v) IT challenges iv) low capacity of counterparts.

» Internal factors include technical expertise, WB-IFC coordination and WBG organizational changes.

IFC AS projects previously evaluated by the IEG were found to be relevant, more clearly in terms of the WBG frameworks than in terms of national-level plans and priorities. Indeed, 80% of the projects analyzed were found to be strategically relevant, but while the evidence was specific in terms of the WBG (alignment with Bank's CPFs and regional strategies) it was not specific regarding country priority. An example of such issue is in Lao (586507): "At the approval, the project documents indicate that the project supported

IFC's strategy to improve investment climate in IDA. Improvement of doing business environment was high on the government's reform agenda. However, the CRM meeting raised a relevant question that the project approval document does not explain well; why IFC supported manufacturing licensing reform as neither the Business Entry indicator of Doing Business nor the most recent Enterprise Survey showed licensing as an important binding constraint." Furthermore, the assessment on the relevance for the private sector also counted on additional sources, such as the ICA and Enterprise Surveys. The 20% evaluated projects that were found not to be relevant have their ratings driven by external events (e.g., economic crisis) or issues related to counterparts' lack of commitment or resistance to implementation.

IEG has also repeatedly advised against using DB as the primary source of evidence or primary monitoring tool, and the review indicates DB indicators are not often used as project indicators. in several occasions. Reliance on DB data for setting baselines and targets is also problematic given changes in the DB methodology over time and the divergence between data collected at the project level and DB data collection methodologies. IEG recommended that projects define their own indicators and collect their own data. Some of the issues related to the use of DB indicators at the project level relate to lack of relevance, as IFC project is broader or deeper; challenges collecting data, when counterparts are responsible for generating the indicators mismatches with the DB can create problems; and to lack of consistency, as DB methodologies change over time. Even though not commonly used, the DB approach has influenced the way non-DB indicators are worded. Indeed, the IFC AS standard indicators adopt their form (e.g., number of documents eliminated), disregarding more relevant indicators for which data could have been easily provided by counterparts.

When it comes to impact, the main challenges found in the project related to de jure versus de facto issues and the focus on capturing private benefits, neglecting public effects. There are instances in which reforms fail to bear fruit at the impact level, meaning, neither the private nor the public sector feel the effects of the reforms. Often this is due to laws and regulations being enacted but not implemented because of lack of complementary regulations. An example is in Comoros (580191), where the justice system did not acknowledge the arbitration reform, leading to the disincentives for SMEs to look for that alternative. With regards to the focus solely on private benefits and a failure to capture public effects: It was noted that DB type of projects fail to articulate potential benefits for the government/operating unit (e.g. operational efficiencies, savings and similar) or the public effects of the promoted reforms, focusing instead on economic benefits for the private sector. This is at odds with WBG's overall mission but also presents a missed opportunity to show the "business case" (i.e. operational efficiency and public benefit) of the reforms for the government counterpart which in turn would increase chances of reforms' full adoption and sustainability.

As a result, at the Outcome level (adoption of changes), the fact that the WBG puts emphasis on collecting information that is not relevant per industry standards, affects not only WBG's ability to present the "business case" but also its role of broadcasting international best-practices. An example is the operation on Trade logistics in the Balkans (572687), in which the reduction of time and number of documents were an immediate consequence of the operation that reduced the size of samples for inspection. Instead, IEG questions the use of reduction of time and number of documents as indicators for this type of work. Sampling rates are indeed the most relevant indicators at the outcome level while the agency's efficiency, rates of detection, (ability to detect non-compliant consignments with less screening) should be the impact.

The DB did draw attention and resources to its business areas measured, but the projects also covered activities that would not be reflected on DB reports. Indeed, improvements in DB rankings is not the main focus of IFC's portfolio. Most (72%) projects did not have improvement of DB rankings as an objective; they were categorized as DB because they used DB indicators or DB type of indicators (e.g., documents or procedures eliminated) as complementary evidence, which indicates that projects were not narrowly focused on influencing DB rankings. There are projects whose primary objective was to work on areas such as investment promotion and business exit mechanisms, whose reforms would not be directly picked up by the DB. Furthermore, the same could be said of typologies of activities, work on PPDs (formal or informal), capacity building activities, systems upgrades and similar, if successful, provide value added to the country beyond the mere reform and improve sustainability over time.

The IFC portfolio presents instances of repeat interventions over time which suggests the deepening of previously introduced reforms or expansion to additional areas. Hence countries with repeat interventions provide a good opportunity to explore the depth of the reforms and the extent to which these repeat interventions represent a long-term commitment or strategic planning on the part of the WBG. A substantial (42) number of countries had multiple interventions. 184 IFC projects were implemented in 81 countries. Fifty two percent of the countries had two or more interventions over time, whereas 48% of countries had one intervention. A cursory review suggests that multiple projects tackle different areas and, in some instances also show evolution from a focused DB exercise to a more comprehensive intervention. In other instances, the involvement started with a multi-component intervention, later moving into single topic projects.

IFC AS projects suffered from typical challenges such as turnover of counterparts, political changes, change of priorities and similar issues. Other external factors most commonly found were weak interagency coordination unit weakness. That happened when the client government's DB reforms' coordinating unit lacked the mandate or political power over the other participating agencies to perform a facilitator role and to enforce adoption of changes, e.g., if the unit is hosted under a Ministry that has no competencies over the reform; if the unit's mandate was clear but they lacked capacity or resources; or when coordinated Agencies were reluctant to collaborate due to lack of trust, fear of losing competencies, political fight, old grudges, lack of communication and so on. Those issues demand a significant amount of time from IFC AS to build consensus (affecting deadlines and budget) or to understand the underlying causes for the lack of collaboration (denoting lack of proper analysis of stakeholders' capacity during preparation). Lack of client commitment or lack of ownership was also a challenge, usually explained by the political economy that affects the approval of laws and regulations and poorly articulated "Business case" when the Government does not see the point of financing a reform that would benefit mostly the private sector. Vested interests or shift of power were linked to stakeholders' fear of losing revenue or power. An example of the last was in an automation project Lebanon, as lawyers would be negatively affected by the project and decided to lobby against the project.

Other challenges were related to IT. As many reforms require the upgrade of clients' IT systems in order to achieve the intended impact, those are impacted by IFC's team ability to oversee the IT upgrade, select vendors, integration with clients' or stakeholders' systems, secure funding and so on. A failed IT intervention can undermine project's achievement in other areas (e.g., process simplification) in addition to presenting reputational risks for IFC if the system fails and affects government operations. An example is an IT solution developed for Food in Inspectorate in Montenegro was implemented only partially, in part because inspectors at the border points lacked access to internet connection. Low capacity of counterpart can also limits the ability to adopt changes, either institutional capacity (partner institution being underfunded and in lack of basic resources) and HR, or low technical capacity of staff (lack of technical knowledge, adequate training and/or high turnover of staff). These issues undermine partner institution's ability to implement changes and its sustainability over time.

