

4

Regulatory Risk and FDI

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Key Findings

- **This report presents a new global database on the content of legal instruments and a quantitative measure of regulatory risk, focused on transparency, investment protection, and recourse.** It evaluates (a) transparency and predictability in the content as well as in the process of making laws and regulations that apply to investors; (b) legal protection of investors against arbitrary and nontransparent government interference; and (c) investor access to effective mechanisms for recourse, including grievance management and dispute settlement.
- **Evidence from this database, which analyzes laws affecting investment, shows that investor confidence and FDI flows increase with regulatory transparency, investment protection, and effective recourse.** The constructed measure of regulatory risk is predictive of investment risk premium. Lower regulatory risk is associated with higher investment, in regressions using a global dataset of over 14,000 parent companies investing in nearly 28,000 FDI greenfield and expansion projects across 168 host countries.
- **The effect of regulatory risk on FDI is sizable and comparable in magnitude to the investment-enhancing effects of trade openness in the same regression models.** In fact, in some of the models, the effect of regulatory risk on FDI exceeds that of trade openness, showing that a 1 point reduction in regulatory risk increases the likelihood of an investor entering or expanding in a host country by 0.5–2 percentage points. In contrast, a 1 percentage point increase in the host country's trade-GDP ratio is associated with a 0.3–0.6 percentage point increase in an investor's likelihood to enter or expand.
- **Business survey results confirm the importance of transparent, predictable regulatory environments to investors.** Investors rank countries' legal and regulatory environments as one of the top three factors shaping investment decisions, along with political and macroeconomic stability. Exposure to regulatory risks in host countries triggers existing investors to consider withdrawing investments or canceling planned investment. Moreover, results of the 2019 Global Investment Competitiveness (GIC) Survey show that complex administrative procedures are a further obstacle for nearly two-thirds of investors.
- **To enhance investor confidence and reduce regulatory risk, governments need to remain committed to creating open and predictable environments for FDI.** Given that sources of policy uncertainty that erode investor confidence are both international and domestic, solutions at both levels are needed. Governments can reduce risks for investors by improving transparency and predictability in policy making and implementation, reducing room for bureaucratic discretion, aligning domestic rules with international legal frameworks, and facilitating access to a wide range of dispute settlement mechanisms, including mechanisms to prevent disputes by early detection and resolution of investor grievances.

Introduction

Investors in a country rely on its legal and regulatory framework to recognize their property rights and enforce those rights in a predictable and efficient manner. Economic theory suggests that when investors incur fixed and irreversible setup costs, uncertainty about the local conditions—especially policy uncertainty—will have a dampening effect that reduces investment response to new investment opportunities (Bernanke 1983; Bloom 2009; Dixit 1989).

Among studies that look at developed countries, Baker, Bloom, and Davis (2016) construct a news-based index of United States economic policy uncertainty and document that the most frequent references to perceived policy uncertainty are related to macroeconomic and regulatory policy. Their empirical analysis indicates that aggregate investment and output decline as uncertainty in the United States surges. Among the studies that specifically look at developing countries, Alfaro, Kalemli-Ozcan, and Volosovych (2008) find that low institutional quality, a source of uncertainty, is a major deterrent for foreign capital flows into low-income countries. A similar effect has been documented for components of institutional quality including corruption (Wei 2000); government transparency (Gelos and Wei 2005); predictability of laws, regulations, and policies (Daude and Stein 2007); and property rights protection (Papaioannou 2009).

With the global rise in protectionism in response to nationalist sentiments and economic security considerations, policy uncertainty has once again become a key concern for investors. Cross-country evidence documents the highest share of newly introduced restrictive measures against foreign direct investment (FDI) in high-income countries in the past two years (UNCTAD 2019d). Further uncertainty over the development of the international policy frameworks for trade and investment is likely to erode investor confidence. The Global Investment

Competitiveness (GIC) Surveys in 2017 (World Bank 2018) and 2019 (see chapter 1) suggest that two-thirds of investors consider policy uncertainty as “important” or “critically important” to their investment decisions. Further, they confirm that political stability and a country’s legal and regulatory framework are the two most important factors for firms’ decision to invest in developing countries. As FDI to developing countries has been slowing, competition between developing countries for investments has only intensified.

A Regulatory Framework to Reduce Risk and Boost Investor Confidence

Even though the shift toward more protectionist policies has so far concentrated in large economies, it is vital for all governments to improve the regulatory framework to reduce risk and help restore investor confidence for several reasons. First, country risk is difficult to manage from the firm standpoint. In a survey of chief financial officers across the globe, only 15 percent of respondents state that they use political risk insurance,¹ and nearly half avoid investing in a risky country altogether (Giambona, Graham, and Harvey 2017).

Second, the risk profile in each country will influence the types of firms that enter its markets because multinational enterprises (MNEs) vary systematically in their vulnerability to and ability to manage different risks. A joint survey by the Multilateral Insurance Guarantee Agency and the Economist Intelligence Unit (MIGA 2013) finds that firms that outperformed their competitors paid significantly more attention to assessing and taking measures to manage political risk. Better-performing companies, with better capabilities to assess political risk, also experienced fewer cases of expropriation, default of government payments, cancellation of import/export licenses, or restrictions on currency transfer than other firms. More recently, using a new measure of firm-level political risk, Hassan et al. (2019) find that a

large share of the variation in political risk appears to play out at the firm level and is significantly associated with investment and hiring decisions. Moreover, they find that dispersion in firm-level risk often increases with aggregate risk level. This result suggests that reducing country-level risk can improve macroeconomic outcomes through an additional channel—by lowering the distortion of resource allocation across firms as they respond to varying levels of risk.

Finally, a country's attractiveness for FDI can suffer in the long term from a bad track record of government conduct. From a signaling perspective, it is important to reduce not only actual risk but also perceived levels of risk.

A New Regulatory Risk Measure

An important response by countries to the increasing policy uncertainty and associated risks is to create supportive, predictable legal and regulatory regimes to de-risk investments. The question is: How is the role of government action reflected in country risk ratings? Relating government actions to the measurement of risks is key to informing policy makers. Attracting FDI requires improving investors' perception about uncertainty in the economy, which in turn requires an effective signal and government actions to boost confidence in its overall policy. Yet country risk ratings often include a wide range of measures, from quantitative macroeconomic indicators to qualitative expert perception of political and investment risk. These qualitative measures are often beyond the influence of or have no direct relationships with government actions.

To fill in this gap, this study develops a quantitative measure of regulatory risk—a subset of political risk—that is linked directly to specific legal and regulatory provisions. Regulatory risk, as defined here, is related to select features of countries' regulatory framework that can reduce risks for investors and limit the potential for unexpected losses due

to arbitrary government conduct. Specifically, the new regulatory risk measure examines (a) whether there is transparency in both the content and process of making laws and regulations that apply to investors; (b) the extent of legal protection provided to investors against arbitrary, unpredictable, and nontransparent government interference; and (c) whether investors have access to effective mechanisms for recourse. The regulatory risk measure developed in this study, therefore, serves as a tool to help countries identify specific areas for further improvement.

This study draws on existing indicators and collects new data, including on the content of legal instruments, that cover several regulatory areas: investment laws and treaties, public procurement, property registration, and other cross-cutting regulatory governance measures. Importantly, and in contrast to other risk ratings, the constructed measure of regulatory risk does not rely on inputs based on perception.

The underlying data are organized into three dimensions: transparency, protection, and recourse. For each of these dimensions, two aggregate scores are calculated from individual data points using a simple average and a weighted average, where weights are derived from a principal component analysis (PCA). Because of limited data overlap, two different sets of the overall regulatory risk measure are developed: (a) a panel version including data between 2014 and 2017, and (b) a cross-sectional version that includes richer data but is available only for 2017.

This study finds that these constructed measures carry meaningful signals of risk for investors. The measures show that countries differ substantially in regulatory risk. While many countries' risk levels have stayed relatively stable, some have experienced significant changes in their risk levels over time. Countries with higher regulatory risk in this framework tend to have a higher expropriation risk premium (that is, higher prices to ensure against expropriation risk) and tend to be considered as riskier in other ratings such

as the International Country Risk Guide's (ICRG) investment risk profile indicators.

Notably, higher regulatory risk appears to be associated with a more restrictive FDI regulatory framework. Although restrictiveness per se does not necessarily constitute risks for investors, it can increase uncertainty where rules are imprecise or unclear, leaving room for discretion in implementation. This result lends empirical support to the concern about growing protectionism and further highlights the need for countries to manage their regulatory frameworks to restore investor confidence.

How Regulatory Risk Affects FDI

Importantly, regulatory risk matters for investments. This study finds that lower risk is associated with higher FDI inflows. Consistent with this result, estimations from a model of investor location choices suggests that regulatory risk can deter the decisions of MNEs to enter or expand in a host country. This effect is of meaningful magnitude: if the median country improves its performance to the level of a top 25th percentile performer, investors will be 5.5–22 percentage points more likely to locate in the country. To put this result in further perspective, in the same model, the effect of the regulatory risk measure on investment decision making is comparable in magnitude to trade openness: a 1 standard deviation increase in trade openness is associated with a 28 percentage point increase in the likelihood of investor entry, on average. In comparison, a 1 standard deviation decrease in regulatory risk is associated with a 9 percentage point increase in likelihood of investor entry.

To summarize, these results suggest that the legal provisions and other regulatory features selected and scored in this study can provide a meaningful framework for government actions and reforms to reduce regulatory risk. Country case studies suggest that the regulatory risk measure can capture

significant changes in line with changing government policy despite the limited number of regulatory areas that can be covered because of the lack of cross-country data. Across countries, performance on the three dimensions of regulatory risk measured—transparency, protection, and recourse—is often correlated. Yet statistically, they all appear to have some predictive power concerning investor behavior, suggesting that it is important for countries to pay attention to all three aspects in their regulatory framework. The constructed risk measure and the underlying data can provide a starting point to help guide further research, diagnostics, and more specific policy recommendations to reduce risk for investors.

Analytical Framework

Measuring risk and uncertainty is inherently challenging. Research has often relied on some measures of volatility or dispersion as proxies of uncertainty, which might or might not be tightly linked to true underlying economic uncertainty (Jurado, Ludvigson, and Ng 2015). A growing literature attempts to quantify policy uncertainty and political risk based on the frequency that “keywords” related to “risk” or “uncertainty” appear in news publications or corporate disclosures (Baker, Bloom, and Davis 2016; Hassan et al. 2019). These proxies are useful to track the movements of risk and to study their consequences on market participants. However, they are not intended to provide a direct link to specific government actions that cause such movements in risk. In addition, because of the nature of the data and textual analysis required, these proxies are not easily expanded or comparable across countries.

In contrast, the risk measure in this study aims to capture risk as implied by policy and regulatory choices. It bears some similarities to other popular risk ratings, such as the ICRG's political risk rating; the Economist

Intelligence Unit's (EIU) legal and regulatory policy risk rating; and the country risk classification of the Organisation of Economic Co-operation and Development (OECD), which allows for a cross-country risk comparison (table 4.1). These risk ratings typically include a mix of quantitative macroeconomic indicators, business environment indicators, and qualitative expert assessment based on political events. The model to arrive at the final rating is often proprietary. In summary, they assess risk as follows:

- *The EIU legal and regulatory policy risk rating* is a component of its operational risk model, ranging from 0 (low risk) to 100 (high risk). It is the (rescaled) simple average of various subindicators, which are scored on a 0–4 scale by the EIU's analysts working in regional teams using open and closed sources (EIU 2017).
- *The ICRG political risk rating* is a composite risk rating of 12 components, including government stability, investment profile, and conflict.² It ranges from 0 (low confidence, high risk) to 100 (high confidence, low risk). The scores are determined by political risk experts and editorial staff.
- *The OECD country risk classification* forms the basis for minimum risk premium categories for many official export credit agencies. It is a measure of transfer and convertibility risk and cases of force majeure, and it relies on both quantitative inputs and expert opinions.³

Other characteristics of these risk ratings are summarized in table 4.1. Among other factors, these commercially available risk ratings often inform investors' opinions on countries' investment attractiveness. Yet despite the importance of risk rating for investment decisions, the methodology often

TABLE 4.1 Several Popular Cross-Country Risk Ratings Do Not Clearly Link Risk Levels to Specific Government Actions and Rely on Perception-Based Inputs

Characteristic	ICRG political risk rating	EIU legal and regulatory policy risk rating	OECD country risk classification
Objective	To assess the political stability of the country	To assess the risk that the legal system will fail to safeguard investment	To provide country risk classification, encompassing transfer and convertibility risk and cases of force majeure (such as war, expropriation, revolution, civil disturbance, floods, and earthquakes)
Type of analysis	Subjective (perception-based) analysis only	Subjective (perception-based) analysis only	Objective data and subjective (perception-based) analysis
Underlying data	Twelve components, including government stability, investment profile, corruption, and external and internal conflict Scored on a scale from 4 (very low risk) to 1 (very high risk) by political risk experts and editorial staff	Ten questions, including "How vulnerable is the legal process to interference or distortion to serve particular interests?" and "What is the risk that business financial statements are inconsistent or misleading?" Answered on a scale from 0 (very little risk) to 4 (very high risk) by expert opinion of analysts in the regions	<i>Objective data:</i> macroeconomic indicators on the country's financial and economic situation <i>Subjective analysis:</i> qualitative assessment to integrate information not fully taken into account by quantitative data Answered by country risk experts from export credit agencies
Aggregation methodology	Simple average of individual components	Simple average of individual components	Model-based: two-step procedure, including a quantitative model with possible adjustments through qualitative assessment

Source: World Bank.

Note: EIU = Economist Intelligence Unit; ICRG = International Country Risk Guide; OECD = Organisation for Economic Co-operation and Development.

does not clearly link the level of risk to specific government actions.

This study's measure of regulatory risk contrasts with other risk ratings by measuring regulatory risk without relying on inputs based on perception. It is also narrower in scope and excludes other sources of risks, such as macroeconomic uncertainty or political violence. It captures sources of regulatory risk solely through quantitative indicators that are linked directly to specific, actionable legal and regulatory provisions. It is therefore intended to help identify concrete weaknesses, give specific policy recommendations, and trace real changes in the regulatory environment.

Capturing Sources of Regulatory Risk

Regulatory risk, in this study's definition, is related to selected features of the legal and regulatory framework that might affect the expected profitability of a business. In the same vein that political risk reflects the variability in economic returns that stems from uncertainty about political events, the concept here is closely related to uncertainty about laws and regulations.⁴ Given that sources of regulatory risk can be extremely heterogeneous and new risks will continue to emerge, the measure in this study does not include specific regulatory changes. Rather, the analysis aims to capture features of countries' regulatory frameworks that can limit the potential for unexpected losses due to arbitrary government conduct that generates uncertainty for investors.

Three Questions to Assess Risk

The study uses three analytical questions to assess how the legal and regulatory framework affects risk for investors:

- Is there *transparency* regarding the content as well as the process of making laws and regulations that apply to investors?

- What is the extent of legal *protection* provided to investors against arbitrary and unpredictable, or nontransparent, government actions?
- Do investors have access to effective mechanisms for *recourse* in case of grievances or disputes?

These questions allow for a systematic way to think about dimensions of the regulatory framework that countries can influence to improve perceived and actual levels of risk. They also serve as a guide to organize the data sources used (box 4.1).

By improving *transparency* and reducing room for discretionary behavior of regulators, countries help reduce risks for investors as entry and operating costs become more predictable *ex ante*. *De jure protection* of rights (that is, protection based on legal provisions) provides guarantees for investors against unexpected interferences. An effective *recourse* mechanism can help minimize the *ex post* costs of disputes for investors and provide “teeth” for the protection guarantees by making it costlier for governments to violate them. In other words, it provides a way to sanction deviating behavior and determine the credibility of legal promises.

Accordingly, even though the analysis measures regulatory risk through these three dimensions, their effectiveness is dependent on one another. In fact, as will be shown later, countries that perform better on one dimension are often better performers in other dimensions of the regulatory risk measure as well.

