

Capital Mobilization Impacts Resulting from DFC's Political Risk Insurance Product

Impact Assessment Report

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Glossary of terms

BU	Berne Union
D4C	Debt-for-Climate
DFC	United States International Development Finance Corporation
DFI	Development Finance Institution
ECA	Export Credit Agency
ERU	Energy Resources of Ukraine
EU	European Union
FDI	Foreign Direct Investment
HIC	High-Income Country
ICIEC	Islamic Corporation for the Insurance of Investment and Export Credit
IFC	International Finance Corporation
IMF	International Monetary Fund
LIC	Low Income Country
LMIC	Lower Middle-Income Country
MCL	Maximum Contingent Liability
MIC	Lower Middle-Income and Upper Middle-Income Countries (LMICs and UMICs) as defined by the World Bank
MIGA	Multilateral Investment Guarantee Agency
OCE	Office of the Chief Executive
ODP	Office of Development Policy
OECD	Organization for Economic Co-operation and Development
OGC	Office of the General Council
OPIC	Overseas Private Investment Corporation
OSFI	Office of Structured Finance and Insurance
PCM	Private Capital Mobilization
PPA	Power Purchasing Agreement
PPP	Public-Private Partnership
PRI	Political Risk Insurance
SSA	Sub-Saharan Africa
TNC	The Nature Conservancy
UMIC	Upper Middle-Income Country
US	United States of America
WEF	World Economic Forum

Introduction

Since launching in 2019, the U.S. International Development Finance Corporation (DFC) has helped advance America's foreign policy by providing financing solutions to the most critical challenges facing the world today. DFC mobilizes private capital to invest in projects that create jobs and opportunities in emerging markets.

In this holistic assessment of DFC's Political Risk Insurance (PRI) initiatives, the primary goal was to measure the effectiveness of the product in mobilizing private capital by analyzing a portfolio of 14 DFC PRI projects that spanned ten countries and five sectors.

The analysis was framed through three primary objectives:

- 1. Understand the PRI and reinsurance context and channels for impact through a detailed analysis of the market landscape and a robust literature review*
- 2. Critically review the impact of 14 projects that have received DFC support by analyzing quantitative data and conducting a qualitative assessment through in-depth interviews with key DFC and market stakeholders*
- 3. Develop a clear set of lessons learned and recommendations that DFC can consider that could allow the organization to deploy its PRI and reinsurance products more strategically, and better measure and articulate its impact on mobilizing private capital*

The following pages will provide a comprehensive view of these three objectives, complete with marketplace dynamics, in-depth project and competitive analysis, and priority areas going forward.

Ultimately, the report is designed to provide a granular and comprehensive view of these findings. There is immense opportunity for DFC to expand, serve, and evaluate projects, maximizing developmental impact and creating new opportunities for its stakeholders and society at large.

Literature Review and Mechanisms for Capital Mobilization

Chapter Summary¹

The majority of foreign direct investment (FDI) (~65 percent) continues to flow to high-income, politically stable countries, as investments in many low-income countries are subject to a variety of additional project risks, including vulnerability to sizeable political risk. Political risk – which includes expropriation, corruption, and government ineffectiveness, among other areas – significantly inhibits FDI's potential impact.¹

Political Risk Insurance (PRI) can serve as a catalyst for private capital mobilization, effectively engaging countries with perceptions of higher political instabilities. This is seen in fragile and conflict-affected states where an average of 6.2 percent of FDI is covered by PRI, compared to 3.8 percent amongst sample lower-income countries.² By assuming part, or all, of the critical non-commercial project risk, PRI improves investor confidence and enhances credit of emerging market debt securities. In addition, and specifically in the case of public insurers, PRI can help prevent adverse political events (e.g., expropriation) from taking place.

Currently, PRI does not cover a significant number of investments in low-income countries (LICs) and lower middle-income countries (LMICs). The share of annual equity inflows into developing countries insured against political risks by Berne Union (BU) members stood at approximately 3.6 percent between 2010 and 2018.³ However, PRI coverage is likely to become more attractive, gaining traction and evolving alongside marketplace dynamics including the potential for higher yields in riskier emerging markets and the need to protect against downside losses as a result of an increasingly volatile global business environment and precarious geopolitical affairs.

The threat of adverse regulatory changes, breach of contract, convertibility restrictions, and expropriation stand as the most relevant factors to acquire PRI. New types of engagements between the private and public sector, such as public-private partnerships and public financing and subcontracting, have increased the investors' need to cover various types of political risks these structures present. Furthermore, PRI product attributes, perceived fairness of price, extent of coverage, and brand name, significantly influence clients' decisions on when, and from whom, to purchase PRI.

Links between PRI and Private Capital Mobilization

The primary goal of this literature review is to analyze the impact of political risk insurance and reinsurance activities in order to catalyze foreign equity and debt investments to developing economies. This objective is realized by reviewing literature across, and triangulating the implications between, three pillars (Exhibit 1):