An internal factor of success was technical expertise. IFC's ability to deploy high quality international expertise is highly appreciated by the client governments. Unfortunately, it is sometimes difficult to find this expertise locally in low-income countries or alternatively it is difficult to find international experts who are willing to remain in the country for an extended period. The IFC team's responsiveness, flexibility, and local presence along with its ability to maintain an ongoing communication and dialogue were highlighted as great strengths and a distinctive feature from other donors. Good WB-IFC Collaboration was also important. Collaboration might take the form of projects that support or complement each other either financially or technically. Examples include adoption of IFC AS reforms included as a conditionality in DPLs or WB investment lending used for IT upgrades as noted earlier. The collaboration might also be informal, with the sharing of WBG experts or consultants. Overall projects reviewed show positive collaboration, which appears in part facilitated by the Joint GP arrangement. WBG Organizational changes were also a relevant factor, as over the last 6-7 years the IFC unit in charge of enabling environment reforms has gone through several organizational changes. IFC-WB collaboration greatly benefitted from the existence of the Joint GP. There were instances in which the WBG teams worked interchangeably between IFC and WB interventions to the extent that, in projects in which IEG tried to "tease out" whether a particular result was due to an IFC or WB project, the interviewed project team was unable to provide a clear answer as they were all working towards a common objective independently of who was funding what. However, organizational changes negatively affected IFC's project governance due to turnover of managers, competing priorities (managers or staff paying more attention to large WB operations) and even a lack of access to IFC systems by WB staff. This translated in some occasions into a lack of proactive supervision with managers failing to provide guidance and support to project teams. Project teams coped as best as they could and effects on results were minimized to the extent possible, although operational efficiency was affected.

Figure I.1. PPAR chapeau report summary

Projects/Operations Reviewed

Sl No	Country	Project ID	Name	Instrument	Actual Project Cost (US$ million)	Approval Date
1	Republic of Congo	P118561	Support for Economic Diversification	Investment Project Financing (IPF)	12.47	16-Dec-2010
2	The Gambia	P114240	Growth & Competitiveness	IPF	11.76	30-Sep-2010
3	Guinea	P128443	Micro, Small and Medium Enterprises (MSME) Development Project	IPF	9.5	06/28/2013
4	Lao PDR	P106165	Trade Development Facility Project	IPF	7.6	11/16/2007
5	Benin	P132786 P146665	Ninth and Tenth Poverty Reduction Support Credit	Development Policy Operation (DPO)	20 20	03/11/2014 03/17/2015
6	Georgia	P112700 P117698 P122202	First, Second and Third Development Policy Operations	DPO	89.6 53.6 40.0	07/02/2009 07/29/2010 07/21/2011
7	Pakistan	P147557 P151620	First and Second Programmatic Fiscally Sustainable and Inclusive Growth Development Policy Credit	DPO	402.4 500.1	May 1, 2014 Jun 18, 2015

Why these Projects Qualify as "Doing Business-informed"?

Sl No	Country	Project Objectives framed in DB indicators	Project Components framed in DB indicators	Project used DB indicators as monitoring indicators
1	Republic of Congo			1. Number of Doing Business reforms adopted and implemented 2. Number of Doing Business indicators that have been reformed to improve the country's business environment 3. Number of overall procedures that have been reduced in the five Doing Business indicators where the country is ranked last.
2	The Gambia		Improving the Business Environment Component aimed at improving the business environment through business registration and tax administration reforms, establishment of a collateral registry and support for investment promotion and facilitation	1. Time to receive a business license (working days) 2. Time spent preparing, filing and paying taxes in hours/year 3. Number of securities registered at the Collateral Registry
3	Guinea	The development objective (PDO) was to support the development of MSMEs in various value chains and to improve business processes of Guinea's investment climate. This ICR Review interprets "selected business processes" to mean the five doing business areas, the reforms of which were to be supported by the project: business registration, investment promotion, business regulation, the credit information system, and the payment system.	Sub-component 2.2: Credit Information System and Payment Systems	

Why these Projects Qualify as "Doing Business-informed"?

Sl No	Country	Project Objectives framed in DB indicators	Project Components framed in DB indicators	Project used DB indicators as monitoring indicators
4	LAO PDR		1. Trade Facilitation 2. Increasing Export Competitiveness and Business Environment (US$ 1.39 million at appraisal) 3. Strengthening of the Sanitary and Phytosanitary Standards and Technical Barriers to Trade Frameworks 4. Capacity Building, Trade Policy, Trade Agreements and Global Opportunities	Improved scores on objective measures of trade facilitation was measured using Logistics Performance Index in the ICR.
5	Benin		1. Business Environment sub-component within Strengthening Private Sector Competitiveness 2. Improving Efficiency at the Port and Customs Reform sub-component within Strengthening Private Sector Competitiveness	1. Credit registry coverage (%) 2. Number of formal registered companies 3. Cost to Export (US$ per container) 4. Cost to Import (US$ per container)

Why these Projects Qualify as "Doing Business-informed"?

Sl No	Country	Project Objectives framed in DB indicators	Project Components framed in DB indicators	Project used DB indicators as monitoring indicators
6	Georgia	Some of the outcomes for the Improving External Competitiveness Pillar include: 1. streamlining the tax payment system and reducing costs of tax compliance 2. streamlining customs procedures and reducing costs of trading across borders 3. preparing the basis for improved access of Georgian products to European and international markets 4. increasing reliability and independence of statistics		Time required for tax compliance (reported by Doing Business publication) Time required to import and export (reported by Doing Business publication)
7	Pakistan		Improving the business environment and investment climate Policy Area—Improving the availability and accuracy of credit information, the Program seeks to facilitate access to credit by the private sector and enhance consumer protection. A step in this direction is strengthening the regulatory framework for the operation of credit bureaus in the public and private sector. This is to be achieved through passage of the Credit Bureau Act. The establishment of a One Stop Shop (OSS) for business registration for registering limited liability companies is a prior action for the DPCs and is an explicit part of the GOP's reform strategy.	An improved system/ framework providing availability/ coverage/ quality of credit information for consumers and SMEs by June 2016.

Lesson 1: Counterpart Commitment

- For investment climate reform projects, strong political will and a champion at the highest level of the government are key for bringing the public and private sector together to identify and implement reforms needed for improving the investment climate and competitiveness.
  - In the case of Republic of Congo, the project aimed at funding the staffing of the High-level Council for Public-Private Dialogue (HCDPP)—a high-level Public-Private platform which was expected to: foster the private sector's involvement in policy dialogue; and monitor the action plan aimed at improving the investment climate and diversification of the economy.
    - ✓ During the field mission, IEG found that HCDPP was inactive during the life of the Project. That is, not even a single meeting on public private dialogue was held by the President, who was expected to chair the HCDPP meetings.
    - ✓ Prior to the closure of the project in 2017, the HCDPP was split into two:
      - Inter-ministerial committee for business enabling environment. This committee was chaired by the Prime Minister and was responsible for adopting and implementing investment climate reforms. However, progress has been very slow because only 2 meetings have been held to date (at the time of the IEG field mission in 2019).
      - Committee of consultation between the private sector and the public administrations. This committee is responsible for public-private dialogue; however, it is currently inactive, and no meetings have been held to date.
    - ✓ Although the reforms are adopted by the ministries, there is lack of follow-up from the President's or Prime Minister's office to implement these reforms. Outreach or awareness efforts to promote the new reforms are not being carried out effectively.
      - This is evident from the fact that the Doing Business raking for Republic of Congo remained almost the same at Project approval (Rank= 179; Year=2010), Project closing (176; 2016) and at IEG evaluation (180; 2020) (See Table in the Appendix 1).
      - Even the reforms that were adopted during project implementation have not shown any improvement in Doing Business rankings to-date. For example, starting a business (Rank= 166, Year=2010; Rank=178, Year=2017; Rank=179, Year=2020), trading across borders (178; 182; 183), paying taxes (180; 183; 185), getting electricity (N/A; 178; 179), dealing with construction permits (69; 124; 134) and registering property (169; 171; 174) have deteriorated between 2010 and 2020.

Lesson 1: Counterpart Commitment (Continued..)