The analysis combines existing indicators and collects new data sources, including the content of legal instruments, to measure countries' regulatory risk, guided by the three analytical questions. To ensure cross-country availability, the data focus on a few regulatory areas that apply to investors, both foreign and domestic, or in some cases, only one of them (for example, international investment agreements [IIAs]). The areas covered are investment (specifically, investment laws and treaties); public procurement;

BOX 4.1**Data Sources for the Regulatory Risk Measure**

This study's measure of regulatory risk relies on both primary and secondary data that cover cross-cutting regulatory governance as well as specific regulatory areas: investment, public procurement, and property registration. In annex 4A, table 4A.1 lists the full set of seven data sources, the scale of the raw values for each variable, and which of the three pillars they belong to.

Because the data sources differ in their geographical and time coverage, the constructed risk measure includes two different versions. The "panel version" of regulatory risk data maximizes comparability over time (using 2014–17 data), covering up to 167 countries. Its data sources include the following:

- A database of 2,103 international investment agreements (IIAs)^a includes those that were in force between 2014 and 2017, whose content is mapped by the United Nations Conference on Trade and Development (UNCTAD).^b The IIA provisions are scored using principles similar to those applied to the investment laws database (used in the "cross-sectional" version described below). The IIAs are publicly available from UNCTAD's online Investment Policy Hub.
- A panel database was compiled of members of the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (the New York Convention) and Convention on the Settlement of Investment Disputes between States and Nationals of Other States (the ICSID Convention) for the universe of all countries.
- World Bank *Doing Business* subindicators are used that were available from 2014 onward and thus define the time coverage for the panel index.

The "cross-sectional" version of the regulatory risk data maximizes the number of underlying variables but only for a single year (2017 data only), covering 86 countries. In addition to the information used in the panel version, its data sources include the following:

- A new investment laws database, compiled for this study, codifies the content of publicly available investment laws of 102 countries.^c A framework of 162 questions was developed to assess the content of the laws and create a database that includes a series of 0–1 indicators, depending on whether the laws include specific provisions. Only those investment laws that are currently in force are included. Thus, investment law scores are included only in the cross-sectional indicator for 2017 and not in the panel version.
- The World Bank's Benchmarking Public Procurement (BPP) database is used to create a score for public procurement.
- Subindicators from the World Bank's Global Indicators of Regulatory Governance (GIRG) cover virtually all countries (more than 186).

a. The UNCTAD Investment Policy Hub database (<https://investmentpolicy.unctad.org/>) includes bilateral investment treaties (BITs) as well as other treaties with investment provisions.

b. The measure does not include survival clauses that extend the application of a treaty to a certain number of years beyond its termination. Although BITs between members of the European Union (EU) were included in the analysis, they are expected to terminate over the coming months. On January 15, 2019, EU member states endorsed a political declaration to terminate their intra-EU BITs by December 6, 2019. This followed a recent decision by the European Court of Justice (*Achmea v. Slovak Republic*), which ruled that investor-state arbitration provisions in BITs between EU member states are not compatible with EU law.

c. In total, the database includes investment laws for 102 countries (as of this writing) that are publicly available on UNCTAD's Investment Policy Hub or that were received directly from government counterparts.

property registration; and other cross-cutting regulatory governance measures.

An important criterion for including data sources is that they can be linked to specific regulatory provisions that lend themselves to government action. The measure covers select aspects of these distinct regulatory areas that fit into one of the three pillars (transparency and predictability, investment

protection, and recourse). The legal provisions included across all these data sources are "scored" based on how they increase transparency, protection, and access to recourse through a specific set of principles, as shown below.

The dimension of *transparency* includes three elements: (a) systematic publication of and consultation on laws and regulations;

(b) availability of portals and similar mechanisms that enable investors to find information about relevant laws and regulations; and (c) to a more limited extent, the specificity and clarity of legal provisions on the applicable administrative procedures (to increase predictability and reduce chances of abuse of discretion).⁵

The standards of *protection* are selected based on the importance of the protections to investment operations, especially in the context of unpredictable or nontransparent government actions. These include provisions on expropriation, fair and equitable treatment (FET), and transfer of funds.⁶ Further, the focus is on standards that are “absolute” in nature.⁷

For the *recourse* pillar, investors’ access to investor-state dispute settlement (ISDS) is reviewed as well as proxies for overall quality of domestic dispute resolution, including the quality of land dispute resolution and the judicial processes.

Figure 4.1 summarizes the three pillars of the regulatory risk measure and the key principles for evaluating the legal provisions under each pillar. For further details on how these principles translate into specific provisions selected and the rationale for such selection, see the first section of annex 4A.

This analytical framework, including the three pillars and areas of regulations covered,

is rooted in the legal and international political economy literature. It aims to capture characteristics of the overall regulatory environment and instruments such as investment laws and treaties that governments often adopt to limit the risk to outside investors.

Substantively, protection from unpredictable government conduct is generally one of the core purposes of IIAs and investment laws. They present the fundamental principles of investment protection within a country’s investment policy regime. Some evidence suggests that IIAs can work as either a commitment device that protects investors covered by the relevant IIAs or as a signal that countries have laws and policies in place that protect all foreign investment. (For a review of the evidence, see Bonnitcha, Skovgaard Poulsen, and Waibel 2017.) Importantly, IIAs appear to matter more for investments that entail high sunk costs—such as infrastructure (Bauerle Danzman 2016) or fixed capital investments (Kerner and Lawrence 2014)—or that are capital intensive (Colen, Persyn, and Guariso 2016).

Further, it has been argued that it is not the ratification of IIAs per se but the treaty “strength” (including dispute provisions) that is important for FDI inflows. For example, Dixon and Haslam (2016) find a positive association between the strength of protection

FIGURE 4.1 Three Pillars of Regulatory Risk Frame the Analysis

Pillar 1: Transparency	Pillar 2: Protection	Pillar 3: Recourse
<p>Is there <i>transparency</i> regarding the content as well as the process of making laws and regulations that apply to investors?</p>	<p>What is the extent of legal <i>protection</i> provided to investors against arbitrary, unpredictable, or nontransparent government actions?</p>	<p>Do investors have access to effective mechanisms for <i>recourse</i>, in case of grievances or disputes?</p>
<ul style="list-style-type: none"> • Systematic publication of and consultation on laws and regulations • Registries or ICT platforms, and similar mechanisms to allow investors to find information about relevant laws and regulations • Specificity and clarity of legal provisions (to reduce space for discretion) 	<ul style="list-style-type: none"> • Absolute treatment standards • Protection guarantees against direct and indirect appropriation • Provisions on transfers of funds and fair and equitable treatment (FET) 	<ul style="list-style-type: none"> • Investor-state dispute settlement and prevention • Land dispute resolution • Quality of judicial processes

Source: World Bank.

Note: ICT = information and communication technology.

clauses in bilateral investment treaties (BITs) and FDI inflows. Frenkel and Walter (2019) find that stronger international dispute settlement provisions in BITs are associated with positive effects on FDI activity.

Because of various empirical challenges, evidence about the impact of IIAs remains mixed. One common finding, however, is that IIAs act as complements rather than substitutes for local property rights and that countries must have the necessary domestic institutions in place to make these international commitments credible and valuable to investors (Hallward-Driemeier 2003; Tobin and Rose-Ackerman 2011). As such, the framework in this study aims to cover regulatory aspects that apply to foreign investors but also serve as proxies for the overall domestic regulatory environment.

Caveats in the Regulatory Risk Measure

Although these pillars provide a useful framework to guide government actions to reduce regulatory risk, the regulatory risk measure carries some caveats:

- First, it focuses heavily on *de jure* legal provisions. Because of lack of data, the study does not review important implementation aspects that can affect regulatory risk, such as the quality of day-to-day functioning of all regulatory bodies and variations in the interpretation and application of laws and regulations.
- Second, although the measure considers whether there is consultation with stakeholders during the rulemaking process, existing data cannot capture how widely or how well such consultation occurs and the extent to which comments have led to changes in laws and regulations.
- Third, even though regulations often vary by sector, given the limited availability of cross-country information on sectoral regulatory frameworks, the regulatory risk measure does not cover this dimension. Both primary and secondary data

used for this research are available at the economywide level only. Relatedly, the focus is on a few select legal instruments such as IIAs and investment laws—again, driven by limitation of cross-country comparable data.⁸

Finally, an important caveat is that the framework sidesteps the issue of the “right to regulate,” given its varied and unsettled implications. There have been growing concerns around limitations on the sovereign right to regulate and increased vulnerability to investor-state disputes. As a result, states have started including provisions in IIAs to clarify their right to regulate. This is being done in a few ways, such as by defining terms like “indirect expropriation” and “fair and equitable treatment” to limit the scope of interpretation of these terms. In other cases, carve-outs and exceptions are included—for example, to limit the application of provisions on expropriation and transfer of currency for legitimate regulatory measures,⁹ or adjustments are made to secure states’ right to regulate through jurisdictional exclusion of regulatory disputes. For example, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (Article 29.5) allows states to revoke the benefit of ISDS with respect to claims challenging a state’s measures to control tobacco.

Indeed, provisions clarifying the right to regulate give arbitral tribunals and courts the option to fully weigh them against investor protection guarantees, and carve-outs allow for nonapplication of guarantees. Arguably, such provisions enable greater regulatory flexibility and consequently can also generate uncertainty for investors. Yet they also provide predictability regarding the situations where exceptions can apply. Given the variation in how “right to regulate” provisions are drafted, the high subjectivity in their interpretation, and their multidimensional impact on investors and states, these provisions have not been scored for the purpose of this study.

Constructing a Composite Measure of Regulatory Risk

Based on the three pillars in the analytical framework, individual data sources are combined into the three component scores as well as a composite risk score. The process to construct the composite regulatory risk score requires choices regarding how to normalize original data—which often have different measurement units—and how to aggregate the rescaled data. This study’s choices are guided by previous literature on composite indicator methodology (Filmer and Pritchett 2001; Gelman and Stanig 2016; Kaufman, Kraay, and Mastruzzi 2011; OECD 2008), taking into account the following criteria:

- *Comparability over time and across countries:* The index should allow for assessing progress of countries over time and relative to one another.
- *Maximized information content:* The index should consider the correlation structure among different variables.
- *Transparency:* The construction method should be simple enough to allow for an understanding of how individual variables contribute to the composite index.

Because of the varying time and country coverage of the different data sources (as described in box 4.1), the study faces a trade-off between maximizing the information content (number of variables used) and maximizing the size of the cross-section and time dimension. In addition, to allow for the inherent trade-off between maximizing information content and transparency, the study tests for two different aggregation choices to allow for an understanding of how individual variables contribute to the composite score: First, both the component scores and the composite score are calculated as a simple average of the underlying (normalized) variables. Second, the component scores are calculated as a weighted average of individual data sources, where weights are given as the

first components in a PCA (annex 4A, table 4A.2). The second approach has the advantage of considering the correlation structure of the individual variables, but it is less transparent in how they contribute to the overall index.¹⁰

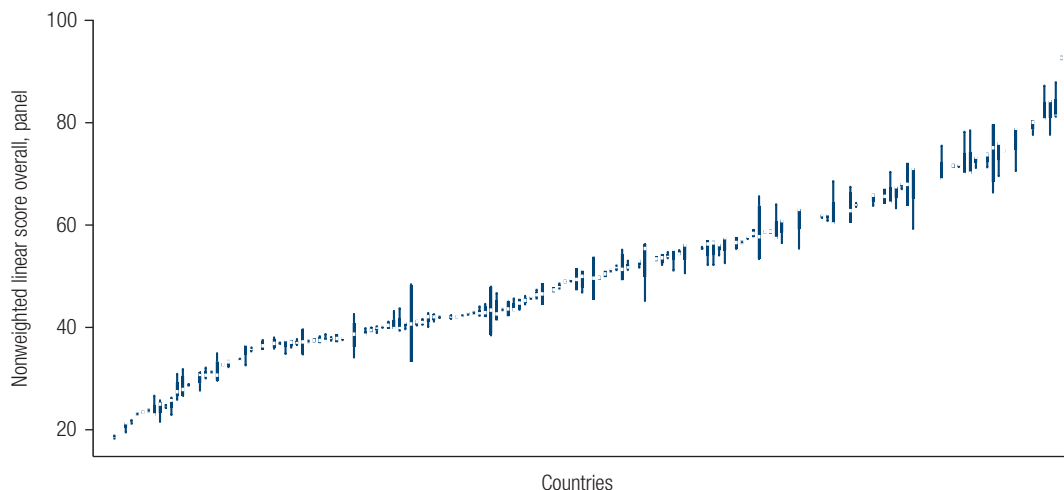
Given these criteria and trade-offs, the analysis ends up with two different sets of the overall regulatory risk measure: the panel version (including the 2014–17 data) and the cross-sectional version (richer data but available for 2017 only). In addition, within each version, the robustness of results is tested with the inclusion (exclusion) of certain variables and two different aggregation methods discussed. One caveat of the methodology is that it does not calculate a range of uncertainty, such as in Kaufmann, Kraay, and Mastruzzi (2011). Uncertainty makes comparison of adjacent points less credible (Høyland, Moene, and Willumsen 2012). For this and other reasons—particularly, limited available cross-country data—caution should be taken in comparing countries that are closer to one another in the constructed risk score. For further methodology details, see Data Normalization and Aggregation in annex 4A. The data for all the subcomponents are available in the online supplementary appendix.¹¹

Characteristics of the Constructed Measure of Regulatory Risk

The results show high correlations of the constructed risk measure across different aggregation methods and inclusions of different data sources (see annex 4A, figure 4A.1). Therefore, for brevity throughout the chapter, unless indicated otherwise, results using the panel version of the composite risk score are reported.

The constructed score suggests that countries differ substantially in the types and extent of regulatory risk, and some have made regulatory changes that significantly affect the level of risk over time.

FIGURE 4.2 Regulatory Risk Levels Vary Significantly across Countries and Change Substantially for Some Countries over Time



Source: World Bank.

Note: Each bar is a boxplot of the regulatory risk measure (panel version) for one country during the sample period (2014–17), covering 167 countries. The bars are ordered by the average of the countries' regulatory risk score (ranging from 0 to 100) during the sample period. The farther a bar is situated to the left (right), the lower (higher) is the country's average regulatory risk. The bigger (smaller) a bar's height, the bigger (smaller) is the country's change in regulatory risk over time. For the full list and descriptions of data sources used to calculate aggregate scores, see annex 4A.

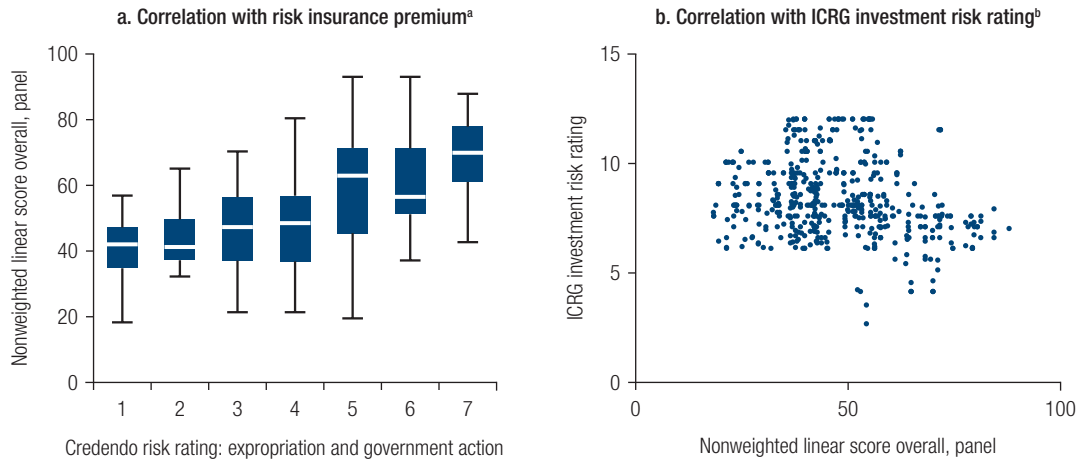
Figure 4.2 plots the distribution of risk by country as well as the range of changes in each country between 2014 and 2017. On average, the risk scores vary between 20 for the lowest risk score and 95 for the highest risk score (out of a 0–100 range). While many countries have fairly small changes over time, some have experienced significant changes, especially those with a higher average risk level.