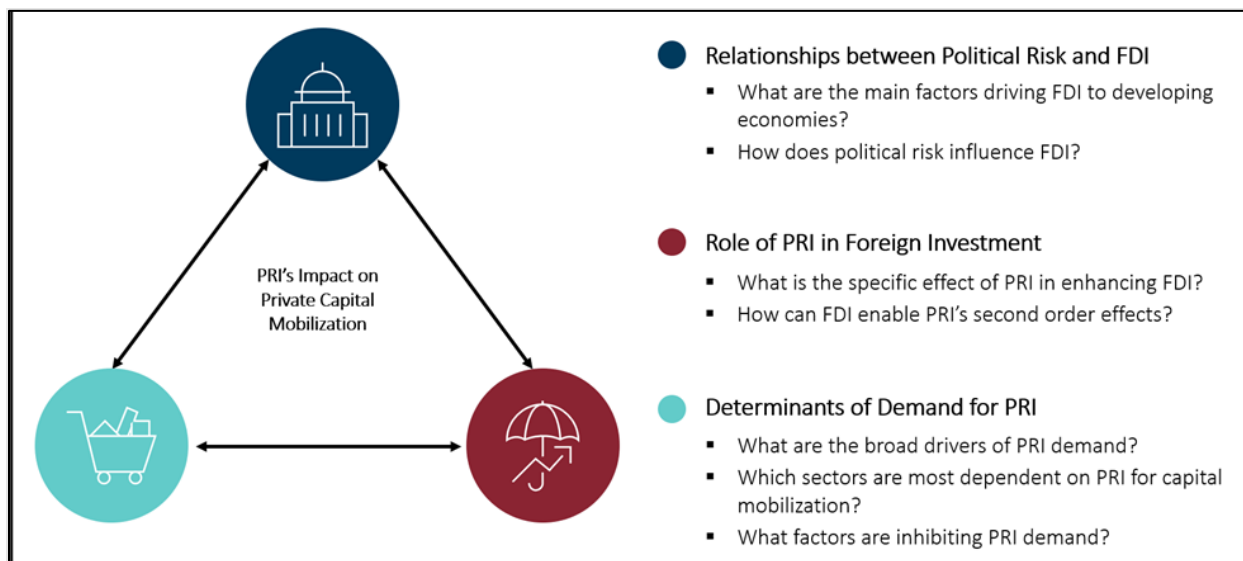
- i) **Political Risk and Foreign Investment:** Reviewing the literature on FDI to understand the main factors driving investment inflows to developing economies, as well as the role of political risk in relation to these flows.
- ii) **Role of PRI:** Analyzing the role that PRI can play in driving FDI while simultaneously anticipating and mitigating against potentially inhibiting factors. Through this assessment, we can develop an understanding

¹ Literature review may not reflect the impact of recent geopolitical events (e.g., war in Ukraine) as academic articles are yet to be published on such recent events.

and perspective on positive externalities that are created once investments into politically risky countries are covered by PRI.

iii) **Demand for PRI: Holistic, regional, and sector-level analysis of the drivers of demand for PRI.** Identifying the drivers of PRI demand and factors inhibiting demand, focusing on sectors that are most dependent on PRI to enable investment.

Exhibit 1



Political Risk and Foreign Investment

The need for FDI is greatest in emerging economies. However, most capital flows (~65 percent)⁴ are invested into high-income countries (HICs) and upper middle-income countries (UMICs). This imbalance of flows can be partially attributed to both perceived and real political and other non-commercial risks. This trend exists even within LICs/LMICs, as investments skew towards more politically stable environments. Between 2017 and 2020, LICs/LMICs in East Asia and Pacific accounted for 31 percent of FDI into LMICs/LICs, while Sub Saharan Africa only accounted for 20 percent.⁵ It is telling that investment flows within emerging economies skew toward East Asia and Pacific. On average, this region is comprised of countries with higher economic development levels.

Democracy is a critical driver of political stability, and directly corresponds with increased FDI inflows into developing countries.⁶ Democratic institutions may have a positive effect on FDI because democracy provides checks and balances on elected officials, reducing arbitrary government interventions, lowering the risk of policy reversals, and strengthening property right protections. However, research shows that there is an inverse effect of FDI in democracies when natural resources comprise a large share of the country's exports. A possible explanation includes that FDI in natural resources is often tightly controlled by the government, and it may be easier to develop preferential and close ties with the government in autocratic regimes.⁷

Overall, stronger institutions have a positive and economically significant effect on FDI. Some institutional aspects matter more than others. There are key factors which play an outsized role in deterring FDI

including: the unpredictability of laws, regulations and policies; excessive regulatory burdens; government instability; and lack of commitment. Furthermore, research has shown that improved institutional quality and declining political risk have attracted FDI to Sub-Saharan African countries.⁸

Politically risky investment environments are typically characterized by arbitrary policies that do not protect property rights or assure steady tax rates.⁹ Foreign investment is potentially harmed due to high uncertainty about potentially abrupt changes in host countries' political institutions and their ensuing policies.¹⁰ Specifically, inadequate protection of property rights or insufficient contract enforcement raise transaction costs for investors. Further, risk premiums are increased significantly with the absence of formal and informal institutions required to maintain the rule of law, and information asymmetries among market actors related to the costs associated with the market value of products.¹¹

Expropriation risk one of the most significant concerns for investors. It is a key driver of FDI's uneven investment flow across developing countries.¹² This effect is more pronounced in countries that receive little foreign aid, as aid is often used as leverage to offset expropriation risk.¹³ However, aid alone cannot entirely offset the adverse effects of political risk. Countries still need to take measures to reduce the types of risks that deter FDI, such as the lack of enforcement of rules and regulations.¹⁴

Role of PRI

PRI enables investors to mitigate against country risk and increase the financial returns of projects. As such, PRI facilitates investment in high-risk countries that otherwise would not be considered. The main role of PRI, as emphasized in the literature, is to transfer foreign investors' capital exposure to insurance providers that are less risk averse and more capable to bear the risk.¹⁵ Additionally, PRI coverage protects foreign investors from asset-based and trade-related risks such as events in which the host nation forces shareholders to sell off their stake in a foreign enterprise, defaults on obligations, or illegally revokes licenses and permits, among other risks.

PRI plays a relevant role in mobilizing capital to fragile and conflict-affected states, generating higher demand for insurance from investors in these countries. From 2010 to 2018, fragile states had on average 6.2 percent of FDI covered with insurance while lower-income countries had an average of 3.8 percent in the same period among countries surveyed for an Islamic Corporation for the Insurance of Investment and Export Credit (ICIEC) report.¹⁶ However, the report highlights differences among country peers. For instance, considering fragile and conflict-affected states, Rwanda had an average of 13 percent of FDI covered with PRI, while Chad had a share of 0.9 percent. The report illustrates that as some countries – even in the same income category – have less access to other sources of finance and PRI than others, there are still substantial differences regarding risk perceptions of the market in individual countries.¹⁷

Beyond PRI's risk allocation impact, the literature emphasizes PRI's second-order effects in developing countries, including positive externalities related to improving investor confidence, enhancement of credit conditions, and increased valuation of investment projects.