- Lack of key champion at the highest level of the government to implement the reforms is also a major challenge in The Gambia project. This is evident from deterioration in the Doing Business ranking for The Gambia from 140 at Project approval in 2010 to 155 in 2020 (Appendix 2).
  - ✓ In 2017, the government established a National Business Council (NBC) to carry out Public Private Dialogue and investment climate reforms in The Gambia.
    - The NBC is comprised of public sector (representing 5 cabinet ministries) and private sector (representing executives of 7 private sector companies) entities.
    - Initially, the President of The Gambia was expected to chair the NBC; however, he delegated the responsibility to the Vice President.
  - ✓ During the field mission, IEG found that the progress in adopting and implementing reforms has been very slow.
    - For example, during the past 3 years NBC has only met 3 times and the last meeting did not even involve the cabinet ministers.
    - According to the Gambia Chamber of Commerce, the biggest challenge is to coordinate and bring all the cabinet ministers together while organizing the NBC meetings.
    - Despite several attempts made by the IFC Doing Business team to support the government in improving the investment climate, the progress has been very slow. For example, IFC Doing Business team conducted a mission in The Gambia in February 2019 and recommended a set of very simple reforms to the government. However, when the IFC team re-visited the country in December 2019, not much progress was made and only one of the many reforms recommended was implemented by the government.

Lesson 1: Counterpart Commitment (Continued..)

- Guinea Business Forum (GBF) never became operational because of lack of commitment from the highest level of the Government and lack of agreement among the various private sector associations.
  - ✓ GBF has two governing bodies:
    - The Piloting committee. The Prime Minister is the chair of the piloting committee, MISME is the first deputy chair, and a private sector representative is the second deputy chair, which is currently vacant. The piloting committee is responsible for drafting strategies and reforms to improve the business environment in Guinea
    - A permanent secretariat is responsible for implementing recommendations made by the piloting committee.
  - ✓ However, the GBF is not yet operational.
    - For example, since 2017 the Prime Minister has chaired the GBF only three times. Moreover, there are a total of 29 private sector associations (each representing a professional organization) in Guinea. Lack of agreement among these associations on identifying a second deputy chair is due to vested interests or political connections.
    - Also, the Government is not taking any initiative in selecting a most effective and powerful association that can lead the private sector on the GBF. These challenges are affecting the implementation of legislations, rules, laws, and regulations in Guinea.

Lesson 1: Counterpart Commitment (Continued..)

- Strong ownership from the coordinating ministry during the early stages of implementation of activities involving information and technology systems, especially those designed and implemented by external vendors outside the country, is needed; otherwise, it could lead to disruption of work and affect sustainability of the outcomes post-project closure.
  - In the case of The Gambia project, lack of ownership and involvement from the Ministry of Justice during the implementation of Single Window Business Registry (SWBR) resulted in the ministry not having adequate knowledge and capacity to maintain and upgrade the system post-project closure.
    - ✓ During the field mission, IEG found that there was lack of ownership and involvement from the Ministry of Justice during the implementation of SWBR by a USA-based firm or external company.
      - That is, there was no involvement from the staff of Ministry of Justice or even in terms of appointing a local Information and Technology company to understand the technical aspects of the complex systems involved in the development of SWBR.
    - ✓ This not only affected the relationship, but also resulted in the external company not transferring the administrative access rights to the ministry in order to manage and maintain the system.
      - Since Ministry of Justice did not pay the full amount to the external company, the administrative access rights that is required for maintaining the SWBR system were not transferred to the ministry at project-closure.
    - ✓ Lack of knowledge and capacity of Ministry of Justice to maintain and upgrade SWBR has resulted in significant challenges in maintaining the system and has led to inefficiencies in the operations of SWBR.
      - This is evident from high downtime of SWBR and the fact that the ministry must contact the external company every time there is a technical issue with the registry.
      - Until 2019, SWBR had a high downtime, typically every 3 weeks the SWBR was down or unavailable for business registration for up to 3 consecutive days.
    - ✓ For smooth operations of the SWBR post-project closure, it is important that the ministry responsible for day-to-day operations and maintenance of the registry is involved during the development of the information and technology systems, especially when an external company is involved.

Lesson 1: Counterpart Commitment (Continued..)

- Accession to a major regional or global agreement such as World Trade Organization (WTO) can serve as a strong incentive for reforms and ensure political commitment.
  - The Lao People's Democratic Republic - trade development facility project helped implement several reforms that were part of Lao PDR's WTO and Association of Southeast Asian Nations (ASEAN) membership commitments.
    - ✓ For example, the Lao Trade Portal helped Lao PDR comply with WTO and ASEAN standards that require member countries to make their trade related regulations publicly available and easily accessible.
    - ✓ Similarly, progress on improving the Sanitary and Phytosanitary (SPS) legal and regulatory framework was driven by the need for WTO compliance.
    - ✓ Accession and compliance requirements of multilateral agreements provided a strong overall impetus for many of the reforms that were supported by the project.

Lesson 2: Project Complexity

- When working with low-capacity clients, especially in Fragility, Conflict & Violence (FCV) countries, design should be simple with a minimum of components and limited requirements for coordination.
  - In the case of Republic of Congo, slow disbursement of funds along with scaling back or dropping of several activities/components from the initial Project's design was an indication that the weak institutional capacity was not adequately captured during the scoping and design phases of the Project.
    - ✓ The disbursement rate was only 20 percent during the first 3 years of implementation and the Project restructuring in 2014 involved dropping of several activities/components.
    - ✓ This led to efficiency issues with several restructurings and implementation delays during the life of the Project, ultimately affecting the achievement of outcomes. Therefore, Republic of Congo and the World Bank did not get the maximum net benefit from this Project.
  - Similarly, in the case of The Gambia, project design did not adequately capture the weak institutional capacity of the Project Coordination Unit (PCU) which is evident from the several changes to the scope of the project during implementation.
    - ✓ Adding activities to the Project during design without considering the country conditions and dropping or replacing activities at the time of implementation changes the scope of the project and leads to efficiency issues.
  - The World Bank needs to be more realistic and do more upstream preparation before designing complex projects in FCV countries with uncertain business environments and low-capacity institutions.

Lesson 3: Client Capacity

- In a limited capacity environment, a "learning-by-doing" approach can be effective in building government capacity.
  - At the time of approval of Lao People's Democratic Republic (PDR) - trade development facility project, the National Implementation Unit (NIU) had limited capacity for procurement and financial management.
    - ✓ However, the confidence of the NIU grew during the implementation period mainly due to a "learning-by-doing" approach. This approach was based on:
      - a full-time procurement advisor attached to the NIU during the initial period.
      - a full-time financial management advisor in place throughout the implementation period.
      - training and advice provided by World Bank procurement and financial management specialists based in Bangkok and Vientiane.
      - continuity on the part of the World Bank team, with the team lead and trade economist remaining in place from project effectiveness until closing, allowing for key relationships to be developed and institutional memory retained.
- For efficient management and sustainability of the SWBR, a permanent funding mechanism needs to be in place.
  - ❖ In case of The Gambia project, SWBR depends on Ministry of Justice and Ministry of Trade for funding its day-to-day operations and maintenance.
    - ✓ Lack of funding to maintain and upgrade the software and equipment needed for smooth functioning of the SWBR is a major problem and is affecting the sustainability of the registry.
      - ▪ This is because the revenues generated from the registration of new businesses by the SWBR goes directly to the Ministry of Justice and back to the central government. For example, in 2019, SWBR had to rely on the funding from another ministry (Ministry of Trade) to contract a local information and technology company, purchase equipment to upgrade the registry, and resolve issues related to system downtime.
  - ❖ An option would be to retain a portion of the revenues generated from the registration of new businesses by SWBR for operations and maintenance of the registry, rather than depending on other ministries for funding.