Importantly, the results show that regulatory risk, as measured in the framework, can explain perception of investment risk. This is reflected in the correlation of regulatory risk with the risk premium and other risk ratings. Figure 4.3, panel a, presents the variations in the constructed regulatory risk across countries, based on the category of “expropriation and government action” risk insurance premium (that is, risk insurance prices) evaluated by Credendo, a major risk insurance group.¹² It shows that although there is some overlap in regulatory risk for countries across different risk premium categories, in general,

for countries with more expensive risk premiums, the median as well as the 25th and 75th percentiles of regulatory risk also tend to be higher. Figure 4.3, panel b, shows the correlations of the regulatory risk measures with the ICRG investment risk rating.¹³ In general, the riskier countries in the framework are also rated as riskier in the ICRG rating.

In addition, higher regulatory risk appears to be associated with a more restrictive FDI regulatory framework. Figure 4.4 shows this result for a subset of 69 countries where statutory restrictions to FDI, such as screening or equity restrictions, are captured by the OECD FDI Restrictiveness Index. Although restrictiveness per se does not necessarily constitute risks for investors, it can increase uncertainty through higher chances for abuse of discretion when regulations are imprecise or unclear. Growing protectionism over the past few years has exacerbated policy and regulatory uncertainty. The results here lend empirical support to this concern and further

FIGURE 4.3 Higher Regulatory Risk Is Associated with Higher Expropriation Risk Insurance Premiums and Investment Risk Ratings



Sources: Panel a: World Bank and Credendo; panel b: World Bank and ICRG.

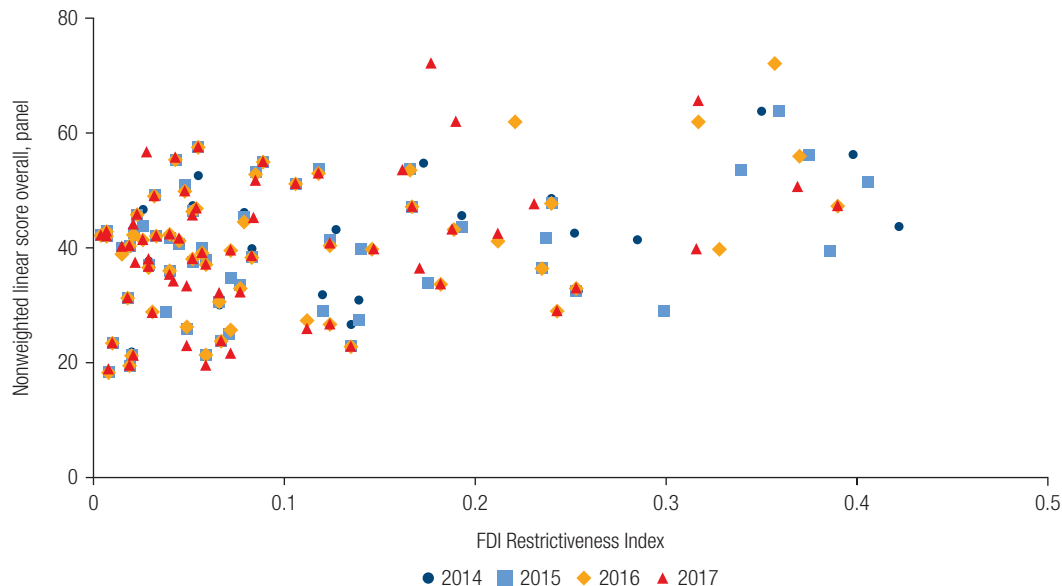
Note: The "nonweighted linear score overall, panel" refers to the "panel version" of the regulatory risk score (0–100), calculated from 2014–17 data, covering 167 countries. For the full list and descriptions of data sources used to calculate aggregate scores, see annex 4A. See additional results on the correlation of the cross-sectional version in annex 4A, figure 4A.4.

a. Figure is a boxplot of regulatory risk score (panel version) over the seven risk premium categories of "expropriation and government action risk."

The country risk rating categories data come from Credendo, a major credit insurance group. The higher (lower) the risk premium, the higher (lower) the risk. The correlation coefficient between Credendo's risk premium rating and regulatory risk is 0.52 (significant at 1% level).

b. Figure is a scatterplot of regulatory risk score (panel version) on the x-axis and International Country Risk Guide (ICRG) investment profile rating on the y-axis. ICRG investment risk is measured on a scale from 1 (low confidence, high risk) to 12 (high confidence, low risk). The correlation coefficient between ICRG investment risk and regulatory risk is -0.24 (significant at 1% level).

FIGURE 4.4 Higher Regulatory Risk Is Associated with More Restrictive FDI Regulations



Sources: World Bank and Organisation for Economic Co-operation and Development (OECD) FDI Regulatory Restrictiveness Index, <https://www.oecd.org/investment/fdiindex.htm>.

Note: Foreign direct investment (FDI) restrictiveness is measured by the OECD FDI Restrictiveness Index, which measures statutory restrictions on FDI in 22 economic sectors across 69 countries, including all OECD and Group of Twenty (G-20) countries. The correlation between the OECD FDI Restrictiveness Index and this study's regulatory risk score is 0.33 (significant at 1% level). The "nonweighted linear score overall, panel" refers to the "panel version" of this study's regulatory risk score (0–100), calculated from 2014–17 data. For the full list and descriptions of data sources used to calculate the panel aggregate scores, see annex 4A.

highlight the need for countries to manage the regulatory framework to restore investor confidence.

In summary, these results suggest that the legal and regulatory provisions selected and scored in the framework carry meaningful signals of risk for investors. With these results in mind, the next section examines whether the regulatory risk measure can predict FDI inflows and other investor decisions.

Regulatory Risk and FDI

At the Country Level, Lower Regulatory Risk Is Associated with Higher FDI

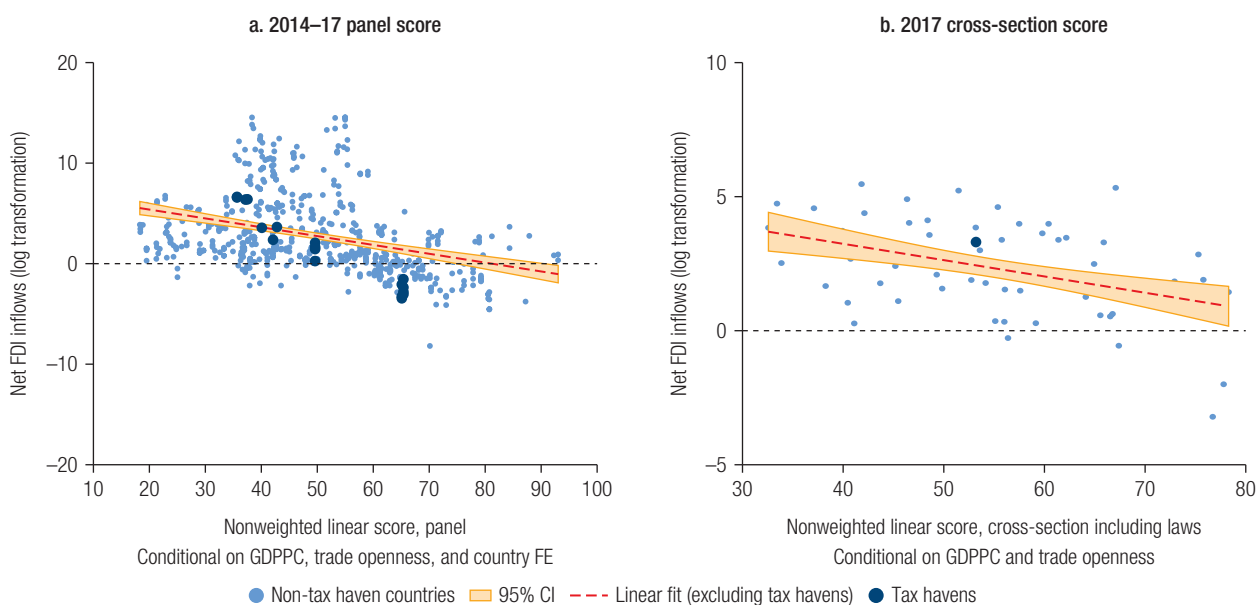
On average, total FDI inflows to a country are negatively correlated with the level of regulatory risk as measured in the framework. Figure 4.5 depicts this relationship, using a log transformation of real net FDI inflows.¹⁴ The model controls for gross domestic product (GDP) per capita, trade

openness, and country fixed effects (where appropriate). This relationship is robust to the choice of different index versions: panel a shows the panel index, while panel b shows the cross-section version.

In addition, results using bilateral FDI data (where the source countries can be identified) hold that FDI inflows decrease as a host country’s regulatory risk increases. Arguably, aggregate FDI inflows mask heterogeneity in the individual composition of a host country’s FDI. By using a newly constructed panel dataset of bilateral FDI inflows, the model is able to consider both home and host countries’ characteristics.¹⁵

In this model, regulatory risk also has a significant and negative impact on bilateral FDI inflows. Moreover, conditional on the destination country’s risk, there appears to be a negative correlation (though statistically not significant) between FDI inflows and the difference in risk levels between the destination and source countries (see annex 4A, table 4A.3). It suggests not only

FIGURE 4.5 FDI Inflows Are Higher in Countries with Lower Regulatory Risk



Source: World Bank calculations, from the World Development Indicators database.
 Note: The scatterplots show the correlation between net FDI inflows and regulatory risk index. Panel a uses a 2014–17 panel score; panel b uses a 2017 cross-section score. CI = confidence interval; FDI = foreign direct investment; FE = fixed effects; GDPPC = GDP per capita.

that the destination country's risk matters but also that investors from a lower-risk country might be affected more disproportionately.

To focus on the interaction between risk and irreversibility of investments, the analysis examines activities of existing investors that are subject to some adjustment costs. These include the total amount of capital invested that is illiquid or employment expansion. Aggregate data from the U.S. Bureau of Economic Analysis on activity of foreign affiliates are used, including expenditure on fixed capital, research and development (R&D) expenditure, and number of employees. For established MNEs, the correlation between regulatory risk and investment and hiring activities is negative. However, the correlation is not statistically significant, conditional on the host country's GDP per capita, trade openness, and country fixed effects—possibly driven by a small sample size. (See the full regression results in annex 4A, table 4A.4.)

Increased Likelihood that MNEs Will Invest in Locations with Lower Regulatory Risk

Investor-level data lend microfoundation support to the negative relationship found between risk and aggregate FDI. The analysis uses a dataset of 14,335 parent companies investing in 27,886 FDI greenfield or expansion projects across 159 host countries between 2014 and 2016. This dataset enables the exercise to test the relationship between a host country's regulatory risk and MNE-level investment size using an investor decision model (box 4.2).

The analysis confirms that regulatory risk deters investor entry and expansion. This result is robust to the inclusion of host country controls. Figure 4.6 depicts the estimated coefficients for the different models tested, showing that higher regulatory risk has a negative impact on the likelihood that foreign investors will enter or expand

BOX 4.2

Examining How Regulatory Risk Affects Investor Location Decisions

Models of determinants of aggregate FDI suffer from many potential biases, driven by the difficulty in accounting for unobservable country characteristics and characteristics of investment types that can drive investment flows. An alternative approach is to study individual investors' location choices, especially in the context where investors' decisions are observed over time. In such a setting, the assumption that location choices are driven by location characteristics tends to be a less restrictive assumption when investor fixed effects (and hence investor heterogeneity) can be accounted for.

To look for more rigorous evidence on the relationship between regulatory risk and foreign direct investment (FDI), this chapter takes advantage of data from fDi Markets, a *Financial Times* dataset of greenfield FDI transactions that allows identification of the parent company and sector information not typically available in aggregate FDI inflows data.^a The fDi Markets transaction data are transformed into an investor-level dataset, and a conditional

logit model is estimated to investigate the determinants of multinational enterprises' (MNEs) location choices. A random utility model is assumed (McFadden 1974) whereby an investor chooses one location among other alternatives. It can be thought of as a profit-maximizing problem in which investors enter the country with the highest expected profit, where expected profits depend on regulatory risk and other country characteristics, as follows:

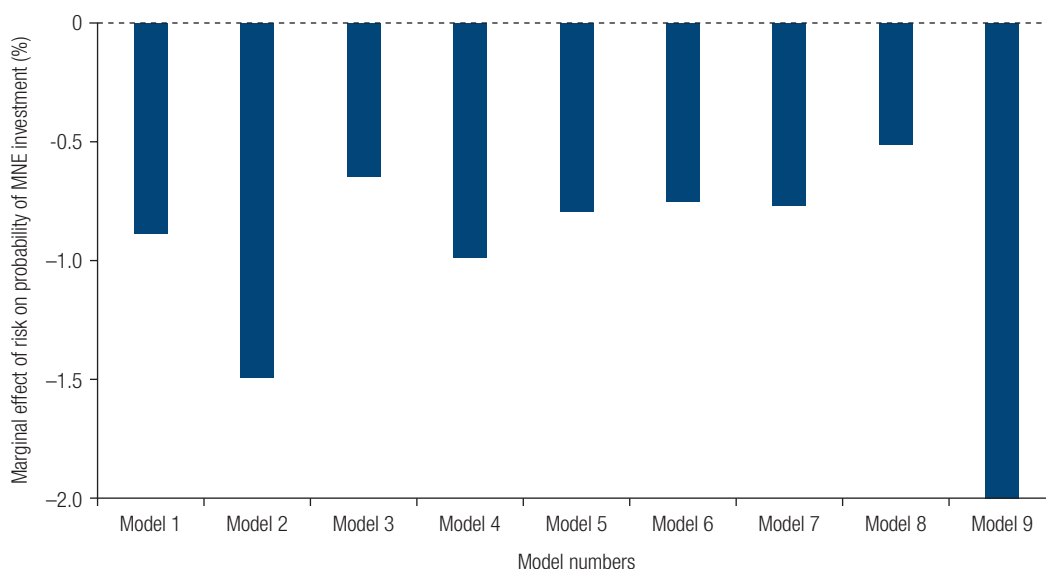
$$Pr^o(invest_{ijt}) = \Phi(\beta_0 + \beta_1 risk_{jt} + X'_{jt}\gamma + \delta_i + \varepsilon_{ijt}), \quad (B4.2.1)$$

where $Pr^o(invest_{ijt})$ represents the probability of firm i investing in country j ; $\Phi()$ is the logistic cumulative distribution function; $risk_{jt}$ denotes regulatory risk; x'_{jt} is a vector of other host-country characteristics; δ_i denotes firm fixed effects; and the error term ε_{ijt} captures residuals.

Note: Previous studies of the location choices of multinationals using this approach include Chen and Moore (2010) and Joyez (2015).

a. For more on the fDi Markets dataset, see <https://www.fdimarkets.com/>.

FIGURE 4.6 Higher Regulatory Risk Has a Negative Impact on Investors' Likelihood of Entering or Expanding in a Host Country



Sources: World Bank, using data from fDi Markets, a *Financial Times* dataset (<https://www.fdimarkets.com/>).

Note: The figure presents coefficient estimates on regulatory risk from a discrete location choice model using fDi Markets data. All models control for $\ln(\text{population})$, $\ln(\text{GDP per capita})$, GDP growth (annual %), and trade openness. In addition, models 2–9 include one of the following variables in this order: lower secondary completion rate; bank deposits (% GDP); top combined corporate income tax rate (%); World Governance Indicators (WGI) regulatory quality; Polity IV democracy measure; volatility of GDP per capita growth; exchange rate volatility; and Fitch Sovereign Rating (categorical variables). GDP = gross domestic product; MNE = multinational enterprise. For more detailed model explanations, see box 4.2. For all coefficients, by model, see annex 4A, table 4A.5.

in a host country. All specifications control for economic fundamentals. Furthermore, different measures of a country's institutional environment or other indicators of macro or sovereign risks are included. All results are in the same direction and are statistically significant at the 1 percent level.

The effect of regulatory risk—or, conceived more positively, certainty—on MNEs' investment is of meaningful magnitude. The results across different specifications suggest that, on average, a 1 percent reduction in regulatory risk increases the likelihood of an investor entering or expanding in a host country by 0.5–2 percentage points. In other words, all else equal, if the median country improves its performance (reduces regulatory risk) to the

level of the top 25th percentile performer, investors will be 5.5–22 percentage points more likely to locate in the country.