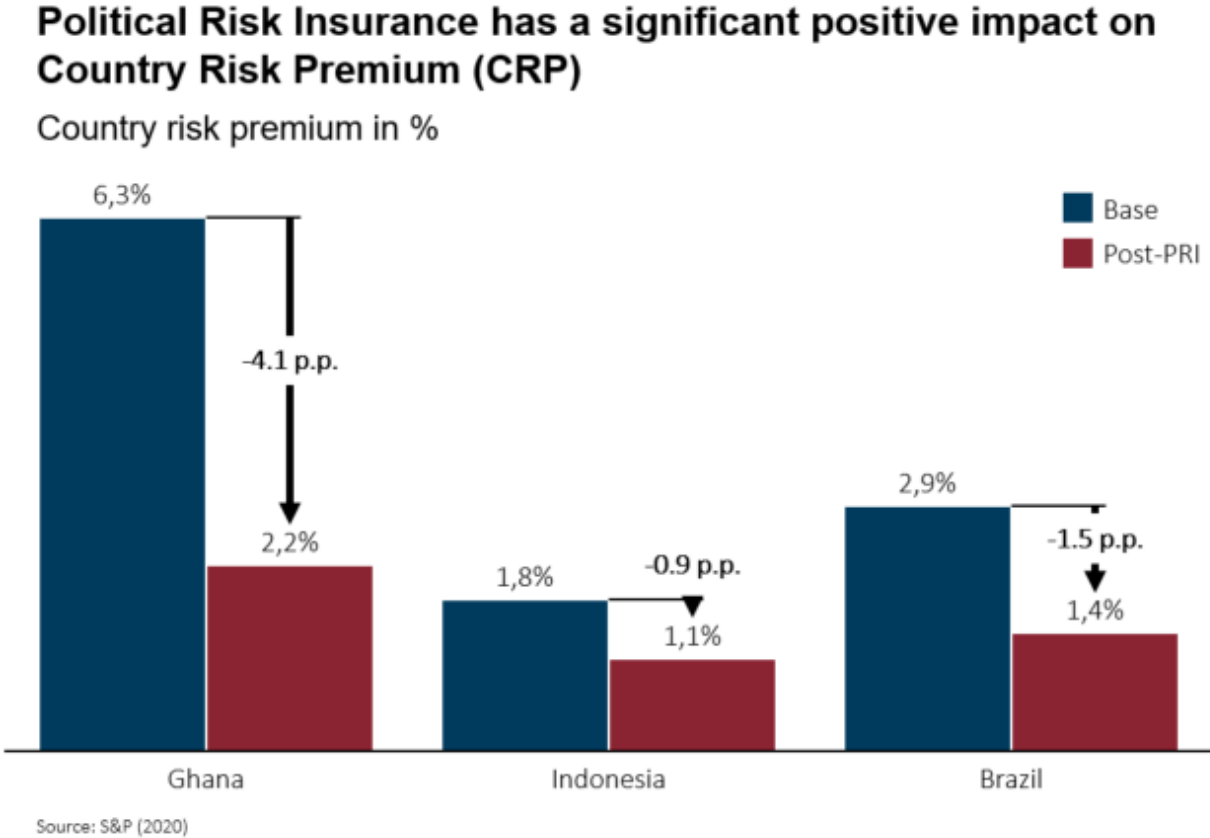
PRI enables favorable lending terms for foreign investments. Theoretically, PRI compensates for the potential economic losses caused by asset-and-trade-related adverse events.¹⁸ Most insurers cover 90 percent of the risk, requiring the investor to bear the remaining portion.¹⁹ Political risk insurers protect investors' balance sheets from unanticipated damages from the host/foreign governments that are otherwise difficult to mitigate. PRI limits corporate liability and preserves shareholder value invested in

foreign projects, thereby encouraging investment in geographies and sectors where it would not occur otherwise.²⁰

PRI can be used for credit enhancement of emerging market debt securities. Lenders and rating agencies reward PRI-insured debt issue, especially if there is a partial payment facility independent of final arbitration rulings.²¹ For instance, if a company wants to finance an infrastructure project in a B- rated country with a bond offering on the New York Stock Exchange, it may be able to achieve an investment grade rating depending on the PRI coverage it negotiates and the structure of the deal (reserve, arbitration attributes, and timing). As a result, the company could reduce the spread over Treasury bills paid on the bonds. In addition, a robust debt reserve payment mechanism is key to credit enhancement and assuring continued returns to bondholders.

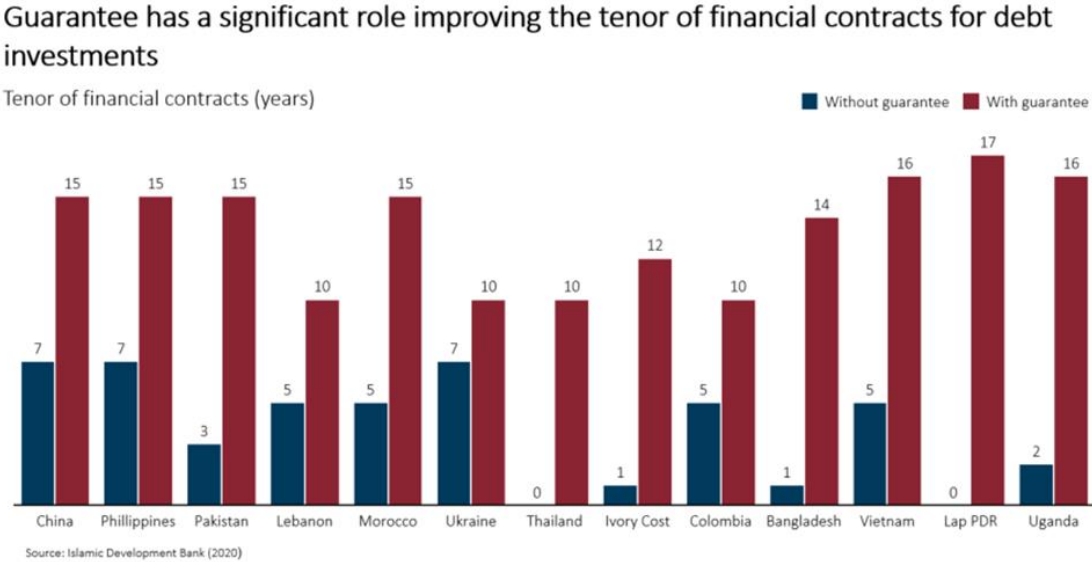
PRI curbs country risk premiums, improves the valuation of investments in emerging markets, and enhances the internal rate of return of development projects.²² In work conducted by S&P Global, a single representative project was looked at in three differently rated country contexts: Ghana, Indonesia, and Brazil (B- to BBB in S&P/Fitch rating equivalents), and insurable perils covered under PRI were mapped against 21 risk events. The study showed that, assuming full coverage, PRI typically improved country risk premiums (CRP), the related credit rating equivalent of an investment project, and increased internal rate of returns and net present values of projects (Exhibit 2). The main conclusion of the work is that PRI thus does more for a company than cover insured losses, as a lower CRP confers higher asset valuation, enables investment finance on more favorable terms, and other benefits.