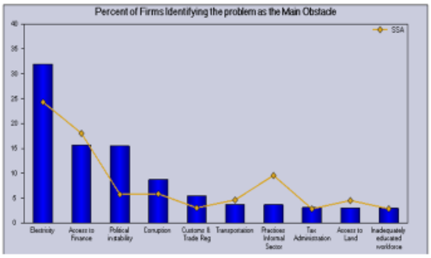
Lesson 3: Client Capacity (Continued..)

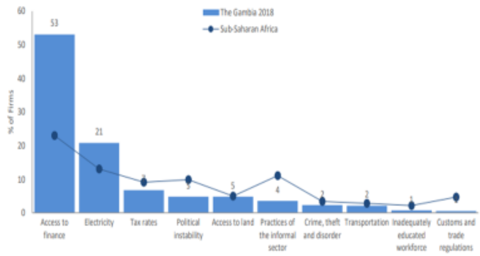
- Lack of involvement of a World Bank credit information specialist during implementation contributed to weak outcomes of the credit registry.
  - ❖ During the virtual mission, IEG found that the task team leaders did not actively involve a World Bank credit information specialist during Project implementation.
    - ✓ The specialist participated in only one mission during the life of the Project. This is because the specialist was not part of the Project team and was requested to provided comments on legal framework and Request for Proposals on a random basis by various Task Team Leaders.
- It is crucial to select companies that have real time experience in implementing Credit registries.
  - ❖ For effective functioning of a credit registry, it is important to ensure that the design and implementation of the registry is based on international best practice standards. For this, selecting a company with good reputation and prior experience in implementing registries in several countries is a key.
    - ✓ A Tunisian company that implemented the credit registry is basically a software company and does not have any prior experience in implementing credit registries in countries.
    - ✓ As a result, some of the fundamental things or international best practice standards (such as matching algorithm that is crucial to identify existing or new borrowers) were not built into the design of the credit registry.
    - ✓ There are also implications on the follow-on World Bank project (Support to MSME Growth, Competitiveness and Access to Finance - P164283) because any change in credit registry needs to be done with the help of this company as it owns the software source code of the system.
  - ❖ Given that IFC is a global leader in implementing financial infrastructure projects, World Bank and IFC teams can collaborate to build capacity of the Government counterparts to select companies that meet international best practice standards.

Lesson 4: Binding Constraints

- Competitiveness or private sector development projects should focus on binding constraints, otherwise the businesses or investments they facilitate will be limited by these constraints.
  - In the case of Republic of Congo and The Gambia, projects did not focus on binding constraints to the private sector and investors.
    - ✓ Although enterprise survey data at the time of appraisal of the Republic of Congo and The Gambia projects indicated that access to finance, electricity supply and political instability were among the leading constraints to private sector development, none of them were explicitly addressed through the project.

Snapshot of the Business Environment in Congo, Rep.





Lesson 5: World Bank and IFC Collaboration

- World Bank investment projects and IFC Advisory Services supported the governments in West African countries in implementing business environment reforms, particularly in simplifying processes to enable small entrepreneurs to enter the formal sector.
  - With technical assistance from WBG and other donors, the Organization for the Harmonization of African Business Law in Africa (OHADA) member countries (16 West African countries) adopted a revised General Commercial Law in December 2010.
    - ✓ The Commercial Law, which was applicable to all OHADA members introduced the Entreprenant status, a simplified legal regime specifically designed for small entrepreneurs, whose intended objective was to facilitate the migration of businesses operating in the informal sector into the formal sector.
      - IFC's 2013-16 investment climate Advisory Service Project addressed the informal sector issue by implementing the Entreprenant status in Benin.
      - IFC worked jointly with the World Bank (2008-17 CIGOP project) and UNCTAD to support the government in identifying a package of incentives to encourage firm's formalization and performance (e.g., simplified business registration, tax, credit, social security benefits).
      - From 2014 to 2016 experts from the World Bank Group (including the IFC investment climate project team) carried out a pilot to implement randomized impact evaluation of the Entreprenant.
    - ✓ Findings from the randomized impact evaluation of the "Entreprenant" program.
      - One year after the launch of the "Entreprenant" program, a study carried out by the World Bank assessed the impact of all three versions of the "Entreprenant" program on formalization rates. The impact was 9.1 percentage points in the first treatment group providing only registration simplification and information, (i.e. nine out of 100 informal businesses in this group opted to register); 13 percentage points in the second group, which also provided business training, counseling and bank support services; and 15.8 percentage points in the third group, which also added to the previous group's benefits the provision of tax mediation services.
      - Differences between groups were all significant, suggesting that businesses valued the additional policy incentives provided. The formalization rate in the control group (which did not receive any assistance in formalization) was less than 1 percent, suggesting that in the absence of the program, this type of informal businesses would not usually formalize.

Lesson 6: Collaboration with Development Partners

- The World Bank can play a significant role in helping focus government's efforts in policy areas where other development partners mainly support reforms.
  - Including trade-related reforms required to negotiate Georgia's Deep and Comprehensive Free Trade Agreement with the EU in the Georgia First, Second and Third Development Policy Operations (DPO) series helped focus efforts on reforms important for strengthening export potential and avoided spreading resources too thinly.
    - ✓ The trade-related reforms would most probably have taken place had the World Bank not included them as prior actions in the 2009–11 DPO series.
      - After the 2008 crisis, Georgia was keen to fulfill the requirements for starting negotiations on the Deep and Comprehensive Free Trade Agreement (DCFTA) with the European Union.
      - The formal additionality of the DPO series on this reform agenda is, therefore, limited. Moreover, the World Bank had not engaged in a dialogue with the government on the regulatory convergence with the European Union directives based on prior experience with Eastern European countries during their accession negotiations with the European Union. The World Bank occasionally played an informal mediation role in raising DCFTA negotiation issues important to the government with the European Union.
      - The trade-related prior actions of the DPO series were rather used as disbursement triggers, in an agenda otherwise overwhelmingly driven by the European Union. Including these measures in the DPO series brought, however, added value by helping focus the government's efforts on the areas of technical barriers to trade (TBT), food safety, and competition policy, which were important for DCFTA negotiations and strengthening export capacity over the medium term.
      - Given Georgia's resource and capacity limitations, this focused effort helped avoid spreading resources thin. Moreover, according to government officials consulted during this evaluation, the inclusion of these reforms in the DPO three-year cycle helped the timing and accelerated the pace of these reforms.

Lesson 7: Intergovernmental Cooperation

- In the case of Pakistan First and Second Programmatic Fiscally Sustainable and Inclusive Growth (FSIG) Development Policy Credit, the policy reform package did not provide a framework to build effective engagement with Pakistan's provincial governments.
  - Experience from earlier operations suggests that structural reforms at the federal level in Pakistan must be complemented by a relevant provincial effort to sustain these reforms and maximize their impact.
    - A coordinated countrywide approach to reform design and implementation is especially important for a country such as Pakistan with government structures heavily concentrated at the provincial level.
      - The two largest provinces (Punjab and Sindh) dominate political and economic life; their combined share of population reaches 75 percent of the country's total, and they collect about 85 percent of total taxes (out of six federal units).
      - Improvements in the business environment and modernization of tax administration are examples of reforms that require significant intergovernmental cooperation in Pakistan.
      - Although under the FSIG program the government made some important steps to engage with provincial governments (in tax policy and conditional cash transfer administration), much more cooperation is needed, including in tax enforcement (direct taxation), tax administration (property valuation), and broad-based business deregulation.