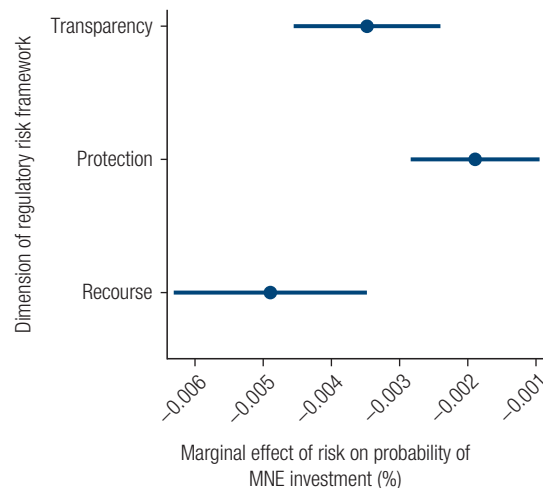
To put this result in further perspective, in the same model, the explanatory power of the regulatory risk score on FDI is comparable in magnitude to trade openness. When controlling for both variables at the same time, a 1 percent increase in the host country's trade-GDP ratio is associated with a 0.3–0.6 percentage point increase in an investor's likelihood to enter or expand.¹⁶ That is, a 1 standard deviation increase in trade openness is associated with a 28 percentage point increase in likelihood of investor entry, on average. In comparison, a 1 standard deviation decrease in regulatory risk is associated with a 9 percentage point increase in likelihood of investor entry.

How Elements of the Regulatory Framework Matter for Investment

The three dimensions of the regulatory risk measure—transparency, protection, and recourse—are not independent of one another. Countries with better protection also tend to have higher measured quality of recourse mechanisms and regulatory transparency (see annex 4A, figure 4A.3, panel a). Nevertheless, most countries still have markedly different performances across the three pillars (see annex 4A, figure 4A.3, panel b). That is, they tend to perform substantially better in one pillar than in others, implying the potential to improve the overall level of risk by focusing on certain pillars. Consequently, the analysis also finds that each of the three risk pillars still has a positive effect on investor entry decision, conditional on other dimensions of the regulatory framework (figure 4.7).

Finally, the econometric evidence that regulatory risk matters for investor decisions is consistent with investor perception as documented in the 2019 GIC Survey: First, investors, especially large investors, consider a host country's legal and regulatory environment to be one of the most important factors shaping their parent firm's decision to invest in the country. Second, exposure to political risk in host countries triggers existing investors to consider withdrawing investments or canceling planned investment. Third, for investors that experienced an adverse political risk event, both the quality of rules and their implementation appear to be a major obstacle in such cases. (See box 4.3 for more detailed survey results and chapter 1 of the report for the survey's methodology and sample.) These findings are also consistent with other surveys, which consistently identify political risk and regulatory uncertainty as major concerns for foreign businesses.¹⁷

FIGURE 4.7 Different Dimensions of the Regulatory Framework (Transparency, Protection, and Recourse) Matter for Investment



Sources: World Bank, using data from fDi Markets, a *Financial Times* dataset (<https://www.fdimarkets.com/>).

Note: The figure presents results from a discrete location choice model using fDi Markets data, controlling for $\ln(\text{population})$, $\ln(\text{GDP per capita})$, GDP growth (annual %), trade openness, WGI (World Governance Index) regulatory quality, and volatility of GDP per capita growth. The plot shows coefficient estimates and 95% confidence intervals of the three components of regulatory risk. GDP = gross domestic product; MNE = multinational enterprise.

BOX 4.3

Importance of Political Risk and a Stable Regulatory Framework for Investment Decisions: Confirmation from the 2019 GIC Survey

Legal and Regulatory Environment

Besides political and macroeconomic stability, investors consider the legal and regulatory environment to be one of the most important factors shaping their investment entry decisions. In the 2019 Global Investment Competitiveness (GIC) Survey, 42 percent of respondents consider it a “critically important” factor in their investment decisions (figure B4.3.1).

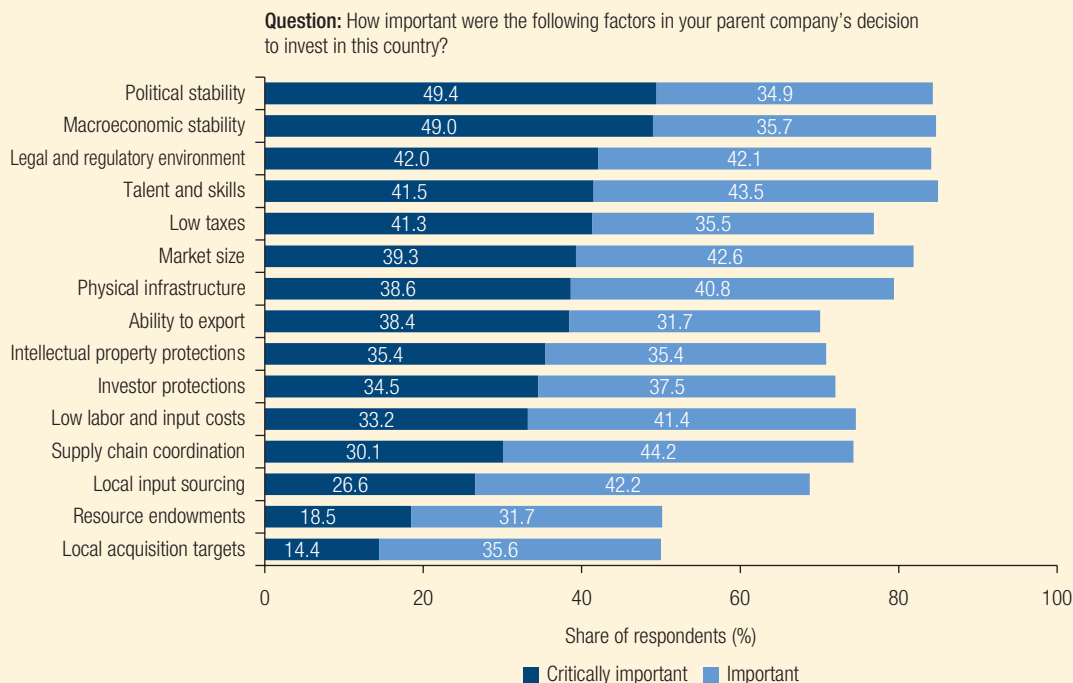
Further, countries’ legal and regulatory environments are especially important for larger firms. On average, large firms (those with more than 250 employees) rank the legal and regulatory environment as their top investment consideration, while small and medium enterprises (SMEs) consider it to be only the fourth most important consideration. (Ranking of

importance is based on the percentage of investors who rate a factor as “important” or “critically important.”) These differences may be driven by the presence of restrictions that are applicable only to larger firms and the greater regulatory scrutiny that large companies tend to experience.

Political Risk

Most (two-thirds) of existing investors would consider withdrawing investments or canceling planned investment in the face of political risk exposure in host countries (figure B4.3.2). This result is in line with the finding that more than 70 percent of existing investors consider investment protection guarantees (against political risk) to be “important” or “critically important” for investment decisions (figure B4.3.1).

FIGURE B4.3.1 Legal and Regulatory Environment Is the Third Most-Cited Investment Decision Factor



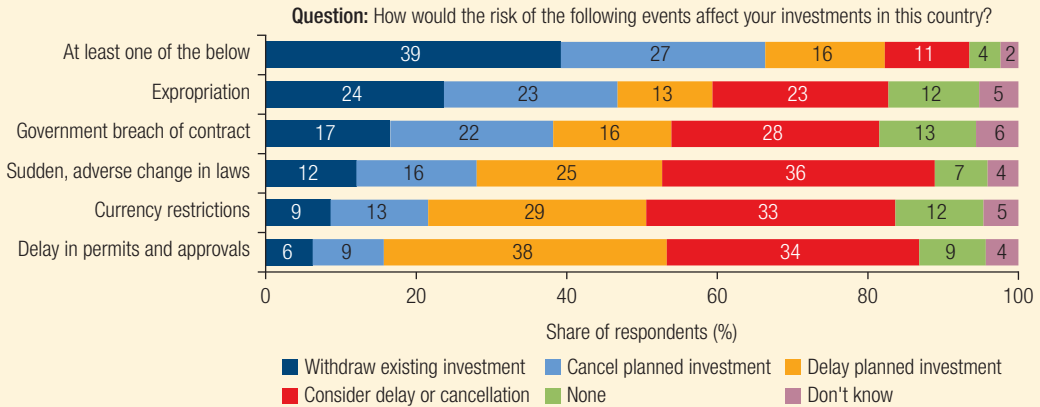
Source: Computation based on 2019 GIC Survey.
 Note: Affiliates of multinational enterprises were surveyed in 10 middle-income countries: Brazil, China, India, Indonesia, Malaysia, Mexico, Nigeria, Thailand, Turkey, and Vietnam. “Political stability” is ranked ahead of “macroeconomic stability” because 49.4 percent of respondents cited it as “critically important,” versus 49.0 percent for macroeconomic stability.

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BOX 4.3

Importance of Political Risk and a Stable Regulatory Framework for Investment Decisions: Confirmation from the 2019 GIC Survey (continued)

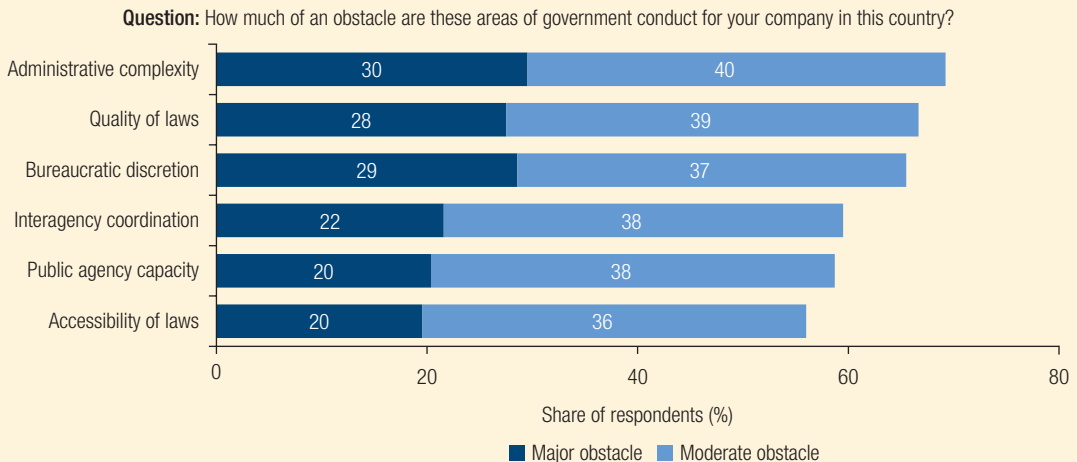
FIGURE B4.3.2 Expropriation and Breach of Contract Are the Most Likely to Affect Investments Adversely



Source: Calculations based on the 2019 GIC Survey.

Note: Affiliates of multinational enterprises were surveyed in 10 middle-income countries: Brazil, China, India, Indonesia, Malaysia, Mexico, Nigeria, Thailand, Turkey, and Vietnam.

FIGURE B4.3.3 Investors Perceive the Quality of Rules and Their Implementation as Obstacles



Source: Calculations based on the 2019 GIC Survey.

Note: Affiliates of multinational enterprises were surveyed in 10 middle-income countries: Brazil, China, India, Indonesia, Malaysia, Mexico, Nigeria, Thailand, Turkey, and Vietnam.

BOX 4.3**Importance of Political Risk and a Stable Regulatory Framework for Investment Decisions: Confirmation from the 2019 GIC Survey (continued)**

Risks of expropriation and government breach of contract evoke particularly negative investment reactions. Experiencing such events would cause about 50 percent and 40 percent of investors, respectively, to consider withdrawing existing investments or canceling planned ones. Sudden legal changes, currency restrictions, and delays in obtaining permits and approvals elicit less severe reactions. Such risks are more likely to cause investors to delay investments rather than to cancel or withdraw investments completely.

Quality of Rules and Their Implementation

Finally, the quality of rules and their implementation contributes to investors' exposure to political risk. Among respondents who reported having experienced exposure to political risk, the top three obstacles related to government conduct are de jure factors (the complexity of administrative procedures, quality of laws) as well as discretion on the part of bureaucrats who apply these laws or procedures in practice (figure B4.3.3).

Country Case Studies

The primary differentiating feature of this study's constructed regulatory risk measure is the link to specific actionable policy and regulatory levers. As a result, low performance on the measure—under any of the three pillars—can in most cases be influenced by taking specific policy actions.

To illustrate the policy and operational implications of the regulatory risk measure, the discussion that follows presents cases of countries that (a) significantly improved over the sample period (Senegal); (b) significantly declined (Indonesia); and (c) maintained consistently high performance (Kazakhstan).

Substantial Improvement: Senegal

Senegal's score on the regulatory risk measure improved from 2014 to 2017, driven mainly by improvements on the transparency pillar. On the World Bank's *Doing Business* Communication of Tariffs and Tariff Changes Index (within the "Getting Electricity" topic), Senegal substantially outperformed other Sub-Saharan African countries.¹⁸ It made registering property easier in 2016 by increasing the transparency of

its land registry and cadaster and thus also improved on the *Doing Business* Transparency of Information Index (within the "Registering Property" topic). Finally, Senegal's bilateral investment treaty (BIT) with Canada, with strong transparency provisions, came into force in 2016.

The improvements documented in the data for Senegal reflect part of a broader package of reforms initiated under the country's Plan for an Emerging Senegal, adopted in 2014 (Republic of Senegal 2014). The plan targets making Senegal an emerging market by 2035, attaining GDP growth of 7–8 percent, creating 600,000 formal jobs, and reaching GDP per capita of US\$1,500. It is based on three pillars:

- *Structural transformation of the economy* by consolidating current engines of growth and developing new sectors with a strong capacity to export and attract investment to create wealth, jobs, and social inclusion
- *Promoting human capital* by improving the well-being of the population
- *Enabling good governance* in order to strengthen security, stability, protection of rights and liberties, and consolidation of the rule of law to create better conditions for social peace.

This period of reforms coincides with an increase in investment inflows. FDI inflows to Senegal increased from US\$409 million in 2015 to US\$587 million in 2017 (UNCTAD 2019b). Six countries steadily increased investment during the period: China, the Republic of Korea, Luxembourg, Morocco, Poland, and Turkey.¹⁹

Consistent Decline: Indonesia

Indonesia's score on all the three pillars fell substantially from 2014 to 2017, reflecting an increase in risk levels. One main driver was the termination of its IIAs.²⁰ The content of IIAs is covered under all three pillars of the regulatory risk measure, and therefore their termination affects performance on all. The number of IIAs in force fell from 41 (mapped) in 2014 to 21 in 2018. All but one were unilaterally denounced. IIA scores for Indonesia across all three pillars declined consistently, with the largest decline in 2016—also the year when most of the unilateral terminations took place. FDI declined from US\$16.641 billion in 2015 to US\$3.921 billion in 2016 (UNCTAD 2019a).

Indonesia's decision to terminate its BITs came at a time when other countries also started expressing concerns about IIAs (including BITs) and the ISDS regime. Indeed, there are legitimate concerns around expansive or inconsistent interpretations of treaty provisions; the qualifications and independence of arbitrators; treaty shopping; lack of transparency; and high costs of dispute settlement. As the broader IIA regime undergoes reform, the challenge for developing countries is in making adequate adjustments to address shortcomings yet ensuring that IIAs remain an effective risk mitigation tool for the country.

More specifically, most of Indonesia's BITs were signed in the 1990s, when the realities of the country were very different from today:²¹ it was not a Group of Twenty (G-20) member, was relatively unstable, and was not a capital exporter. The global economic landscape and political economy has changed substantially since then.