Exhibit 2



In addition, for medium-and long-term debt investments, guarantees (proxies of political risk insurance) can also provide better financial terms and conditions. A study from the Islamic Development Bank showed the impact of having guarantees from The International Bank for Reconstruction and Development (IBRD) on the tenor and pricing of financial contracts among 13 countries (Exhibit 3). The report highlights that on one hand, having insurance or guarantees can extend credit periods up to 10-15 years. On the other hand, insurance or guarantees can provide favorable interest rates and lending conditions.²³

Exhibit 3



Public providers of PRI can avoid adverse events through diplomatic channels. A public PRI provider's involvement in a project can prevent host governments from taking discriminatory and unwarranted actions against the insured investor. Public insurers can advocate to avoid adverse events from occurring through political engagement with relevant public entities. Furthermore, host governments may be worried about jeopardizing their relationship with other bilateral or multilateral organizations related to the insurer if political problems arise in a publicly insured project. This decreases the likelihood that PRI trigger events occur, further reducing the risk of the investment. As a result, PRI improves fundraising and project financing opportunities for investors.²⁴

Furthermore, there are additional advantages that public PRI providers can leverage. Public entities have better access to information through public and diplomatic channels, and have broader development ambitions beyond profitability, which enables higher risk tolerance.²⁵ First, public entities have broader, context-specific knowledge about the host governments' potential actions and intentions. This information can be used to stabilize premiums to cover their risk as needed. However, if host governments act under bilateral investment treaties, it will narrow the existing information asymmetry between public and private PRI issuers. Second, public entities often have a statutory mandate to support their sponsor government's policy goals. Unlike private providers, they can operate at break-even, or even at loss, with subsidies from sponsoring governments, and without the fiduciary responsibility of generating profits for shareholders. This convergence of factors, combined with the deterrent effect of public institutions on host governments,

create an opportunity whereby investors are increasingly willing to pay for lower and more predictable premiums of publicly provisioned PRI.²⁶

Although its role is critical to enhancing FDI flows to developing economies, PRI is not the main tool considered by investors to mitigate political risk. According to the results of a survey conducted by MIGA-EIU, most of the firms address political risks by setting joint ventures with domestic partners, exercising caution by implementing investment plans gradually, and performing in-house political risk analysis. In 2011, one in five firms used investment insurance to mitigate political risks.²⁷ This number varies by sector, with utility companies (28 percent of firms) and the financial service sector (25 percent) being those with a higher number of firms using PRI, ahead of manufacturing (21 percent) and non-financial services (12 percent).²⁸

Demand for PRI

A significant number of investments in LICs/LMICs are not covered by PRI. Between 2010 and 2018, the share of annual equity inflows into developing countries insured against political risks by Berne Union members stood at approximately 3.6 percent.²⁹ In total, an estimated 5 percent of FDI inflows, excluding third-party loans, was insured against political risks. In 2018, only 0.7 percent of the stock of foreign equity investments and 1 percent of total FDI stock, were insured by Berne Union members.

In addition, there is a potential gap of PRI provided to south-south and domestic investments. First, the majority of PRI for equity investments are provided by Export Credit Agencies. However, they tend to only provide support to investors from the country in which they are domiciled. Also, domestic equity investments lack access to PRI as the insurance supply is mostly focused on foreign direct investments. Domestic investors could benefit from coverage against political violence and breach of contract risk in public-private partnerships, in which a local investor makes an equity investment.³⁰

Adverse regulatory changes, breach of contract, convertibility restrictions, and expropriation stand as the most relevant factors to acquire PRI. Project structures that engage both the private and public sector, such as public-private partnerships and public financing and subcontracting, increase the desire to mitigate against inconvertibility and expropriation risks, in addition to the desire to protecting investments from traditional factors such as war or terrorism acts. In sectors in which the regulatory frameworks are complex and the public sector plays a critical role – predominantly oil and gas, mining, electricity and power, and telecommunications – PRI is considered to cover contractual risks and country level risks.³¹

Previous growth in the demand for PRI has been driven by the appetite of investors to enter higher yield markets coupled with the risks implied in these markets. According to the literature, the higher the magnitude and probability of potential loss, which is gauged by risk managers' perceived exposure to political risks, the more likely an investor is to seek out PRI policies.³² The growth seen in FDI up until 2016, directed to Asia, Sub-Saharan Africa, and Latin America, is reflected in the gradual orientations of new PRI business towards these markets.³³

Investors have targeted sectors with high intrinsic risks to create additional financial returns. Investors are attracted by higher returns in natural resource-based sectors, power generation, and infrastructure – projects that are linked to expropriation risks, asset devaluation, and contract frustration. For instance, in Latin America, independent power producers and their lenders are hesitant to enter new markets without PRI. As a result, investors are buying PRI and incorporating the cost into the price agreements.³⁴

A number of key factors may also inhibit PRI demand. According to the literature, investor willingness to pay, coverage gaps, and contract complexity are the main limiting factors to procuring PRI. First, high insurance costs in fragile states limits PRI adoption. Second, some key risks such as partial expropriation and asset devaluation, are out of scope for typical insurance products. Finally, the complexity of insurance contracts, and the lack of transparency and clear communication, affect the perceived adequacy of contract prices, reducing incentives to acquire PRI.³⁵ To combat this issue and generate higher PRI demand, it is important to expand the types of losses or events covered by PRI, and improve contract design and communication.³⁶

Implications for Pathways of Private Capital Mobilization for PRI

The insights from the literature review have been used to distill a framework for evaluating DFC's ability to mobilize private capital through its PRI activities. DFC can drive private capital mobilization (PCM) through both first order (direct) and second order (indirect) effects.