Lesson 8: Lesson specific to One-Stop-Shop for Business Registration

- A one-stop shop needs authority over the functions it combines, and process simplification, which involves "back-office re-engineering", not just a unified user interface.
  - Successful SWBRs are expected to bring relevant government agencies together to ease the registration process of new businesses; otherwise, if the businesses must go to multiple government agencies at multiple locations, then that defeats the purpose of the SWBR of being a One-Stop-Shop.
    - ✓ The SWBR in The Gambia is not functioning as a One-Stop-Shop because businesses must manually go to several government agencies (such as Gambia Revenue Authority or GRA office for taxes, social security office for registering their employees, trade licenses etc.) at different locations to complete the business registration process.
    - ✓ SWBR system also does not have an adequate monitoring and reporting mechanism in place to break-down the information by various segments that would enable the government in its decision-making process and in further refinement of the business environment in The Gambia.
      - For example, the SWBR can only provide information on geographic area, month, and average number of days to register a business. It, however, does not have a provision to break-down the information by SMEs, MSMEs, large companies, gender, youth, age, nationality or public sector employees that also own businesses in The Gambia.
    - ✓ Certain parts of the Company Law have not been incorporated in the SWBR.
      - For example, there is no provision in the system to determine the fee for increase in share capital in businesses.
      - Also, one year after registration, a business must file for tax returns by providing financial statements and status of the company. However, most companies don't file for tax returns.
    - ✓ Due to the high tax rate and lack of public awareness in The Gambia businesses do not come forward for registration unless they are provided with an incentive that triggers the registration process.
      - ✓ For example, more recently, donors are providing training and grants to SMEs on the condition that they register their businesses in the SWBR, which triggers the registration process as access to funding is a major constraint to firms in The Gambia.

Lesson 8: Lesson specific to One-Stop-Shop for Business Registration (Continued..)

- In the case of the Guinea project, implementation of the One-Stop-Shop in Conakry has made it easier (in terms of reduction in both cost and time) for small companies to register their businesses and has contributed to the improvement in Guinea's doing business ranking on starting a business; however, the One-Stop-Shop is not fully operational in other regions of the country.
  - ✓ Small proprietary and limited liability companies register their businesses by sending their documents to Investment Promotion Agency, which in-turn, registers their businesses through the One-Stop-Shop for company, tax, and social security registration.
  - ✓ As a result of various reforms (see footnotes 1-5 in Appendix 3), Guinea's Doing Business ranking on starting a business has improved from 158 in 2013 to 133 in 2017 and to 122 in 2020. The cost as percent of income per capita has improved from 97 percent in 2013 to 78 percent in 2017 and to 34 percent in 2020. The time taken to register a business with the One-Stop-Shop has improved significantly from 26 days in 2013 to 4 days in both 2017 and 2020.
  - ✓ During the virtual mission, IEG found that the One-Stop-Shop in the six regions are housed in rented offices and do not provide the same level of services to businesses as compared to the One-Stop-Shop in Conakry.
    - For example, the One-Stop-Shop in Kindia is housed in the Islamic bank. Similarly, the One-Stop-Shop in Labe is housed in the Governor's office. Finally, the One-Stop-Shop in Boke is in the premises of a post office.

Lesson 9: Lesson specific to Credit Registry (Continued)

- In the case of the Guinea project, the credit registry or credit information system (CIS) has not been fully implemented by the Project. The system is not being used by banks to check the creditworthiness of borrowers prior to issuing loans due to serious issues in quality and accuracy of data.
  - During the virtual mission, IEG found that commercial banks in Guinea do not have confidence in the CIS. Before issuing loans, commercial banks contact each other to get credit information about borrowers rather than accessing this information directly from the CIS.
    - ✓ The percentage of population (both individuals and firms) in the credit registry in Guinea is only 1.8 percent, significantly below the Sub-Saharan Africa average of 8.3 percent in 2020. Moreover, the depth of credit information index in Guinea is 0 (on a scale of 0-8) as compared to 3.9 for Sub-Saharan Africa in 2020 (Appendix 4).
  - Issues in quality and accuracy of data in CIS in Guinea are mainly due to:
    - ✓ **Delays in the provision of data from banks and Microfinance Institutions (MFIs).** Out of the 23 MFIs in Guinea, only eight share data with the CIS because most of them do not have adequate technical infrastructure (such as computers) and store the data manually in papers. A total of 16 commercial banks share information with the CIS every month; however, the process is cumbersome and involves too many steps, resulting in data quality and accuracy issues and delays in sharing data with the CIS.
    - ✓ **Lack of data intelligence.** The CIS does not have a matching algorithm (i.e., a mechanism to track text matching) to identify new or existing borrowers. Errors in data collection occurs when banks enter the names of borrowers in several different ways (e.g., Stephen can be entered as Steven or Steve). A matching algorithm according to international best practice can help in automatically identifying a borrower and avoiding data entry errors. Since the matching algorithm in not built into the CIS, Central Bank must manually match the borrower names, resulting in delays and issues in data quality and accuracy.
    - ✓ **A snapshot of data on total exposure of borrowers is generated on a fixed date every month.** The effectiveness of CIS is undermined because the system does not have a mechanism to generate alerts or early signs of distress in the event of borrower default on loans between the snapshot date and the next reporting date.

Lesson 9: Lesson specific to Credit Registry

- Evidence shows that in some countries the collateral registry is active and operational; however, lenders' preference to use immovable assets over movable assets as collateral and technical issues in the registry causing high system downtime have led to low utilization of the collateral registry.
  - In the case of The Gambia project, the collateral registry for the registration of securities created over movable property was established in 2014 by the Security Interests in Moveable Property Act.
    - ✓ The collateral registry is used by the Central Bank (e.g., loans to its staff to procure vehicles), government entities/public parastatals, private sector companies (e.g., loans to MSMEs) and commercial banks.
    - ✓ At the time of the IEG field mission, 806 transactions were recorded in the collateral registry.
  - Very few financial institutions in The Gambia use movable assets as collateral because it is very difficult to collect movable assets in the case of default.
    - ✓ During the field mission, IEG interviewed a large commercial bank and a microfinance institution in The Gambia and found that only 10-18 percent of their loan portfolio use movable assets as collateral. This is mainly because the financial institutions prefer land over movable assets as collateral, even though property rights are a major issue in The Gambia due to lack of clear ownership of land titles.
  - Technical problems with the collateral registry have led to high system downtime. This is because an external company that implemented the system no longer exists and therefore, maintaining and upgrading the registry is a major challenge for the Central Bank.
    - ✓ For example, the micro finance institution interviewed by IEG during the field mission mentioned that it was logged out and was unable to access the collateral registry for a period of more than a year and only received the access recently.
  - Finally, the Central Bank does not even collect information on what percentage of the loan portfolio are secured by movable and immovable assets during supervision visits to financial institutions in The Gambia.

Lesson 9: Lesson specific to Credit Registry (Continued)

- In some of the countries in Africa, the Bank-firm relationship is one of the main contributing factors for getting credit in Guinea rather than just credit information.
  - During the virtual mission, IEG found that commercial banks in Guinea lend to companies with whom they have built existing relationships through prior-loans or to companies that are fully operational.
    - ✓ This is in-line with the literature that across many countries in Africa there is lack of correlation between the share of businesses who cite lack of credit as a major constraint and the degree of financial penetration (examples include Beck,2015; and Mbaye and Benjamin, 2018).
  - All of which suggests that there is more to the bank-firm relationship than just credit information. As a result, doing business ranking on getting credit has remained unchanged in Guinea since 2013 (Appendix 5).

Lesson 10: Lesson specific to Trading Across Borders

- The Lao PDR - trade development facility project was one of a range of other donor-supported initiatives that sought to help improve trade facilitation and competitiveness at the time of project appraisal.
  - Over the 2008-13 implementation period, Lao PDR became more integrated into the regional and international economy as measured by increases in trade in goods and services (Appendix 6).
  - While significant barriers to trade persisted after the project, several intermediate steps to trade facilitation improved through increased transparency and time savings through the creation of the Lao Trade Portal; improved integration into the regional and multilateral trading systems; and increased aid-for-trade management capacity.
  - During implementation of the project, other on-going development partner supported initiatives included the Enhanced Integrated Framework Trust Fund; GIZ support for integration into regional markets; USAID assistance to the Bilateral Trade Agreement and the WTO accession process; and ADB's support
  - In addition, the World Bank was also supporting trade reforms through the parallel Customs and Trade Facilitation Project as well as a series of development policy operations.