Around the time of the terminations, Indonesia also became a respondent to a controversial, high-stakes investment arbitration case. Churchill Mining PLC (a British company) and Planet Mining Pty Ltd. (an Australian company) filed arbitration cases against Indonesia, claiming over US\$1 billion in damages.²² In February 2014, the two cases were consolidated, and the tribunal found that it had jurisdiction to decide on the case, negating Indonesia's arguments opposing jurisdiction.²³ The case was ultimately decided in favor of Indonesia, and the claimants were ordered to pay costs and arbitration fees of nearly US\$9.5 million.²⁴ Nonetheless, from the experience of the Churchill case, the government perhaps also realized the value of having clear treaty language to safeguard against claims based on conduct that was unlawful or contrary to international public policy.²⁵

Indonesia's performance on the regulatory risk measure aligns with investment climate assessments indicating that regulatory uncertainty and lack of transparency are key factors that impede operations of investors (U.S. Department of State 2017, 2019b). Investors report that draft laws and regulations are selectively published for public comment,²⁶ regulations are often vague and leave much room for interpretation, and drafts can take years to become law. Indonesia's significantly decentralized framework on lawmaking creates further uncertainties.²⁷

Indeed, political risk and regulatory uncertainty remain critical issues for investors. In the 2019 GIC Survey, more than 90 percent of respondents in Indonesia consider investment protection against political risk to be "important" or "critically important." To address the issue of regulatory uncertainty, Indonesia has made specific efforts since 2017. For example, Presidential Instruction No. 7/2017 was issued, requiring ministries to coordinate before issuing regulations, to conduct regulatory impact assessment, and to provide opportunity for public consultation. Further, Presidential Regulation No. 95/2018 on e-government was issued, requiring that all levels of government (central, provincial,

and municipal) implement online governance tools to improve overall transparency. These initiatives happened after the period covered in the regulatory risk measure.

As Indonesia progresses with its IIA reform efforts, key aspects that it may consider are (a) clarifying the definitions of investment, FET, and indirect expropriation; (b) including reasonable and limited exceptions and carve-outs to ensure regulatory space for states; and (c) refining the scope of ISDS.²⁸

Notably, countries are also exploring institutional mechanisms to prevent disputes by ensuring better implementation of core investment protection obligations (similar to what Vietnam is setting up, for example).²⁹ Such mechanisms are part of the regulatory risk framework, and thus Indonesia's performance can be improved by putting them in place. In addition, this may also be an opportunity for Indonesia to ensure greater harmonization between all of its IIAs-BITs, and regional free trade agreements (FTAs). Finally, it is important that Indonesia not only adjust its IIAs but also harmonize its domestic legal framework to ensure consistency in its legal framework and its implementation.

Strong Performance: Kazakhstan

Kazakhstan's performance on the overall risk measure has been strong. Over the past few years, Kazakhstan has consistently improved on various indexes based on de jure legal and regulatory provisions. For example, in 2019, Kazakhstan came 28th out of 190 countries in the World Bank's *Doing Business* rankings. It ranks 4th on the "Enforcing Contracts" topic, 18th on the "Registering Property" topic, and 36th on the "Starting a Business" topic. Kazakhstan also performs well on the OECD FDI Regulatory Restrictiveness Index, with a score similar to Austria's.³⁰ All these indicators suggest consistent improvement on de jure measures.

This is a result of Kazakhstan's efforts in several areas: the importance of attracting more FDI as a tool to advance productivity and growth is recognized by the country's

political leadership. Providing impetus toward this goal is Kazakhstan's strategic location along China's Belt and Road Initiative. And after joining the World Trade Organization (WTO) in 2015, Kazakhstan made several reforms in its regulatory framework (such as eliminating local content requirements).

Despite institutional and legal improvements, investment climate assessments indicate that challenges remain relating to continued corruption, inefficient bureaucracy, and arbitrary law enforcement, especially at the regional and municipal levels (U.S. Department of State 2019a). Other reported areas of concerns are the government's tendency to challenge contractual rights, unannounced tax audits, imposition of high and ad hoc fines, and other interventions in companies' operations. On paper, the government has obligations to publish draft legislations. However, investment climate assessments indicate that the legal and regulatory processes are largely opaque. Draft bills are available for public comment, but the process occurs without notice, and some bills are excluded altogether.

From these investor perceptions reported in investment climate assessments, it appears that the real challenge in Kazakhstan is the lack of enforcement of the legal framework. There is also lack of trust in the court systems—the main avenue for seeking enforcement.

Lack of enforcement of the legal framework is also reflected in Kazakhstan's investor-state disputes. It has had 19 investor-state disputes (based on publicly available information), of which 5 were decided in favor of investors, 5 were decided in favor of the state, and the remaining are either pending or settled.³¹ In all cases decided in favor of the investors, the publicly available information indicates, the tribunals found violation of FET or expropriation provisions—both of which are core legal guarantees provided in Kazakhstan's legal framework.

In 2017, the government adopted the 2018–22 National Investment Strategy with the aim of increasing FDI by 25 percent by 2022

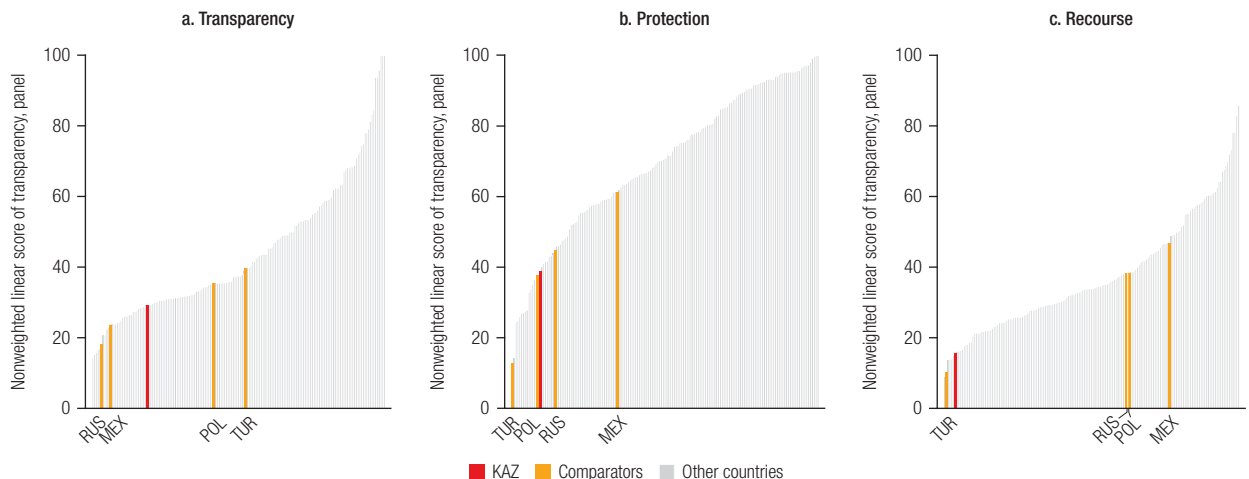
(U.S. Department of State 2019c). Priority areas identified in the strategy include investment climate improvements, privatization, and greater economic diversification. Mineral extraction continues to dominate Kazakhstan's economy, with 75 percent of its FDI stock in the extractives sectors.³² Diversification has consistently been identified as one of the country's priority areas. As Kazakhstan bolsters its efforts to attract a more diverse range of FDI, ensuring effective implementation of its laws and regulations and minimizing risks will be key—indeed, manufacturing and services sector investors tend to be more mobile.

In addition to strengthening the level of regulatory enforcement, Kazakhstan's performance on the measure also indicates certain *de jure* areas that it can further improve. Figure 4.8 benchmarks Kazakhstan's performance on each risk pillar relative to its neighboring countries in Central Asia and other comparators. It suggests that Kazakhstan could focus on improving the transparency pillar, in which it lags the furthest relative to all comparator countries except Poland and Turkey.

More specifically, Kazakhstan does not include a negative list (which would clarify the sectors and activities that are prohibited or restricted for FDI) either in its Investment Law of 2003 or any other instruments. However, it continues to maintain restrictions on foreign ownership (such as a ceiling on foreign ownership of media). In addition, foreign investors report that new laws and decrees are passed that impose penalties for periods before the laws or decrees came into force—without “grandfathering” existing investments (U.S. Department of State 2019c). Notably, Kazakhstan's investment law does not include a provision to address this aspect.

Kazakhstan's strong performance on the regulatory risk measure also raises the question of why higher-income countries are *not* the highest performers on the regulatory risk measure. The measure is linked to specific legal and regulatory instruments, and some countries lack these instruments—in some cases because they might not be required, given the other laws and regulations of the country. For example, the analysis finds that

FIGURE 4.8 Kazakhstan's Scores on the Three Pillars of the FDI Regulatory Risk Measure



Source: World Bank.

Note: “Other comparators” refers to Mexico, Poland, Turkey, and the Russian Federation. The “nonweighted linear score, panel” refers to the “panel version” of this study's regulatory risk score (0–100), calculated from 2014–17 data. For the full list and descriptions of data sources used to calculate the panel scores, see annex 4A. FDI = foreign direct investment; KAZ = Kazakhstan.

fewer countries with high GDP per capita tend to have an investment law. Arguably, countries with a relatively higher GDP have invested more heavily in creating comprehensive legal frameworks and in building institutional capacity to ensure implementation. Therefore, lesser reliance may be placed on instruments like investment laws, which are often used as signaling devices to generate investor confidence. The dataset on investment laws shows that countries that perform better on *Doing Business* tend not to have an investment law.

Nonetheless, investment laws continue to be a powerful instrument leveraged by countries for different purposes.³³ They serve as an important risk mitigation tool. This is also confirmed in the dataset, which indicates that countries with higher political risk ratings tend to have investment laws.

Concluding Remarks

Growing protectionism has exacerbated policy and regulatory uncertainty—with countries adopting a variety of new measures to protect national security or for other public purposes. With the global decline in FDI over the past few years, competition between developing countries to attract it has only intensified. Attracting FDI will require effective government actions to reduce real *and* perceived risk for investors. Existing risk indicators often help inform investors' decisions, yet those indicators often rely heavily on perception and do not have a direct link to what governments can do or have done to affect risk. Relating specific government actions to the measurement of risks is one potential avenue to inform policy makers in their quest to reduce investment risks.

This chapter has presented a new framework to measure regulatory risk that is linked directly to specific legal and regulatory provisions, drawing on existing indicators and newly constructed data on the content of selected legal instruments. It shows that regulatory risk, as captured in this framework, carries meaningful signals of risk for investors. The evidence at both the country and

investor levels suggests that regulatory risk matters for investment attraction and retention. Further, the chapter has demonstrated that the overall risk measure and underlying data sources can be used as a starting point to detect broad areas of weakness in a country and guide further research and diagnostics.

The primary differentiating feature of the risk measure is the link to specific actionable policy and regulatory levers. As a result, low performance on the measure, under any of the three pillars, can in most cases be influenced by taking specific policy actions.

Performance on the transparency pillar. Transparency can be strengthened through actions that improve (a) systematic publication of and consultation on laws and regulations; (b) the availability of portals and other similar mechanisms enabling investors to find information about relevant laws and regulations; and (c) the specificity and clarity of specific provisions.

Countries can adopt specific legal provisions to mandate publication of laws, regulations, and regulatory plans as well as consultations on proposed regulations. In addition, they can clearly publish information on sectors in which there are investment restrictions. To increase the accessibility of legal and regulatory information, countries can set up an online portal or other unified website.

To improve overall predictability, specific actions can be taken on precise drafting of administrative procedures. For example, where an investment approval is required under the investment law, countries can improve their performance by specifying the criteria on which approval would be granted and periods within which such approval should be granted. In the area of procurement, countries can improve their performance on the transparency pillar by ensuring that tendering documents include criteria for evaluation of bids as well as the main terms of the contract and payment schedule.

Performance on the protection pillar. Protection guarantees for investors can be

strengthened largely by improving select legal provisions in a country's investment law or IIAs, in accordance with relatively well-established good practices. For example, legal provisions should protect against both direct and indirect expropriation and should mandate timely and adequate compensation. Legal provisions that guarantee the investors' ability to transfer funds in convertible currency in a timely manner can also improve performance on this pillar. Of course, drafting of any legal provisions will entail not only consideration of well-established principles of investor protection but also the country's overall context, legal traditions, and political economy realities (including flexibilities that need to be provided to reflect the right to regulate).

Performance on the recourse pillar. Recourse for investors can be improved by allowing access to a wide range of dispute settlement mechanisms, including state-state as well as investor-state arbitration. Membership in the New York Convention, which can facilitate enforcement of awards, can also improve performance. In addition, countries can consider setting up an institutional mechanism to systematically prevent investor-state disputes.³⁴ Overall strengthening of judicial processes—through availability of specialized commercial courts, stipulation of time periods for judicial processes, and implementation of case management systems—can also improve performance on this pillar.

This chapter sets the foundation for further research on several related aspects. A major limitation of the current framework is the relatively small number of regulatory areas that can be evaluated because of a lack of comparable data across countries. In using this measure, important caveats discussed earlier in this chapter—including the current focus on *de jure* legal provisions and coverage of a relatively limited set of regulatory areas—should be kept in mind. To improve the predictive power of the risk measure, additional regulatory areas may be incorporated, such as trade regulations. As data availability

improves (by regulatory areas, time period, and geographical coverage), additional research can be undertaken to better understand the impact of regulatory risk on different types of investors as well as which components of risk matter most for investors.

Annex 4A. Construction and Characteristics of the Composite Regulatory Risk Score

Selection and Scoring of Legal and Regulatory Provisions

The selection of the specific legal and regulatory provisions to be included in the risk score, and how to evaluate their contribution to risk, is an inherently subjective exercise. This section details the decision rules used in the study, based on the analytical framework and data availability, within three pillars: transparency, protection, and recourse.

Pillar 1: Is there *transparency* regarding the content as well as the process of making laws and regulations that apply to investors? Here transparency includes three dimensions: (a) systematic publication of and consultation on laws and regulations; (b) availability of portals and other similar mechanisms, to allow investors to find information about relevant laws and regulations; and (c) to a limited extent, the specificity and clarity of legal provisions to increase transparency on the applicable administrative procedures (to increase predictability and reduce chances of abuse of discretion).

The measure covers

- Whether states have an obligation to publish laws and regulations affecting investment, and whether they do publish laws and regulations either on a unified website or in an official gazette;³⁵
- Whether countries publish their negative or positive lists either in their investment law or elsewhere in the legal and policy framework;³⁶

- Whether international investment agreements (IIAs) contain provisions concerning any mechanisms for technical cooperation (including for provision of information to the private sector);
- Whether procurement laws and regulations, notices of calls for tender, tender documents, notices of award, and minutes of bids are made publicly available; and
- Whether bids are opened electronically and whether minutes of bid processes are published online.

It incorporates the World Bank's *Doing Business* indicators to measure

- Whether information on land ownership, documentation requirements for land registration,³⁷ fee schedules, and electricity tariffs were made publicly available and changes notified;³⁸ and
- Whether requirements for obtaining a building permit are clearly specified in the building regulations or on any accessible website, brochure, or pamphlet as well as whether building laws and regulations were publicly accessible.³⁹

Indeed, the degree of specificity and clarity of drafting of legal and regulatory provisions determines the room regulators have to exercise discretion—and thus affects regulatory risk. The measure covers this aspect to a limited extent, largely focusing on a few specific administrative processes affecting foreign direct investment (FDI). For example, it covers whether, in cases where foreign investors need to obtain an investment approval to invest in a country, the criteria and time frames for granting such approvals are stipulated in the law.

On procurement, the measure covers whether procedures for acceptance of completed works and termination of contracts are specified in the law.⁴⁰ Further, it covers whether tender notices and documents include specific criteria for the evaluation of bids, main terms of the contract, and payment schedule. It also considers whether grandfather clauses are included.⁴¹

To measure the extent to which countries ensure transparency in the rulemaking

process (before the final law or regulation is approved), the measure covers whether states have an obligation under investment laws or IIAs to publish and consult on proposed laws and regulations, and whether there is a period set by law during which the text of the proposed regulations should be made publicly available.⁴² It also covers whether regulatory plans are published,⁴³ public consultation is undertaken on proposed regulations (not yet passed), and reports are issued on the consultation process.⁴⁴

Pillar 2: What is the extent of legal protection provided to investors against arbitrary, unpredictable, or nontransparent government actions? For the purpose of this study, the standards of protection reviewed were selected based on the centrality of the protections to investment operations;⁴⁵ their particular relevance in the context of arbitrary, unpredictable, and nontransparent government conduct; and whether they are “absolute” in nature.⁴⁶ The standard of protection available to investors was measured on the basis of the quality of provisions on expropriation, transfer of funds, fair and equitable treatment (FET), and nonderogation. Indeed, variations may exist in the interpretation of various provisions and jurisprudence; however, as discussed earlier in the chapter, because of lack of availability of cross-country comparable data, such variations are not included in the measure.