First order PCM effects relate to mobilizing capital for the specific investment on which DFC is providing PRI. First order PCM involves reducing or reallocating risk taken on by the private investor. As a result, it will decrease the risk profile and improve the expected returns of the project to the extent that the investor feels confident to pursue the investment. A key condition for private capital mobilization is the additionality of the coverage – that the investment would not take place absent the coverage. The key channels through which DFC's PRI activities can most directly impact capital mobilization are:

- Improving expected returns from the investor's reduced risk allocation
- Securing investor buy-in conditional on reduced risk
- Enhancing credit and lending terms
- Reducing likelihood of political risk events as a result of DFC's political and diplomatic engagement

Second order PCM effects relate to a broader perspective on capital mobilization. For example, this could mean enabling the investor to conduct subsequent investments or attracting additional capital into the sector. Second order impacts materialize when impact in the country and/or sector are changed beyond the scope of the individual covered transaction. The key channels through which DFC's PRI activities can indirectly impact capital mobilization include:

- Improving formal and informal institutions (e.g., pioneering contracting or purchasing agreement regimes in the host country)
- Decreasing risk perception through demonstration effects, i.e., decreasing information asymmetries for investors by pioneering and proving an investment thesis in the country or sector.
- Improving physical assets and infrastructure in the country, in the energy or infrastructure sector as an example, for a specific project which then ultimately enhance and facilitate business engagements for other investors

PRI Market Overview and Trends

Chapter Summary

This chapter assesses the global political risk insurance market, focused on evaluating the factors that impact demand for DFC's PRI coverages, particularly the underlying insurable investment flows, global risk perceptions, and the competitive marketplace dynamics.

The PRI market has been shrinking 10 percent p.a. since 2017, likely reflecting somewhat volatile cross-border investment flows to low- (LICs) and middle-income countries (MICs), which decreased by 7 percent annually from 2017 to 2020.³⁷ The impact of the war in Ukraine, supply chain constraints, continued impact from the COVID-19 pandemic, and growing civil unrest globally mean that 2022 FDI flows are expected to further decline, hitting decade-low levels.

Global risk levels are increasing, as 90 percent of global leaders have an increasingly negative perception toward global outcomes.³⁸ Increased risk perception has opposing impacts on PRI demand: it increases demand for PRI insofar as overall risk tolerance levels aren't exceeded, in which case underlying investments (and therefore PRI) start to decrease. Across geopolitical, economic, and environmental macro risk factors, evidence was found for both positive and negative implications for PRI demand. Increased sovereign debt levels, civil unrest, and climate policy risks may increase demand for PRI, while ongoing wars, more severe cases of unrest or conflict, and recession risk may dampen investments and thus PRI demand.

DFC has a clear niche supporting the riskiest countries with high exposures and tenors. Customer interviews indicate strong competitiveness and differentiation. DFC has achieved a top 8 market share in the global PRI market (including Export Credit Agencies) since 2020, with a 31 percent market share (excluding Export Credit Agencies) of total 2021 issuance in countries that are rated CCC+ and lower or unrated.³⁹ There is opportunity for growth by further solidifying DFC's position in risky markets. DFC is overall competitive with leading public insurers on price, maximum tenor, and exposure limits. However, DFC has opportunities to diversify and bolster its range of product offerings, organizational scale, and strategic focus relative to key competitors. DFC's clients highlight its flexibility and collaborative model (or partnership) as core competitive advantages.

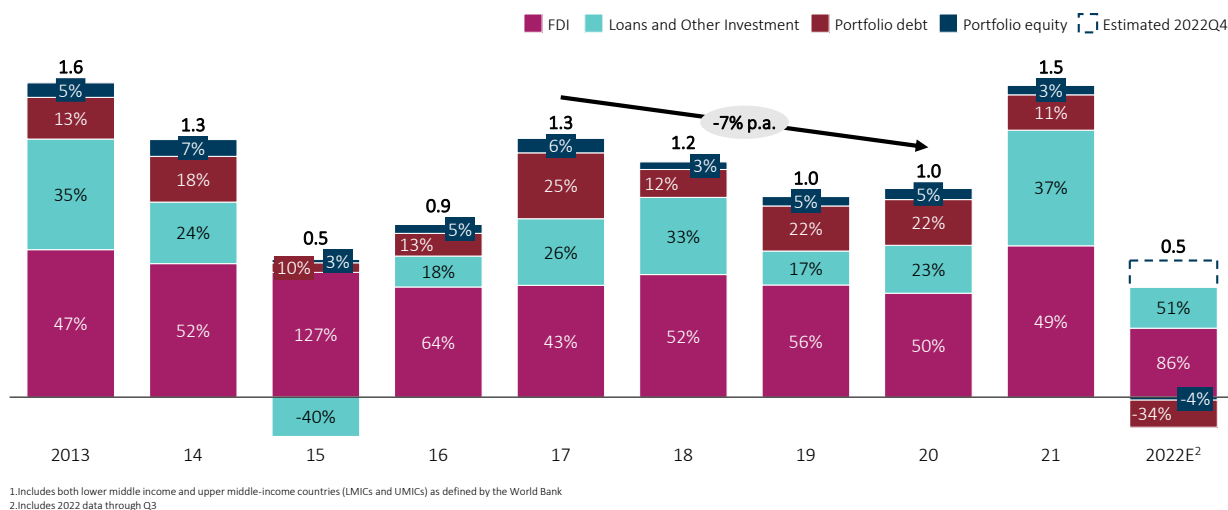
Insurable Investment Flows

The biggest driver of PRI demand is changes in the underlying, insurable investment flows, especially foreign direct investments into lower- and middle-income countries. Since 2017, these cross-border flows have been declining by 7 percent year-over-year.⁴⁰ This is reflected in a 10 percent annual decrease in PRI issuances in recent years.⁴¹