	At Project Approval	During Project Implementation						Project Closure	Project Post-Closure		Current
Doing Business Indicators	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Doing Business Rank	179	177	181	183	185	178	176	178	179	180	180
Distance to Frontier						43.29	41.88	40.58	39.57	39.83	39.5
Starting a Business	166	176	175	180	182	170	177	178	177	179	179
Dealing with Construction Permits	69	83	103	149	142	102	120	124	125	127	134
Getting Electricity			152	170	175	170	176	178	181	182	179
Registering Property	169	133	156	156	164	168	166	171	177	177	174
Getting Credit	135	138	98	104	109	104	109	118	133	134	132
Protecting Minority Investors	154	154	155	158	157	146	150	145	146	149	162
Paying Taxes	180	180	182	182	183	182	182	183	185	185	185
Trading across Borders	178	180	181	181	180	181	177	182	184	184	183
Enforcing Contracts	159	158	159	162	164	151	158	155	155	155	155
Resolving Insolvency	120		134	136	142	117	115	117	118	122	119

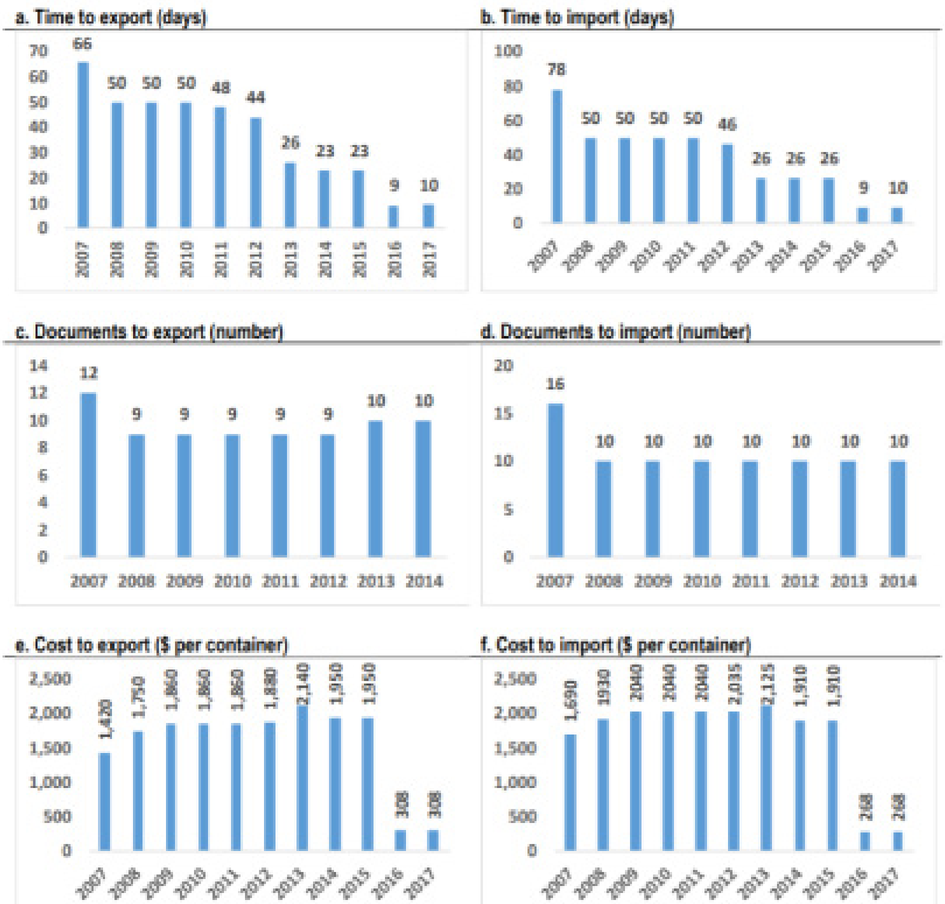
	At Project Approval	During Project Implementation				Project Closure	Project Post-Closure				Current
Doing Business Indicators	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Doing Business Rank	140	146	149	147	150	138	151	145	146	149	155
Distance to Frontier						54.81	48.99	51.7	51.92	51.72	50.3
Starting a Business	114	115	120	123	130	159	169	168	171	169	119
Score of starting a business (0-100)						68.37	67.32	69.37	69	69.91	84.6
Procedures (number)	8	8	8	8	8	7	7	7	7	7	6
Time (days)	27	27	27	27	27	26	25	25	25	25	8
Cost (number)	215.1	199.6	206.1	158.7	174.3	131.2	141.6	125.2	128.2	120.9	49.5
Paid-in min. capital (% of income per capita)	0	0	0	0	0	0	0	0	0	0	0
Getting Credit	135	138	159	159	165	160	162	118	122	134	152
Paying Taxes	176	176	178	179	184	180	177	171	169	169	172

	At Board Approval				At Project Closing			Most Recent
	2013[1]	2014[2]	2015	2016[3]	2017	2018	2019[4]	2020[5]
Starting a Business	158	146	175	126	133	125	111	122
Procedures (number)	6	5	6	6	6	6	6	6
Time (days)	35	16	8	8	8	8	15	15
Cost (% of income per capita)	96.9	81	82.6	79	77.7	67.5	38.2	33.8
Minimum capital (% of income per capita)	324.7	313.8	416	13.9	13.6	8.9	5.4	5.3

Note: The following are the reforms on Starting a Business in Guinea:
1/ Guinea made starting a business easier by setting up a one-stop shop for company incorporation and by replacing the requirement for a copy of the founders' criminal records with one for a sworn declaration at the time of the company's registration.
2/ Guinea made starting a business easier by enabling the one-stop shop to publish incorporation notices and by reducing the notary fees.
3/ Guinea made starting a business easier by reducing the minimum capital requirement.
4/ Guinea made starting a business easier by allowing registration with the labor promotion agency at the one stop shop.
5/ Guinea made starting a business less expensive by reducing the fees for business incorporation.

Indicator	Guinea	Sub-Saharan Africa	OECD high income	Best Regulatory Performance
Strength of legal rights index (0-12)	6	5.1	6.1	12 (5 Economies)
Depth of credit information index (0-8)	0	3.9	6.8	8 (53 Economies)
Credit registry coverage (% of adults)	1.8	8.3	24.4	100.0 (2 Economies)
Credit bureau coverage (% of adults)	0	11	66.7	100.0 (14 Economies)

	At Board Approval				At Project Closing			Most Recent
	2013	2014	2015	2016	2017	2018	2019	2020
Getting credit (rank)	154	159	131	133	139	142	144	152
Strength of legal rights index (0-10)	6	6	6	6	6	6	6	6
Depth of credit information index (0-6)	0	0	0	0	0	0	0	0
Public registry coverage (% of adults)	0	0	0	0	0	0	0	1.8
Private bureau coverage (% of adults)	0	0	0	0	0	0	0	0



Source: Independent Evaluation Group.

Appendix J. Review of Claims and their References

Description of the Approach

This note analyzes the outcomes and impacts claimed by Doing Business (DB) reports published between FY10-FY20. It also assesses whether those claims referenced rigorous sources. The identification of relevant claims followed a combination of manual codification and supervised machine learning methods implemented in collaboration with IEG's Methods Advisory Team (box J1). For each claim made, their stated channels of influence were also captured, along with their referenced sources. The present review aims to understand the claims made in terms of areas, types of reforms, and the link between the outcomes and impacts associated with the business regulatory reforms. Additionally, it assessed rigorousness by comparing the sources used with the literature review (appendix F. Structured Literature Review).