The measure covers whether protection is explicitly provided against both direct and indirect expropriation⁴⁷ and whether several key elements are included to ensure the legality of expropriation:⁴⁸ that expropriation is done (a) only for public purpose; (b) in a nondiscriminatory manner; (c) following due process; and (d) against payment of prompt, adequate, and effective compensation. These specific conditions for expropriation constitute a widely accepted legal standard. The measure also covers whether investors are guaranteed the ability to freely transfer funds in a timely manner and in a freely convertible or freely usable currency.⁴⁹

Further, the measure covers whether a specific FET provision is included. FET is a composite or a bundle of rights available to investors. Although the FET standard is generally not precisely defined in IIAs, it has been clarified through various decisions of arbitral tribunals. These interpretations indicate that FET is an obligation on states to act in a transparent, consistent, reasonable, and proportional manner and to respect legitimate expectations of investors generated from written commitments. Investors have often used the FET standard to seek regulatory stability.⁵⁰ The FET provision may either be “qualified” (with reference to international law or to a list of underlying obligations) or “unqualified.”⁵¹

Finally, the protection measure covers whether, if the legal instruments conflict with other legal norms (other laws, regulations, and IIAs), the more favorable rules apply to investors.

Pillar 3: Do investors have access to effective recourse mechanisms in case of grievances or disputes? The measure covers

- Whether investors have recourse to investor-state dispute settlement (ISDS)⁵² and the full scope of such a right;⁵³
- Whether investors could submit an investment dispute under the ICSID Convention and United Nations Commission on International Trade Law (UNCITRAL) rules;⁵⁴
- Whether investors had recourse to other types of alternate dispute resolution mechanisms, such as mediation or conciliation, either voluntarily or as a mandatory procedure before any adjudicatory procedures (such as arbitration) can begin;
- Whether investors had access to domestic courts either as an option alongside other ISDS forums or as a mandatory step before submitting a claim to investor-state arbitration;
- Whether state-state dispute settlement is available;
- Whether domestic investment laws provide access to any alternate institutional mechanisms to address investor issues before they escalate into legal disputes; and

- Whether countries are members of the ICSID and the New York Convention.⁵⁵ ICSID membership allows investors to pursue arbitration proceedings against the host state under the ICSID Convention,⁵⁶ which requires automatic recognition and enforcement of the pecuniary aspects of awards by all member states.⁵⁷

The World Bank’s *Doing Business* indicators were incorporated to measure

- Whether countries have adopted good practices in their court system in four areas⁵⁸—court structure and proceedings, case management, court automation, and alternative dispute resolution—including aspects such as law regulating the number of adjournments allowed, availability of a case management system and electronic filings, and availability of commercial courts; and
- Whether countries have adopted good practices in ensuring accessibility to land dispute resolution mechanisms,⁵⁹ including availability of out-of-court compensation mechanisms and databases to verify accuracy of government-issued identity documents.

Table 4A.1 lists the underlying variables of the three index components, indicating the *original* scale of the raw variables.

Data Normalization and Aggregation

The process to construct the composite regulatory risk measure is described below.

Normalization

To preserve comparability of the constructed scores over time and cross-country, a min-max aggregation approach was chosen, whereby all individual variables will be rescaled as $(\text{Max}-\text{Min})/\text{Range}$ of (possible) values. Each underlying variable is transformed to a scale from 0–100, where 0 indicates the best possible outcome and 100 the worst—reflecting that the constructed regulatory risk measure is an index of risk. Some data sources, such as

TABLE 4A.1 Underlying Variables of the Regulatory Risk Measure, by Dimension and Subindicators

<i>Pillar 1: Transparency</i>	<i>Pillar 2: Protection</i>	<i>Pillar 3: Recourse</i>
<i>UNCTAD IIA mapping: Provisions on transparency and technical cooperation (0–100)</i>	<i>UNCTAD IIA mapping: Provisions on fair and equitable treatment, expropriation, transfers (0–100)</i>	<i>UNCTAD IIA mapping: Dispute settlement provisions (0–100)</i>
<p>Doing Business (<i>World Bank</i>):</p> <ul style="list-style-type: none"> • “Registering Property”: Transparency of Information Index (0–6) • “Getting Electricity”: Communication of Tariffs and Tariff Changes Index (0–1) • “Dealing with Construction Permits”: Quality of Building Regulations Index (0–2) 		<p>Doing Business (<i>World Bank</i>):</p> <ul style="list-style-type: none"> • “Enforcing Contracts”: Quality of Judicial Processes Index (0–18) • “Registering Property”: Land Dispute Resolution Index (0–8)
<i>Global Indicators of Regulatory Governance (World Bank):</i> Laws are publicly available; regulatory plans are published; public consultation is conducted on proposed regulations; results of consultation process are reported (0–4)		<i>Global Indicators of Regulatory Governance (World Bank):</i> Challenging regulations (0–1)
<i>Investment laws: Provisions on sector restrictions, screening/approval/notifications, access to laws, transparency, and grandfathering (0–100)</i>	<i>Investment laws: Provisions on expropriation, transfers, and fair and equitable treatment (0–100)</i>	<i>Investment laws: Provisions on dispute settlement and dispute prevention (0–100)</i>
<i>Benchmarking Public Procurement (World Bank):</i> Transparency, clarity, access to information (0–100)		<i>Membership in ICSID: (0-1)</i> <i>Membership in the New York Convention: (0–1)</i>

Source: World Bank.

Note: IIA = international investor agreement; ICSID = International Centre for Settlement of Investment Disputes (World Bank Group); UNCTAD = United Nations Conference on Trade and Development. The “New York Convention” refers to the United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards.

the World Bank’s *Doing Business* and Global Indicators of Regulatory Governance (GIRG) subindicators as well as convention membership dummy variables, which are numerical values at the country level, only require this straightforward transformation to a common scale and direction.

Box 4A.1 describes how legal texts (IIAs, investment laws, and public procurement regulations) are transformed into scores. For

each of the three pillars, provisions of interest are identified. The legal texts are broken down into a number of simple, mostly yes/no, questions. Responses to questions relevant to provisions of interest are chosen and converted into scores. Scores for the questions/answers were then aggregated and normalized to a [0,1] score for each provision. All relevant provisions for a given pillar are then aggregated and normalized to the pillar level.

BOX 4A.1**Scoring and Aggregating Rules for IIAs**

Step 1: Scoring the transparency, protection, and recourse pillars

- Each provision is scored using a set of more detailed 1/0 (yes/no) questions.
- The scores for each question are then added up and normalized to a scale [0–1] for each provision.

Step 2: Aggregating provisions to treaty level

- For each law or treaty, the total score of all provisions is taken as a simple average of all provisions. A higher score indicates lower risk.
- Scores are meant to be on an ordinal scale.

Step 3: Aggregating scores to the country level

- The “relevant” treaty for a country pair is determined, considering the network of available treaties (figure B4A.1.1):

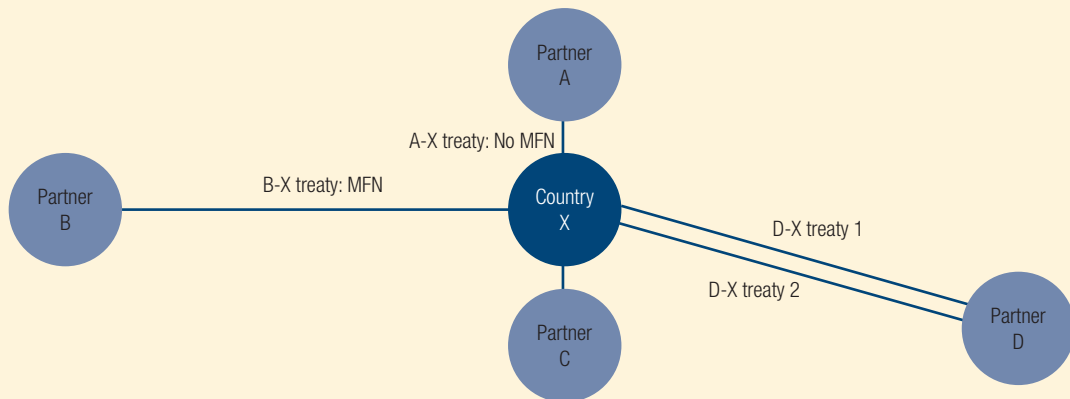
- The weighted average of country pair scores is taken, where weights are the partner country’s share in world gross domestic product (GDP). Underlying assumptions are that the pool of potential investors increases with the size of the international investment agreement (IIA) network and the partner’s economy.
- The scores are aggregated as in the following notation:

$$p_i = \sum_{j \in IIA_j \text{ w/o MFN}} w_j \times \max_t \{p_{ijt}\} + \sum_{j \in IIA_j \text{ with MFN}} w_j \times \max_k \{p_{ik}\},$$

(B4A.1.1)

where p_i presents the score for each pillar (transparency, protection, and recourse) at the country level; w_j presents the weights; and p_{ijt} presents the score of the IIA for the country pair.

FIGURE B4A.1.1 Model of a Country with Multiple Treaty Relationships



Note: MFN = most-favored nation.

For example, a relevant provision for the transparency score of investment laws is “access to laws.” This is scored based on one question: “Does the act guarantee accessibility of laws, regulations, and other legal instruments to investors?” If the answer is yes, a score of 1 is assigned; otherwise, a score of 0 is assigned. This provision as well as four others

are used to construct the overall transparency score for investment laws. Other provisions are more complicated to score and require various questions (and legal know-how).

However, in the case of IIAs, this leaves a score at the treaty level rather than the country level. To obtain a country score for each of the pillars, the relevant treaty is first identified

at the country pair level. If a pair of countries has more than one treaty at the same time, the better score is considered the relevant one. Furthermore, if a treaty between a pair of countries has a most-favored nation (MFN) provision, then the best score out of all host country scores is assigned.⁶⁰

In a second step, these country-pair scores are collapsed to the host country level by calculating the partner country gross domestic product (GDP) weighted average. This weighting reflects the following assumptions: all else equal, the level of protection increases with (a) the number of IIA partners; and (b) the size of the partners' economies.

There are opposing views in the literature about the marginal effects of additional IIAs in attracting FDI. On the one hand, if investment treaties are pure signaling devices about a host country's commitment to protect investors, then additional treaties have decreasing returns (Bubb and Rose-Ackermann 2007). On the other hand, as Montt (2009) argues, IIAs can have increasing returns because investors could expect a more predictable and efficient jurisprudence to evolve with the size of the treaty network. Given these possible opposing effects, a simple rule was followed in which the level of protection increases linearly with the number of partner countries.

Aggregation of the Composite Score

In combining different data sources, a trade-off arises between maximizing the number of (informative) variables used to construct the index and maximizing the size of the cross-section and time dimension. Thus, two versions of the index were constructed: (a) a *panel version* of comparable data for 2014–17, which excludes some data sources not available for the full period (an investment law database constructed for this study and the

World Bank's Benchmarking Public Procurement [BPP] and GIRG databases); and (b) a *cross-section version* with more variables (from the aforementioned sources) for a single data year (2017). (See box 4.1 for a more detailed description of the two versions.)

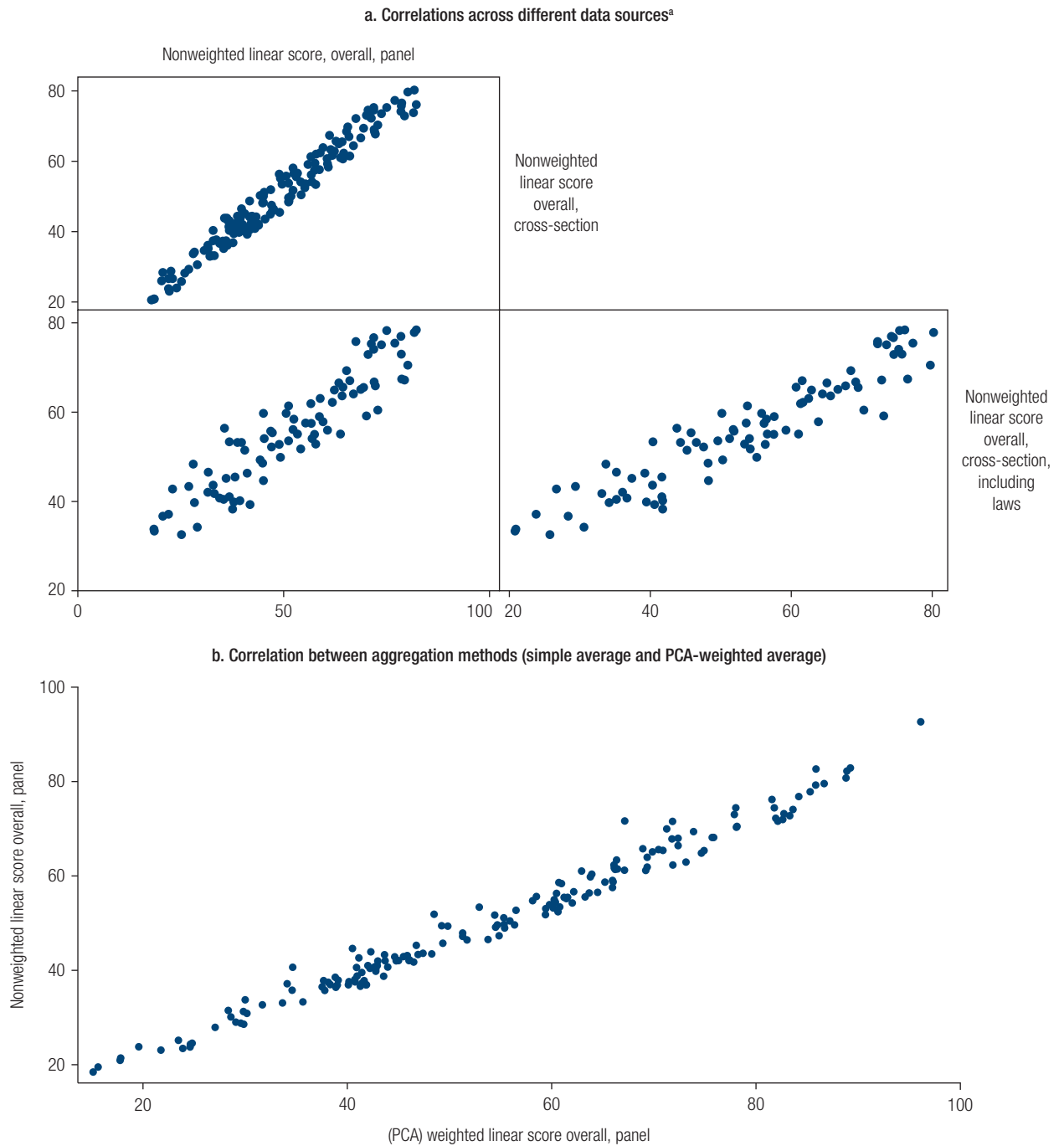
In addition, the two versions were tested including different data sources. The overall score is robust to the inclusion (or exclusion) of the investment law database, as shown by high correlations of the scores constructed using different sets of data (figure 4A.1, panel a).

The overall index of regulatory risk is the simple average of the three component scores. Each component score (transparency, protection, and recourse) is a composite score of its underlying variables. Two methods were tested to aggregate individual variables into the component scores: a simple average and a weighted average where weights are given by the first component from a principal component analysis (PCA). Table 4A.2 shows the weights for the cross-section version of the risk measure, derived using PCA for each of the three pillars—transparency, protection, and recourse. It suggests that none of the variables included in the framework has an outside influence on the overall risk components.

The two aggregation methods yield very high correlations (figure 4A.1, panel b). This chapter refers to the simple average version when referring to the index.

Characteristics of the Regulatory Risk Measure: Additional Results

Additional results are presented in figures 4A.2, 4A.3, and 4A.4, in addition to tables 4A.3, 4A.4, and 4A.5.