Cross-border investment flows to LICs and MICs have been on a downward trend since 2017, with negative implications for the total addressable market for PRI providers. Cross-border investments represent the underlying insurable flows for the global PRI market. From 2017 to 2020, investments shrunk by 7 percent p.a. (Exhibit 4).⁴² A one-off spike in 2021 was driven by pandemic stimulus and international aid, which caused decade high levels of cross-border flow. However, this spike is not projected to be sustained in 2022 as appetite for further stimulus diminishes. Rather, 2022 is expected to return to decade-low levels with a drop of ~28 percent compared to 2020 (should trends from H1 2022 continue), driven by the impact of the war in Ukraine and supply chain constraints.⁴³

Exhibit 4

Cross-border investment flows to LICs and MICs¹, \$ T



These declining cross-border investments are driven mainly by decreasing investments in MICs, while lower income countries experienced flat growth leading up to the pandemic. Upper middle-income countries (UMICs) saw a decline of 6 percent p.a. from 2017 to 2020, LMICs a decline of 10 percent p.a., while LICs experienced slight growth of 2 percent p.a. in the same period.⁴⁴ The overall FDI fluctuations have primarily been driven by cyclical flows into UMICs as investors chase yield. This decline in cross-border flows to LMICs came despite favorable economic conditions prior to the pandemic. In short, FDI has not kept pace with overall economic growth in LMICs. Post-pandemic, LICs seem to be the most affected by declining FDI flows: LICs are projected to see a decline of 51 percent p.a. in FDI from 2020 to 2022, while this decline is 20 percent and 31 percent for UMICs and LMICs, respectively.⁴⁵

China has overtaken the US as the largest source of FDI into low- and middle-income countries. In 2017-2020, China accounted for \$54 billion of FDI into LICs/MICs, on average, while the US accounted for \$49 billion.⁴⁶ Assuming Chinese FDI flows are more likely to be captured by its sovereign Export Credit Agency (ECA), this represents an additional constraint on DFC's addressable market. Japan, Germany, and South Korea round out the top five globally. More than two-thirds of DFC's PRI exposure is concentrated in Sub-Saharan Africa and Latin America. Fifty percent of Chinese FDI is funneled to those two core regions. In assessing FDI flows to Sub-Saharan Africa, the top investor country by far is China; \$9 billion vs. US's \$4 billion. The US is the second largest investor.⁴⁷

Following years of growth, the PRI market has been shrinking 10 percent p.a. since 2017.⁴⁸ The declining PRI market likely reflects the shrinking cross-border investment flows into emerging markets, and additionally may reflect a decrease in investor demand for mitigation against political risks in these markets. Private insurers and ECAs represent >80 percent of PRI issuance,⁴⁹ while multilateral and major public insurers including DFC and MIGA represent 10-15 percent of issuance. The growth of multilateral and major public insurers over the last four years represents a strengthening of these insurers in the market as ECAs and private providers pull back from the market.⁵⁰

PRI issuance has held steady in LICs over the past few years while issuance in LMICs and UMICs declined sharply.⁵¹ From 2018 to 2021, PRI issuance in LMICs and UMICs declined by 15 percent and 16 percent p.a., respectively (Exhibit 5). In the same period, LICs remained relatively steady (slight decline of 3 percent p.a.). LICs have maintained a relatively constant share of PRI issuance of 7-12 percent of total issuance in LICs/MICs.⁵² LICs have also represented a disproportionate share of PRI issuance compared to their typical share of cross border flows (2-3 percent). Fragile and conflict-affected states across income types saw a sharper decline of 17 percent p.a. in PRI issuance over the same period. However, like LICs, they maintained a disproportionate share of PRI issuance (7-16 percent of total issuance in LICs/MICs) compared to their typical share of cross-border flows (1-5 percent) (Exhibit 6).

Exhibit 5

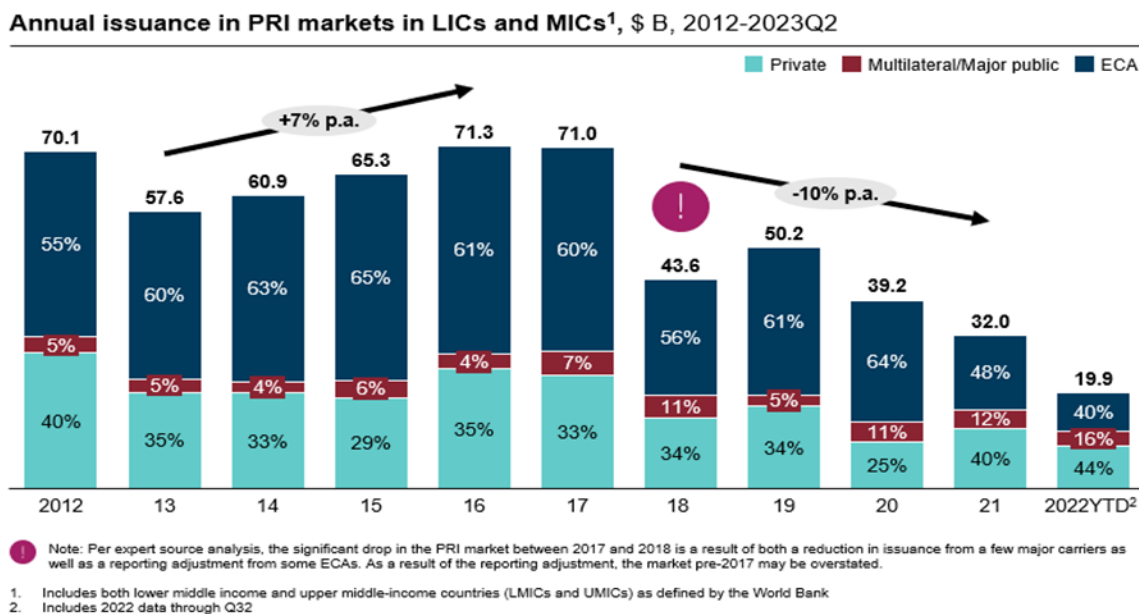
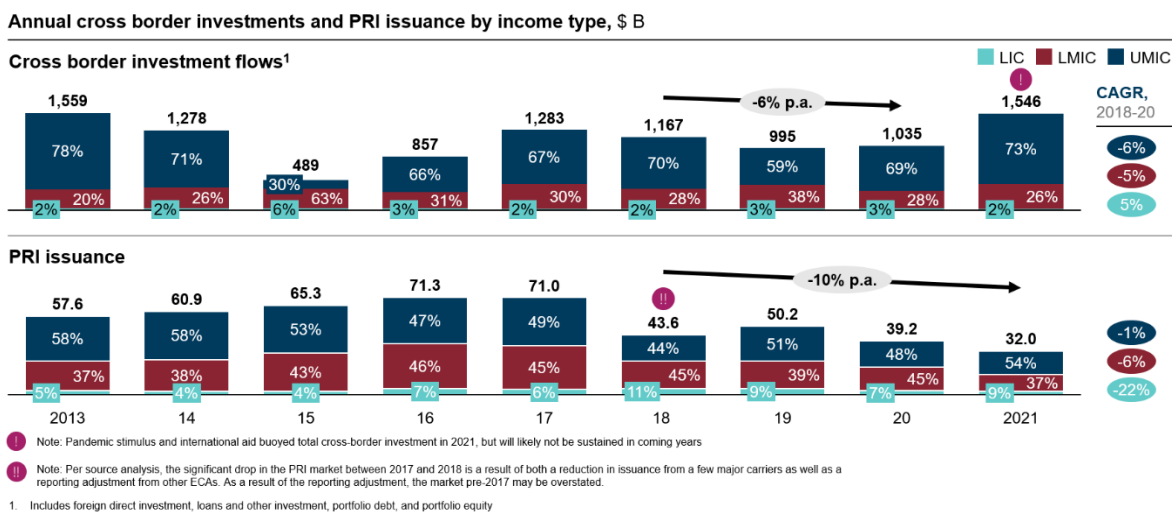