Box J.1. Methodology

Building on insights from the evaluation's Theory of Change and automatic label recognition techniques, the team generated a search taxonomy (key words/phrases) to identify sentences that used relevant words/phrases and were likely to claim impact. Those were: Economic growth; GDP growth; growth rate; income; investment; job; poverty; and unemployment. This initial process identified 4,085 potentially relevant sentences in the eleven Doing Business reports. To refine the initial selection and together with the methods advisory team, the team created a learning sample based on manual screening of a 3% random sample (151 paragraphs). It was stratified by report and taxonomy to classify whether a sentence was relevant or not. Using the learning sample, the team ensembled three text classification models (logistic regression, support vector machine, and multi-layer perceptron) to estimate the probability of being relevant for each of the 4,085 sentences. This exercise assigned 184 sentences a probability greater than an established threshold of 79% in all the three models (selected to get a manageable and useful number of results for manual review). * The team then manually screened the 184 sentences and their adjoining sentences for reference. The team eliminated those paragraphs that did not have coherent framing of reform-related effects and duplicates. That resulted in a total of 89 unique claims for which the team then manually looked for: mentions of mechanisms between reforms and their immediate outcomes, intermediate outcomes, and impact, as well as referenced sources.

* Lower levels yielded an unacceptably high level of false positives.

Source: IEG Team elaboration.

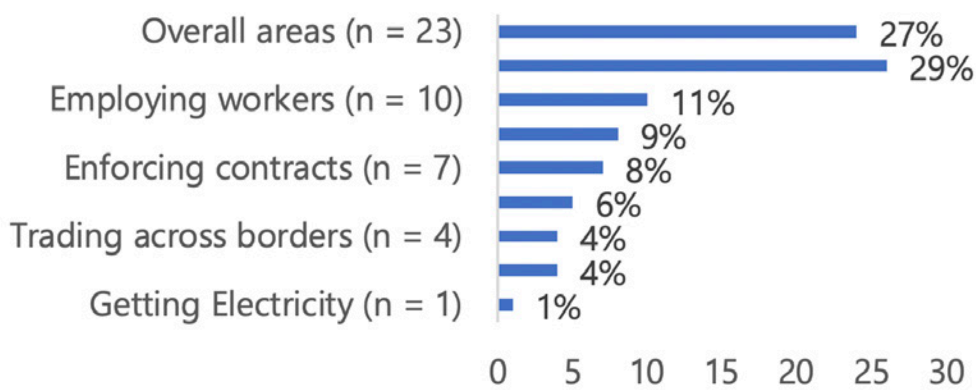
Areas, types of reforms, and channels of influence

Starting a business was the most mentioned DB business area with 30% of the claims, followed by overall areas measured by DB (26%), employing workers (11%), and paying taxes (9%). In contrast, getting electricity was the least mentioned area, with 1% of claims (figure J1a). Regarding the types of reform described in the claims, "improve business laws or regulations" was the most frequent (44%). It was followed by "making it easier overall" (28%)

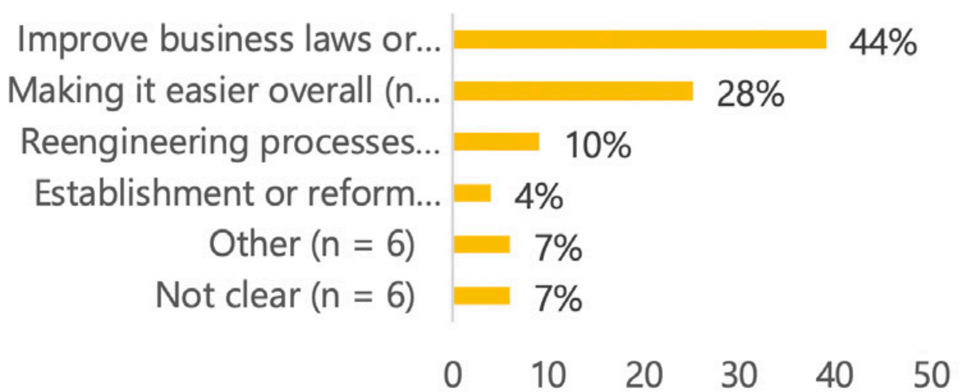
and "reengineering processes" (10%). Some 7% of the claims of impact were not linked to any interventions (figure J1b).

Figure J.1. Claims' distribution in Doing Business areas and types of reforms

a. Distribution of reform areas



b. Distribution of types of reform



Source: Own elaboration based on 2010-2020 DB reports

Most claims did not mention clear, immediate outcomes (57%), but those which did usually referenced the cost and days of doing business and streamlining procedures.[1]

» The claims including to reduce the cost of doing business (19% of all claims) as part of its channel of influence were associated with starting a business and improving business laws or regulations. In terms of intermediate outcomes, were mostly associated with increasing investments, formality, and business entry, while the impacts were increasing growth and employment. The claims of reducing the cost of DB have been losing prevalence in the DB reports, as the DB2018 was the last report that mentioned them (figure J2).

» The reforms associated with streamlining procedures (12%) were mainly related to starting a business, better business laws or regulations leading to increased business entry and employment increase.

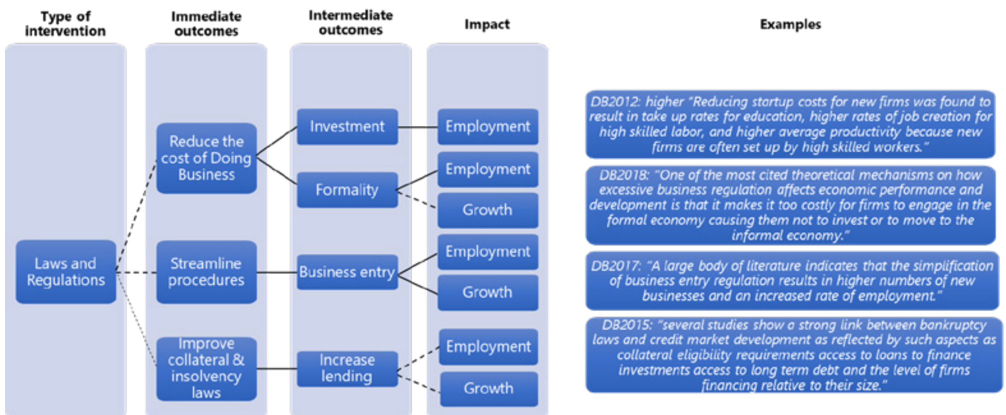
Intermediate outcomes were the focus of the claims (68 out of the 89 claims presented one or more intermediate outcomes). These were most frequently related to the increase in business entry, investment, and formality.[2] (figure 2).

» The most common channels for the claim of an increased business entry (33% of the 89) were associated with starting a business by improving laws and regulations. The immediate outcomes associated with it were streamlining procedures and improving costs. The most common associated impacts were increased employment and growth. E.g., "Research provides strong evidence that reforms making it easier to start a business are associated with more firm creation, which in turn is strongly associated with job creation and economic growth" (DB2015).

» The intermediate outcome of increased investment (30% of the 89) was associated with different business reform areas. Most notably, it was associated with paying taxes (22% of the time). In terms of impact, it was frequently related to increased growth and employment. E.g., "(...) In addition, many African economies lowered rates for the profit tax reducing its share in the total tax rate. The size of the tax cost for businesses matters for investment and growth" (DB2015).