FIGURE 4A.1 The Regulatory Risk Measure Is Highly Correlated across Varying Data Sources and Aggregation Methods

Source: World Bank.

Note: "Nonweighted [or weighted] linear score overall, panel" refers to the "panel version" of this study's regulatory risk score (0–100), calculated from 2014–17 data. "Nonweighted linear score overall, cross-section" refers to the "cross-section version" of the risk score (0–100), calculated from 2017 data. For the full list and descriptions of data sources used to calculate the panel aggregate scores, see annex 4A. PCA = principal component analysis.

a. The correlation matrix plots between different versions of the risk measure—panel version and cross-section version—with additional underlying variables.

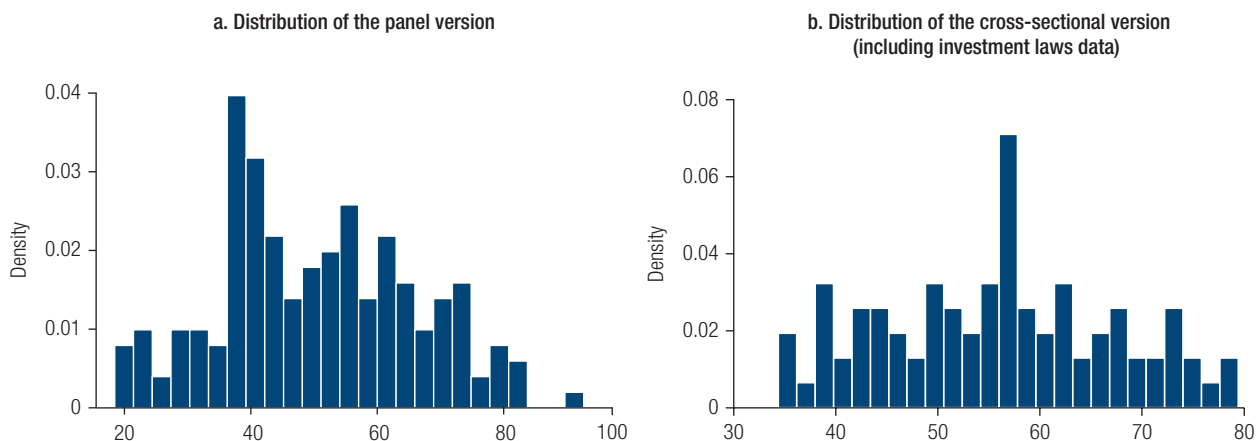
TABLE 4A.2 Principal Component Analysis (PCA) Weights

Pillar	Variable	PCA weights
Transparency	IIAs: Provisions on transparency and technical cooperation	0.183
	Investment laws: Provisions on sector restrictions, screening/approval/notifications, access to laws, transparency, and grandfathering	0.026
	GIRG: Laws publicly available, regulatory plans published, public consulted on proposed regulations, consultation results reported	0.207
	BPP: Transparency, clarity, and access to information	0.088
	DB: "Registering Property": Transparency of Information Index	0.216
	DB: "Getting Electricity": Communication of Tariffs and Tariff Changes Index	0.142
	DB: "Dealing with Construction Permits": Quality of Building Regulations Index	0.139
Protection	IIAs: Provisions on FET, expropriation, transfers	0.500
	Investment laws: Provisions on FET, expropriation, transfers	0.500
Recourse	IIAs: Dispute settlement provisions	0.221
	Investment laws: Dispute settlement provisions	0.041
	GIRG: Challenging regulations	0.086
	ICSID membership	0.084
	New York Convention membership	0.142
	DB: "Enforcing Contracts": Quality of Judicial Processes Index	0.221
	DB: "Registering Property": Land Dispute Resolution Index	0.204

Source: World Bank.

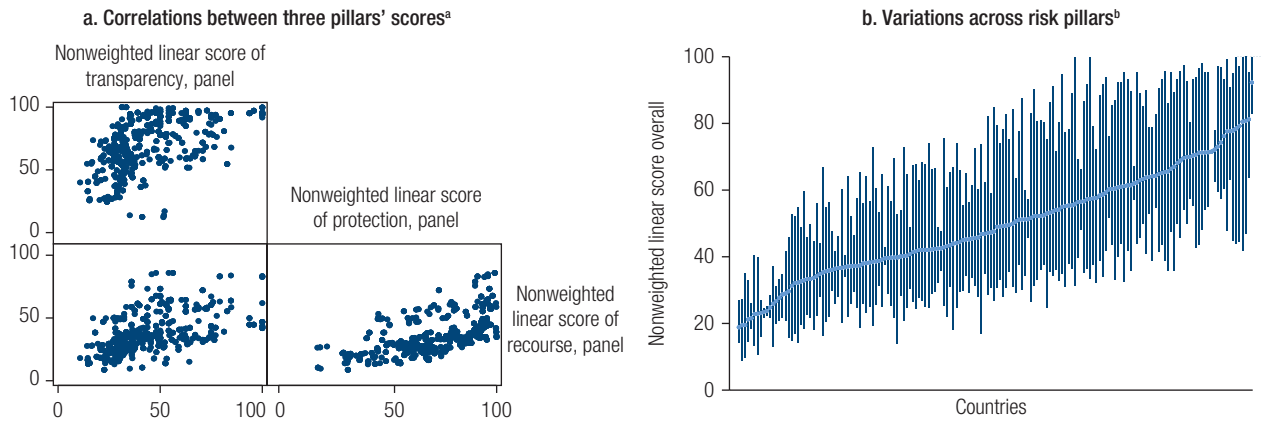
Note: Weights have been normalized to sum up to 1. "New York Convention" refers to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards. BPP = Benchmarking Public Procurement (World Bank); DB = *Doing Business* (World Bank); FET = fair and equitable treatment; GIRG = Global Indicators of Regulatory Governance (World Bank); ICSID = International Centre for Settlement of Investment Disputes; IIAs = international investment agreements.

FIGURE 4A.2 Regulatory Risk Varies across Countries



Source: World Bank.

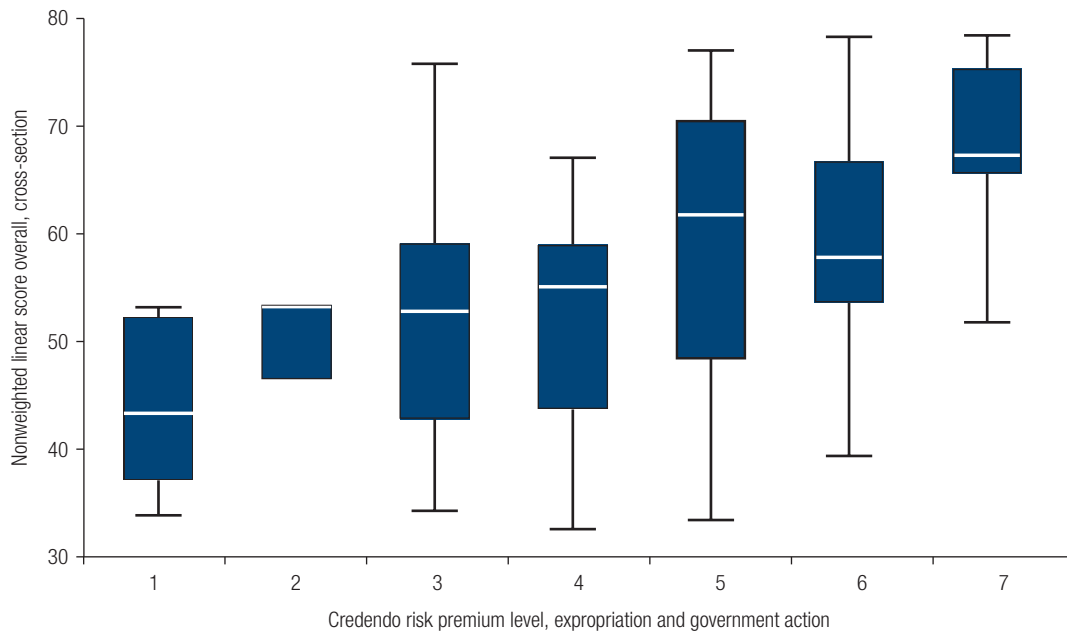
Note: Histograms show distribution of the panel version (panel a), and the cross-sectional version of the regulatory risk measure, including investment laws data (panel b). The "panel version" of the regulatory risk score (0–100) is calculated from 2014–17 data. The "cross-section version" is calculated from 2017 data. For the full list and descriptions of data sources used to calculate the panel aggregate scores, see annex 4A.

FIGURE 4A.3 Countries that Perform Better in One Pillar Often Perform Better in Other Pillars of Regulatory Risk

Source: World Bank.

a. "Nonweighted linear score . . . , panel" refers to the "panel version" of the regulatory risk score (0–100), calculated from 2014–17 data. For the full list and descriptions of data sources used to calculate the panel aggregate scores, see annex 4A.

b. In panel b, the blue dots present the overall regulatory risk scores for 2017 (average of the three risk pillars), covering 166 countries. The bars present the variations by the three pillars (that is, they denote the range determined by the two pillars with the lowest and the highest scores).

FIGURE 4A.4 Higher Regulatory Risk Is Associated with Higher Expropriation Risk Insurance Premium

Source: World Bank and Credendo.

Note: Figure is a boxplot of the regulatory risk score (cross-sectional version) over the seven categories of Credendo's "expropriation and government action risk premium." The higher (lower) the risk premium, the higher (lower) the risk. The "Nonweighted linear score overall, cross-section" refers to the cross-sectional version of the regulatory risk score (0–100), calculated from 2017 data. For the full list and descriptions of data sources used to calculate aggregate scores, see annex 4A.

TABLE 4A.3 A Gravity Model of Bilateral FDI Inflows, 2014–16

	(1)	(2)	(3)	(4)
Regulatory risk (panel index, not including dispute data)	-0.0501** (0.0225)	-0.0308 (0.0354)		
Regulatory risk (panel index, including dispute data)			-0.0705*** (0.0255)	-0.0560* (0.0335)
Difference between destination and origin countries' regulatory risk		-0.0199 (0.0298)		-0.0155 (0.0239)
Market size (GDP)	0.240 (0.147)	0.255* (0.148)	0.241 (0.147)	0.256* (0.148)
Difference in income per capita	-0.141** (0.0598)	-0.153** (0.0607)	-0.142** (0.0599)	-0.154** (0.0608)
Ln(distant)	-0.503*** (0.0933)	-0.529*** (0.0950)	-0.502*** (0.0932)	-0.529*** (0.0950)
Contiguity	-0.0321 (0.386)	-0.0541 (0.383)	-0.0302 (0.385)	-0.0518 (0.382)
A language is spoken by at least 9% of the population in both countries	0.429* (0.245)	0.415* (0.246)	0.428* (0.245)	0.413* (0.246)
Ever in colonial relationship	-0.0349 (0.234)	-0.0138 (0.233)	-0.0346 (0.233)	-0.0134 (0.232)
Common colonizer post-1945	-0.00605 (0.414)	-0.0128 (0.414)	-0.00519 (0.414)	-0.0119 (0.414)
Constant	5.416 (4.653)	4.289 (4.587)	6.319 (4.524)	5.406 (4.477)
Observations	68,086	61,396	68,086	61,396

Source: World Bank.

Note: FDI = foreign direct investment; GDP = gross domestic product.

Robust standard errors in parentheses: *** p < 0.01 ** p < 0.05 * p < 0.10

TABLE 4A.4 Regulatory Risk and Activities of Affiliates of U.S. MNEs

	Total employment	CAPEX	R&D expenditures
Regulatory risk (panel index, not including dispute data)	-0.101 (1.599)	-104.449 (113.909)	-7.594 (17.580)
GDP per capita (constant 2010 US\$)	0.000 (0.000)	-0.163** (0.067)	0.048*** (0.006)
Trade openness (trade as % of GDP)	0.025 (0.116)	6.411 (14.091)	-3.536 (2.536)
Constant	241.723***	11,666.918**	71.836
	-77.31	-5,481.32	-732.201
Country fixed effects	Yes	Yes	Yes
Number of observations	105	100	101
Adjusted R2	-0.027	0.049	0.120

Source: World Bank.

Note: Data on employment, CAPEX (capital expenditure), and R&D (research and development) expenditures are from the U.S. Bureau of Economic Analysis (BEA) on activity of foreign affiliates. GDP = gross domestic product; MNE = multinational enterprise.

Robust standard errors in parentheses: * p < .10 ** p < .05 *** p < .01

TABLE 4A.5 A Discrete Choice Model of Global Investment Location, 2014–16

	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>	<i>Model 6</i>	<i>Model 7</i>	<i>Model 8</i>	<i>Model 9</i>
Regulatory risk (panel index, not including dispute data)	−0.00887*** (0.000595)	−0.0149*** (0.000828)	−0.00645*** (0.000629)	−0.00989*** (0.000619)	−0.00793*** (0.000624)	−0.00751*** (0.000606)	−0.00767*** (0.000607)	−0.00511*** (0.000716)	−0.0200*** (0.000852)
ln(GDP per capita)	0.756*** (0.00571)	0.678*** (0.00783)	0.803*** (0.00647)	0.738*** (0.00593)	0.305*** (0.0111)	0.743*** (0.00617)	0.745*** (0.00574)	0.748*** (0.00697)	0.424*** (0.0144)
ln(population)	0.808*** (0.00461)	0.836*** (0.00665)	0.932*** (0.00598)	0.792*** (0.00487)	0.824*** (0.00471)	0.827*** (0.00499)	0.782*** (0.00480)	0.824*** (0.00529)	0.798*** (0.00676)
GDP growth (annual %)	0.0373*** (0.00205)	0.0447*** (0.00244)	0.0290*** (0.00210)	0.0404*** (0.00210)	0.0313*** (0.00226)	0.0319*** (0.00210)	0.0428*** (0.00221)	0.0238*** (0.00241)	0.0476*** (0.00287)
Trade openness (trade as % of GDP)	0.00499*** (9.73e-05)	0.00578*** (0.000123)	0.00861*** (0.000130)	0.00511*** (9.95e-05)	0.00344*** (0.000100)	0.00610*** (0.000126)	0.00493*** (9.68e-05)	0.00457*** (0.000105)	0.00388*** (0.000111)
Lower secondary completion rate, total (% of relevant age group)		−0.0124*** (0.000524)							
Bank deposits (% GDP)			−0.00536*** (0.000165)						
Top Combined CIT Rate (%)				0.00822*** (0.000904)					
WGI Regulatory Quality					0.733*** (0.0162)				
Polity IV: Institutionalized Democracy						0.00391*** (0.00138)			
Volatility of GDP per capita growth							−0.110*** (0.00663)		
Exchange rate volatility								−6.239*** (0.290)	
Fitch Sovereign Rating dummies									YES
Observations	2,825,609	1,349,349	2,308,090	2,564,859	2,825,609	2,563,529	2,825,609	1,641,111	1,805,949

Source: World Bank.

Note: Results from discrete choice model as described in box 4.2, where investors choose to invest a location based on its characteristics relative to other locations. Investors are identified from parent company information from transaction data of FDI Markets, a *Financial Times* dataset (<https://www.fdimarkets.com>). CIT = corporate income tax; IV = instrumental variable. Standard errors in parentheses. * p < .10 ** p < .05 *** p < .01

Notes

1. In any case, political risk insurance generally does not cover the entire spectrum of a state's conduct that can generate regulatory risks for investors.
2. The ICRG model, created in 1980 and produced since 1992 by investment risk company PRS Group, issues ratings comprising 22 variables in three subcategories of risk: political, financial, and economic. For more information, see "The International Country Risk Guide (ICRG)," PRS Group website: <https://www.prsgroup.com/explore-our-products/international-country-risk-guide/>.
3. For more information, see "Country Risk Classification," OECD website: <http://www.oecd.org/trade/topics/export-credits/arrangement-and-sector-understandings/financing-terms-and-conditions/country-risk-classification/>.
4. For a discussion of uncertainty about political events and political risk, see Kobrin (1979).