Exhibit 6



Brokers play a significant role in PRI issuance from private providers. It is estimated that >90 percent of PRI procurement in the private sector is completed through brokers, compared to an <50 percent for public providers. However, broker usage among public providers is highly variable. For example, MIGA no longer engages brokers, but this is an outlier among many Western multilaterals/ECAs. For re-insurance, broker usage increases among public providers. Data is not readily available on PRI issuance by private insurers without reinsurance from a public provider, but reinsurers did note that in high risk emerging markets (e.g., Sub-Saharan Africa), many private players will not provide PRI without the support of a public insurer. However, a majority of coverage from private providers likely has no public sector involvement (as reinsurer or reinsured).

There is also a lack of data on the types of policies and projects PRI issuance covers. Although corporate blanket policies are favorable for insurers, they at best make up 25 percent of contract volumes for the private sector. These volumes will be even lower for the public sector. Other breakdowns like coverage of greenfield vs brownfield projects, are also unclear and highly dependent on the sector. For example in the energy sector, the past few years have shown a significant growth in renewable greenfield projects. However, since the war in Ukraine began, there has been a resurgence of expansion of brownfield projects for fossil fuels.

Global Risk Perception

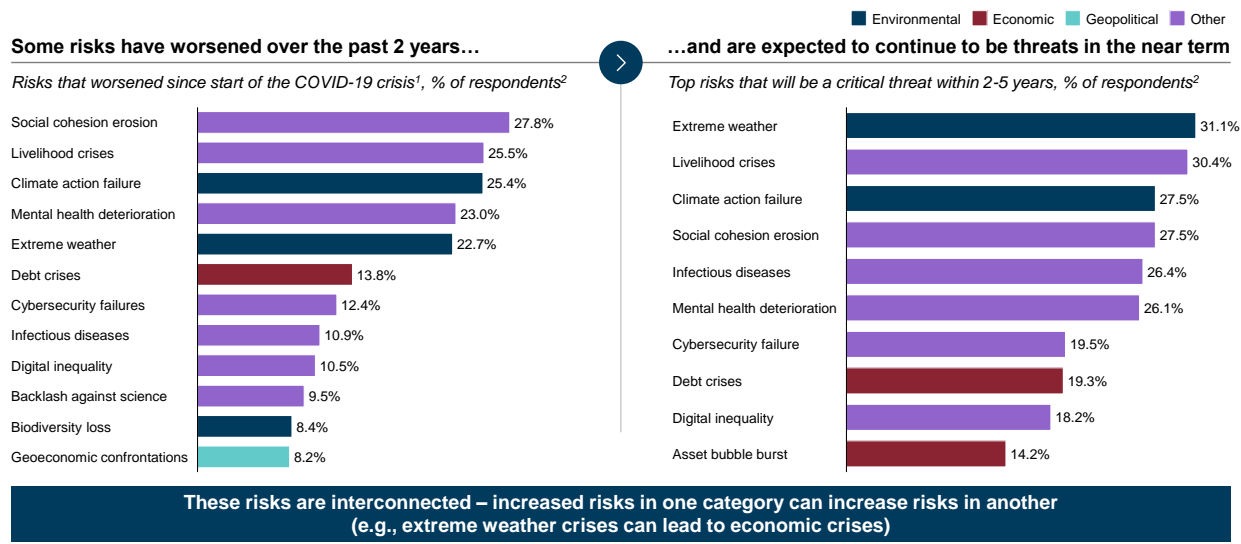
Increasing risk perceptions could have opposing impacts on PRI demand. Through one lens, there is increased demand for PRI coverage as a result of increased sovereign debt levels, civil unrest, and public-private project structures – and the combination that the three risks create. However, in looking through another lens, ongoing wars, more severe cases of unrest or conflict, and recession risk may decrease overall investment and thus PRI demand. In particular, the war in Ukraine has given many investors pause at the speed at which a geopolitical situation can change. Events such as these are likely to increase risk perceptions and thereby may increase the demand for PRI.