» The intermediate outcome of increased formality (20%) was mainly associated with starting a business and paying taxes, with the immediate outcome of improving the cost of business entry, and with the impact of increased employment and growth. E.g., "The literature has shown that [higher] entry costs increase the size of the informal economy and decrease job creation which are likely to hurt economic performance" (DB2014).

Figure J.2. Some of the Claims' Most Common Channels of Influence and Selected Examples



Source: Own elaboration based on 2010-2020 DB reports.

Note: Dashed and thinner outline represents weaker association

Some of the most common channels of influence related reforms with job creation and economic growth (figure J2). Of the 89 claims identified by IEG, 69 included at least one impact. Of these, 62% mentioned job creation and 48% mentioned economic growth. They were associated with starting a business, overall areas measured by DB, and employing workers. In terms of intermediate outcomes, they were related to increased business entry through improved laws and regulations and improved efficiency of processes. Economic growth was also mostly associated with starting a business and overall areas measured by DB, through the increase of business entry, formality and investment, and by increasing efficiency of services. E.g., "[r]esearch provides strong evidence that reforms making it easier to start a business are associated with more firm creation, which in turn is strongly associated with job creation and economic growth" (DB2015). In most cases, paragraphs referred to correlations (60%) instead of causal relationships (28%). E.g., "Research provides strong evidence that reforms making it easier to start a business are associated with more firm creation, which in turn is strongly associated with job creation and economic growth" (DB2015).

The Rigorousness of Claims' Sources

The rigorousness assessment was guided by a comparison of the sources referenced by the claims with the ones referenced in the evaluation's two literature reviews. The first was a desk literature review based on the Doing Business team's bibliographic list (shared with IEG) which is organized by business area. The second, also organized by business area (excluding Labor Regulations and part of the Paying Taxes indicator), was IEG's Structured Literature Review (SLR) (appendix F).

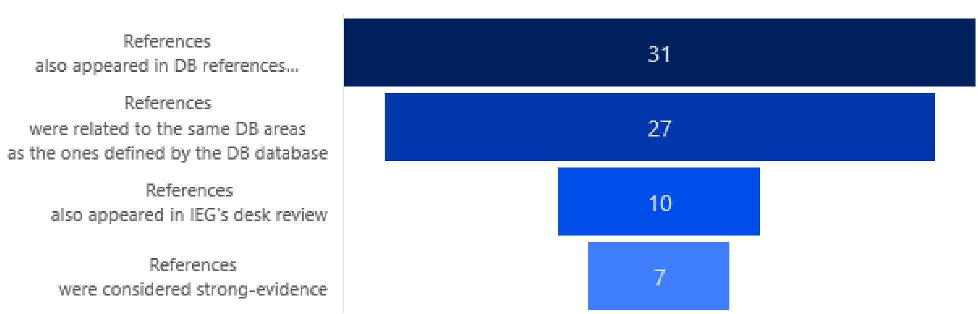
Fourteen of the 89 claims did not mention any source, qualifying as general claims or results of the DB team's own calculations. For example, no references are cited for the following statement: "The size of the tax cost for businesses matters for investment and growth. Where taxes are high businesses are more inclined to opt out of the formal sector. Given the disincentive effects associated with very high tax rates the continual decline in the total tax rate has been a good trend for Africa." (DB2015). Eight of the 89 claims referenced sources within the WBG. Six of these referenced other WBG flagship reports related to the DB and two referenced previous DB annual report. In DB2017 there was a reference to *Women, Business and the Law 2016: Getting to Equal*: "However overregulation of the labor market can discourage job creation and constrain the movement of workers from low to high productivity jobs. Stringent labor regulation has also been associated with labor market segmentation and reduced employment of women and youth." DB2011 references DB2004: "For example Doing Business 2004 found that faster contract enforcement was associated with perceptions of greater judicial fairness suggesting that justice delayed is justice denied."

The other 67 claims made 116 references to peer-reviewed literature, often repeated, covering all DB areas. The business areas most frequently mentioned by references were starting a business (41%), employing workers (15%), and overall areas measured by DB (15%). A total of 39 of the 116 references was repeated, some in different report years (e.g., Djankov, McLiesh and Ramalho 2006, was cited in the 2013, 2014 and 2020 DB reports) and some in support of different claims within the same publication (e.g., Bruhn 2011, cited four times in DB2018). Excluding repetitions, the total number of papers referenced drops to 77. When also dropping references exclusively cited in specific areas measured by the DB (8), the total of unique references made to a peer-reviewed to an indicator-specific claim drops to 69.

The IEG team then performed a "matching" exercise to see whether the references mentioned were used by the IEG's literature reviews. IEG's Desk review (figure 3), which used a database of articles provided by DB drawn from leading journals, had four levels of evidence, ranging from limited to strong but also including a category of "mixed" where articles presented evidence both for and against a link to a particular outcome. If a finding was confirmed by multiple articles it was categorized as "strong evidence". Only 31 of the cited papers were in the DB database. When considering specific business areas, the match dropped to 27 papers. Ten of those references were included by the IEG in its own literature desk review as providing relevant evidence on outcomes.

Only 10 of the references (out of 69) were identified as relevant by IEG's desk review, with 7 of them considered strong evidence, and validated by multiple articles. One of the 10 was confirmed by a single article, while e (were isolated) and two others were contradicted by other sources (mixed evidence). All of the seven considered part of strong evidence were related to the starting a business area, except for one to trading across borders and one on employing workers.

Figure J.3. Matching between Doing Business Claims' References & IEG's Desk Review



Source: Own elaboration based on 2010-2020 DB reports and the Doing Business papers' database

The Structured Literature Review (SLR)[3] matching exercise considered the 69 papers cited by DB reports related to specific business areas. Because the

SLR did not include employing workers, the references exclusively related to it (8) were also dropped from the analysis, leading to a total of 61 references. Out of these, the SLR included only 8 (13%) as meeting its criteria for rigorous evidence. Those were related to starting a business (4), getting credit (2) and resolving insolvency (2). Fourteen of the references that did not match SLR's were from the business area of employing workers. The other 63 references (87%) did not meet the screening criteria of the SLR. An example is:

DB2018: "Research also shows that raising the efficiency level of bankruptcy laws in select OECD high income economies to that of the United States would increase the total factor productivity of the former by about 30 through a rise in bank loans to large firms." *Neira (2017)*. The paper, related to resolving insolvency, did not meet the study design criteria. The author calibrates a model of financial intermediation and informational frictions to obtain its results. However, the SLR "excludes simple before-and-after comparisons and simulation and forecast models."

Some references did not make it into the SLR due to other parameters of the review. It did not include articles written in any language other than English (e.g., Cardenas and Roxo (2009) which was referenced in DB 2013 but published in Spanish). It excluded articles treating cases not covered by the DB indicators, such as those dealing with special tax regimes or incentives or export processing zones (EPZ's). It also did not cover the sub-topic of tax rates (e.g., Djankov et al. (Forthcoming), which relates higher corporate tax rate to lower investment/GDP ratio referenced in DB 2010). That article correlates average tax rates with other economic performance indicators, so it would have been excluded on methodological grounds, since its finding was not based on an actual reform or intervention.

Indeed, many of the articles cited were excluded by the SLR on methodological grounds because they showed general associations or correlations between two variables but did not assess the outcome of a specific reform or reform intervention (e.g. Freund and Rocha (2011)) or failed to establish a causal relationship between two associated variables (Ciccone and Papaioannou (2007)).

[1] Claims found had a total of 51 immediate outcomes (11 of them had more than one immediate outcome).

[2] Claims found had a total of 96 intermediary outcomes (23 of them had more than one intermediary outcome).

[3] The SLR was developed by the consultant Paul Fenton Villar.

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