5. This principle concerns, for example, whether in cases where foreign investors need to obtain an investment approval to invest in a country, the criterion and time frames for granting such approvals are stipulated in a legal instrument.
6. Expropriation, inability to transfer funds outside the host country, and instability in policy and regulatory environment have consistently been identified as critical factors affecting investor decisions to stay and potentially expand operations in a country. (See World Bank [2018] as well as the 2019 GIC Survey, which is covered in chapter 1 of this report and also discussed later in this study.) Breach of these standards has led to most international investor-state disputes. Also see the UNCTAD online Investment Policy Hub: <http://investmentpolicyhub.unctad.org>.
7. In contrast, the “national treatment” standard is a relative standard of treatment under which treatment of foreign investors and investments is assessed relative to the treatment accorded to domestic investors and investment.
8. Nonetheless, IIAs and investment laws are relatively standardized legal instruments where comparable (text) data are available across all countries.
9. Transfer of funds can be restricted temporarily in a nondiscriminatory manner and in good faith in cases of a balance of payments crisis or on legitimate application of certain national laws—specifically, those relating to bankruptcy, insolvency, or the protection of the rights of creditors; issuing or trading in securities and other stock market instruments; criminal offenses; compliance with orders or judgments in judicial or administrative proceedings; and compliance with labor or tax obligations.
10. Intuitively, the first principal component of a set of variables is the linear index of all the variables, which captures the largest amount of information that is common to all the variables (Filmer and Pritchett 2001). While different in purpose, results from a PCA in practice often closely approximate factor analysis, which is often used to estimate an underlying structure of (a) latent variable(s) (Jolliffe 2002). As such, this aggregation methodology resembles results from the noise extraction approach used in Kaufmann, Kraay, and Mastruzzi (2011), where individual variables are assumed to be noisy measures of a “true” underlying (latent) governance indicator, as estimated by an unobserved components model.
11. To access the online appendix, see www.worldbank.org/gicreport.
12. Credendo is a European credit insurance group that covers risk worldwide. In financial year 2017, the value of transactions insured by Credendo amounted to €85 billion.
13. The correlation patterns suggest that the regulatory risk measure appears to distinguish well between countries with very high or low level of risks, but not the countries with very low risk. This is likely because the measure largely includes *de jure* measures. For countries that already have “good” rules on the book, additional information on implementation would be needed to distinguish high and low performers.
14. A common log transformation is used to preserve negative and zero values of net FDI inflows: the natural logarithm of 1 plus the absolute value of FDI, multiplied by (–1) if the original FDI variable is negative.
15. The bilateral FDI data are constructed from various sources, including the OECD bilateral FDI database and the International Monetary Fund (IMF) balance-of-payments International Investment Position (IIP) data. (A forthcoming publication on the bilateral FDI database will provide further details.) A basic gravity model is estimated where host and source country fixed effects are used to control for the multilateral resistance term. The model is estimated using the Poisson pseudo maximum likelihood and has the limitation that observations with negative FDI inflows are omitted.
16. Using the same model, the regulatory risk measure has less predictive power than other risk ratings, such as the ICRG’s political risk rating and the EIU’s legal and regulatory policy risk rating. This suggests that investor perception plays an important role, which the measure presented in this chapter is not well equipped to capture fully.
17. For example, political risk ranks second among nine categories of possible impediments to FDI, according to the MIGA-EIU Political Risk Survey 2013 (MIGA 2013); political risk and uncertainty is ranked 15th among 69 organizational risks, according to

- the Aon Global Risk Management Survey 2019 (Aon 2019); and political risks and regulatory uncertainty is ranked 4th among 12 risks, according to the Association for Financial Professionals and Risk Survey 2019 (AFP 2019).
18. For all *Doing Business* data, see <https://www.doingbusiness.org/en/data>.
 19. This list is generated using the database of bilateral FDI; see discussion in the “Regulatory Risk and FDI” section.
 20. Indonesia’s decision does not immediately affect all foreign investors. Several of the treaties terminated or being renegotiated have sunset clauses allowing for continued application of the treaty for a specific period. Indonesia continues to be a party to other multilateral treaties—in particular, the treaties of the Association of Southeast Asian Nations (ASEAN)—and foreign investors can avail these to seek protection. For the purpose of this study’s constructed regulatory risk measure, not all ASEAN treaties in force could be included because they are not mapped in the UNCTAD database. Further, Indonesia’s national Law Concerning Investment, 2007, also provides protection guarantees but limited recourse.
 21. For a comprehensive historical account of foreign investment and property rights in Indonesia, see Wells and Rafik (2007).
 22. ICSID Case No. ARB/12/14 and ICSID Case No. ARB/12/40.
 23. The companies, in collaboration with local Indonesian companies (Ridlatama companies), invested in the East Kutai Coal Project (EKCP) in the Regent of East Kutai. In 2010, the Regent of East Kutai revoked the licenses (for activities such as survey and exploration) related to the EKCP, alleging that they were forged. The claimants first filed domestic legal proceedings against the revocation, alleging that they had obtained the licenses lawfully through their partnership with the local companies. The tribunal ultimately decided in favor of Indonesia, stating that the claims were “based on documents forged to implement a fraud aimed at obtaining mining rights” and thus were inadmissible. The tribunal indicated that the local business partner of the claimants was likely the source of the fraudulent conduct but that the claimants failed to exercise sufficient due diligence in carrying out their investment.
 24. In March 2017, the claimants applied for annulment at ICSID. On March 18, 2019, the ICSID Annulment Committee dismissed the claimants’ application to annul the award.
 25. Notably, the tribunal observed that, although generally BITs do not contain provisions on the consequences of unlawful conduct by investors, arbitral decisions have clarified that general principles exist independent of specific treaty language.
 26. Law No. 12/2011 on the Development of Laws and Regulations and its implementing government regulation 87/204 allow public comment on draft laws and regulations.
 27. See Law No. 23 of 2014 on Regional Government. In June 2016, the central government, exercising its authority under Law No. 23 of 2014, repealed more than 3,000 regional bylaws that were overlapping with other laws and regulations. However, the Constitutional Court in its Decision No. 56/PUU-XIV/2016 limited the central government’s authority to repeal these local regulations and allowed local governments to appeal the decision. See Butt (2017).
 28. Refining the scope includes reform of the ISDS process. The EU’s free trade agreements (such as with Canada, Singapore, and Vietnam) include a standing investment court system, which includes an appellate tribunal. Other FTAs have either excluded ISDS provisions or diluted its scope, such as in Brazil’s Cooperation and Facilitation Investment Agreements and the United States–Mexico–Canada Agreement.
 29. The World Bank Group has been helping client countries to set up institutional mechanisms to enable them to better detect and resolve investor problems or grievances, which can potentially escalate in investor-state legal disputes (Echandi and Kher 2014; World Bank 2019).
 30. For more on the OECD FDI Regulatory Restrictiveness Index, see <https://www.oecd.org/investment/fdiindex.htm>.
 31. Investor-state dispute data from the UNCTAD Investment Policy Hub, <https://investmentpolicy.unctad.org/investment-dispute-settlement>.
 32. Data from “Direct Investment Statistic according to the Directional Principle,”

- External Sector Statistics, National Bank of Kazakhstan: <https://nationalbank.kz/?docid=469&switch=english>.
33. First, as a single instrument capturing all the most important guarantees for foreign investors, an investment law may have an important signaling effect on the country's openness to investment and reform. Second, it can substantively complement the standards of treatment already available under the country's existing legal framework. Third, it can serve as an opportunity to reflect, in a country's domestic legislation, its core international commitments under its IIAs. Fourth, it can be an opportunity to level the playing field between all investors ensuring that all are equally protected. Finally, it can also allow for unifying a country's legal and regulatory framework, consolidating a diverse set of legal instruments currently in force.
 34. The World Bank Group has been supporting client countries to set up institutional mechanisms to enable them to better detect and resolve investor problems or grievances that can potentially escalate into investor-state legal disputes (Echandi and Kher 2014; World Bank 2019).
 35. "Accessing Laws and Regulations," Global Indicators of Regulatory Governance, World Bank: <https://rulemaking.worldbank.org/en/data/comparedata/accessibility>.
 36. Countries list sectors and activities that are prohibited or restricted for FDI in their negative list. Sectors and activities not listed on the negative list are open to FDI. Alternatively, countries may choose to follow a positive list approach, wherein they list the sectors and activities that are open to FDI.
 37. "Registering Property": Transparency of Information Index, World Bank *Doing Business* indicators: <https://www.doingbusiness.org/en/data/exploretopics/registering-property>.
 38. "Getting Electricity": Communication of Tariffs and Tariff Changes Index, World Bank *Doing Business* indicators: <https://www.doingbusiness.org/en/data/exploretopics/getting-electricity>.
 39. "Dealing with Construction Permits": Quality of Building Regulations Index, World Bank *Doing Business* indicators: <https://www.doingbusiness.org/en/data/exploretopics/dealing-with-construction-permits>.
 40. Other areas that were reviewed were whether the law specifies the method to determine the amount of performance guarantee and whether it also specifies that the procuring entity cannot request more than a certain percentage of the contract value as a bid security amount.
 41. A grandfather clause would exempt application of a new law due to conditions that were in place before the new law was implemented. In a sense, it provides continuity and predictability for existing investments.
 42. "Proposed regulation" means any draft rule affecting business activities proposed by a government's executive authority, ministry, or regulatory agency that, if finalized, is intended to bind any individuals or companies covered by it. This includes subordinated legislation, administrative formalities, decrees, circulars, and directives. The term also includes rules proposed by the government that require final approval by the parliament, other legislative body, or head of state. See "Transparency of Rulemaking," Global Indicators of Regulatory Governance, World Bank: <https://rulemaking.worldbank.org/en/data/comparedata/transparency>.
 43. This refers to forward regulatory plans—that is, a public list of anticipated regulatory changes or proposals intended to be adopted or implemented within a specified time frame.
 44. See "Transparency in Rulemaking," Global Indicators of Regulatory Governance, World Bank: <https://rulemaking.worldbank.org/en/data/comparedata/transparency>.
 45. Expropriation, inability to transfer funds outside the host country, and instability in policy and regulatory environment have consistently been identified as critical factors affecting investors' decisions to stay and potentially expand operations in a country (World Bank 2018). Breach of these standards has led to most international investor-state disputes (see UNCTAD's online Investment Policy Hub: <http://investmentpolicyhub.unctad.org/ISDSn>).
 46. Absolute standards of treatment—such as protection from expropriation, and fair and equitable treatment (FET)—are to be guaranteed to all investors, irrespective of their nationality or other characteristics. On the other hand, the "national treatment" standard is a relative standard under which treatment of foreign investors or investments is assessed relative to the treatment of domestic investors or investment.

47. “Direct” expropriation refers to the direct seizure or taking of property. “Indirect” expropriation refers to cases where actions (such as regulatory measures) of the government may be tantamount to or have an effect equivalent to taking of the property.
48. The aspect of the legality of expropriation is covered only in investment laws because of the lack of availability of comparable data based on other legal instruments.
49. “Freely usable” currency means a currency determined by the International Monetary Fund (IMF) under the IMF Articles of Agreement [Article XXX(f)] to be a currency that is, in fact, widely used to make payments for international transactions and widely traded in the principal exchange markets. The U.S. dollar, Japanese yen, British pound, euro, and Chinese renminbi are currently determined to be freely usable currencies.
50. In some cases, investors have argued that the FET standard encompasses the obligation to maintain a stable and predictable legal framework (Bayindir v. Pakistan, ICSID Case No. ARB/03/29; CMS v. Argentina, ICSID Case No. ARB/01/8), while in others, they have argued that the stability of a legal framework is essential to meet investors’ legitimate expectations (Occidental v. Ecuador I, LCIA Case No UN3467). A recent review of arbitral decisions on this topic indicates that tribunals have recognized either a strict or soft regulatory stability obligation of states under the FET standard. In the first case, a mere change in the regulatory framework applicable to investment can trigger a FET violation, while in the other, procedural fairness and substantive reasonableness need to be considered to determine whether a FET violation has occurred. Although the obligation to provide a stable legal and regulatory framework is fairly settled, tribunals have had mixed views on the scope of the obligation (Ortino 2018).
51. In terms of the IIA’s text per se, an “unqualified” FET provision provides wider protection because its interpretation is not confined—for example, to specifically enumerated rights or other principles (depending on text of the IIA). The general rules of interpretation (under Article 31 of the Vienna Convention on the Law of Treaties or Article 38 of the Statute of International Court of Justice) continue to apply.
52. Disputes emerging from commercial transactions between enterprises are considered commercial disputes, and those arising from intergovernmental relations are considered state-state disputes. Investor-state disputes are disputes between foreign investors and host states. Such disputes are a relatively unique feature of international investment law.
53. This criterion concerns whether, for example, investors are allowed access to ISDS for (a) *any* disputes relating to investment; (b) only those disputes involving specific bases for claims other than the treaty such as investment contracts and investment authorizations; or (c) only those disputes involving alleged breach of the treaty. The first case allows investors to submit a very broad range of disputes to ISDS, while the latter two cases progressively limit the types of disputes that can be submitted to ISDS.
54. This question focuses on the ease of access to various recourse mechanisms for enforcement of investment protection guarantees in a relatively cost-effective and neutral manner. Therefore, although the extensively documented shortcomings of ISDS are well recognized and noted—in particular, on transparency of the process—this study has not delved into this issue in detail. For further information on ISDS, see “ICSID Rules and Regulations Amendment Process” (<https://icsid.worldbank.org/en/amendments>); UNCTAD 2019c; and “Working Group III: Investor-State Dispute Settlement Reform,” UNCITRAL (https://uncitral.un.org/en/working_groups/3/investor-state).
55. The 1958 Convention for Recognition and Enforcement of Foreign Arbitral Awards (referred to as the New York Convention) requires the courts of a member state to recognize and enforce an award rendered in another member state. It also limits the grounds on which courts of member states may refuse recognition and enforcement of foreign arbitral awards. Under Article V, the following are some of the grounds: incapacity of the parties to the arbitration agreement; invalidity of the arbitration agreement; natural justice grounds; arbitral authority or procedure was not in accordance with the agreement of the parties; the subject matter of the arbitration cannot be referred to arbitration under the national law of the enforcing country; and contrary to public policy of

the enforcing country. These exceptions are not easy to establish. Therefore, countries can rarely use them, making the New York Convention a fairly effective means of ensuring enforcement of awards. On the other hand, enforcement of foreign court judgments is available when states have passed a specific law allowing reciprocal enforcement of foreign judgments.

56. Nonmember states can also pursue arbitral proceedings against host states under ICSID's Additional Facility Rules, although without the benefit of automatic recognition and enforcement of the arbitral awards. However, Article 19 of the Additional Facility Rules requires that arbitration proceedings conducted under the rules be held only in states that are parties to the New York Convention. Therefore, in these cases, the regime under the New York Convention will apply.
57. This implies that ICSID awards are generally not subject to any review process by local courts in host states and are automatically enforced. Under Article 53(1) of the ICSID Convention, an arbitral award of the tribunal is binding on all parties to the proceeding. In case of a failure by a party to comply with an award, then under Article 54(1), the other party may seek to have the pecuniary obligations recognized and enforced in the courts of any ICSID member state as though it were a final judgment of that state's courts. Typically, if a party informs the ICSID Secretariat about nonenforcement by another party, the Secretariat contacts the noncomplying party to request information on the steps taken to ensure compliance. See "ICSID Convention Arbitration Rules," ICSID Documents, ICSID website: <https://icsid.worldbank.org/en/Pages/icsiddocs/ICSID-Convention-Arbitration-Rules.aspx>.
58. "Enforcing Contracts": Quality of Judicial Processes Index, World Bank *Doing Business* indicators: <https://www.doingbusiness.org/en/data/exploretopics/enforcing-contracts>.
59. "Registering Property": Land Dispute Resolution Index, World Bank *Doing Business* indicators: <https://www.doingbusiness.org/en/data/exploretopics/registering-property>.
60. Multinationals can also make use of different treaties through investing from a third country. We sidestep this issue because not all investors can take advantage of restructuring to the same extent. Further, the scoring only

considers inclusion of an MFN provision and not any specific exceptions regarding regional integration agreements, ISDS procedural provisions, or phase of application that may be included in treaties and may change the applicable treatment on a case-by-case basis.

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