Global risk perception is increasing. Almost all global leaders have an increasingly negative view toward global outcomes.⁵³ When asked for their outlook for the world over the next three years, only 10 percent of global leaders expect decreasing risks and accelerated global recovery, while 90 percent predict increasing risk, with scenarios including consistent volatility and increasing catastrophic outcomes.⁵⁴

Geopolitical, economic, and environmental macro risks have increased over the past 2 years and are expected to continue on a downward trend. Environmental risks climb to the top of risks that global leaders expect to increase in the next two-to-five years (Exhibit 7).⁵⁵

In the short-to-medium term, there are several macro risks that will significantly impact PRI demand. Geopolitical and economic factors are expected to be strongest in the short-term, but environmental and climate risk factors are becoming increasingly important. The remainder of this section highlights a few non-commercial risks that will have a direct impact on PRI in the short-to-medium term.

Exhibit 7



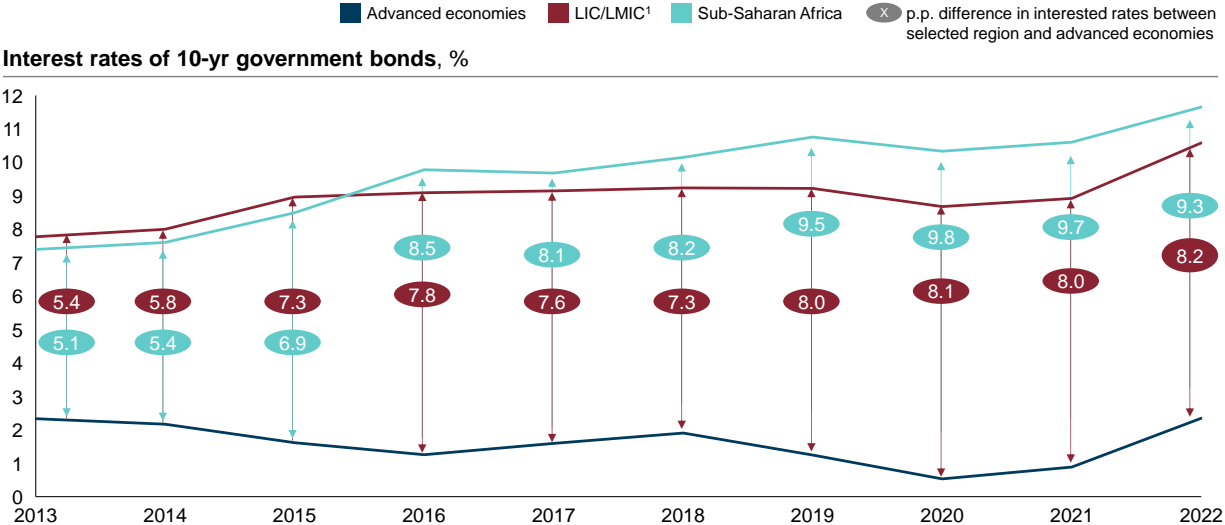
Geopolitically, ongoing wars, and civil unrest will result in loss of life, damage of real assets and infrastructure, and restrictions on the movement of resources and goods, with two-sided implications for PRI demand. The Russian invasion of Ukraine is expected to continue to lead to major loss of life, infrastructure damage, energy disruptions, economic sanctions, and tenuous interstate relations – in Europe and beyond. The impact of the crisis on supply chains and food security may become a vector for further political risks in wide-ranging regions that are facing food insecurity or inflation challenges. Similarly, increased civil unrest across LICs/MICs will lead to prolonged loss of life and physical damage, while also likely leading to restrictions on goods, knowledge, and resources flowing in and out of impacted geographies. The implications of increased political instability for the PRI market will likely increase demand for political violence coverage; though this may be supplanted by overall decreased investments in impacted geographies.

Economic risk factors, particularly sovereign debt and recession risks are expected to increase demand for arbitral award and currency inconvertibility coverage. Debt crises across LICs/MICs risk leading to fiscal crises, sovereign defaults, debt reduction negotiations, and disputes (e.g., as is presently salient risks in Ghana and Egypt). Recession risks are expected to lead to limited spending, unemployment, internal displacement, and other civil consequences. These economic risk factors will likely increase the demand for arbitral award, expropriation, and currency inconvertibility coverages. It will also lead to increased risk for trigger events.

Environmental and climate risks exacerbate an already unstable political and economic climate. Abrupt or far-reaching policy changes, regulations, or taxes imposed to facilitate green energy transitions can spark significant political risks (e.g., the EU's recent carbon border adjustments). It is unclear whether those risks are covered under existing PRI policies and may be a potential growth area for PRI providers. Moreover, physical climate risks and extreme weather events (e.g., floods) can amplify destabilized political situations and increase the frequency of economic crises, potentially increasing the demand for arbitral award coverages.

Investors' risk perceptions of emerging markets investments are increasing, as seen in the higher risk premia that markets are demanding for emerging market sovereign debt. A widening spread of interest rates between LICs/LMICs and advanced economies from ~5 p.p. in 2013 to more than 8 p.p. in 2022 demonstrates an increase in perceived risk of emerging markets (Exhibit 8).⁵⁶ This risk premium is even more pronounced when looking at Sub-Saharan Africa, which is DFC's largest market; the interest rate spread between Sub-Saharan Africa and advanced economies has grown by more than 4 p.p. over the last 10 years - from ~5 p.p. in 2013 to more than 9 p.p. in 2022.⁵⁷ Worsening risk perception is also reflected in the increasing number of sovereign rating downgrades: the share of investment grade sovereigns has steadily decreased from 52 percent in 2013 to 45 percent in 2022.⁵⁸

Exhibit 8



1. Data available for 32 countries

DFC has a larger market share in riskier markets; increased risk in emerging markets may therefore mean an increase in the addressable market for DFC. More than a quarter of DFC's PRI exposure is in markets with a CCC rating or lower. Thus, worsening risk perceptions, as reflected in increased risk premia and sovereign rating downgrades, potentially mean an increase in the addressable market for DFC.

Looking towards the future, several headwinds and tailwinds are critical for DFC to be aware of to understand trends in PRI demand. Tailwinds, defined as factors that increase risk perception within acceptable risk levels include:

- The increasing spread of US treasury bond yields vs. emerging market bond yields; and
- The increase in credit default swaps in emerging markets, as more people are seeking default protection, which can be considered a proxy for investors willing to purchase protection for illiquid assets

However, rising interest rates can also have secondary effects on PRI, as the high cost of capital puts pressure on developers to minimize PRI costs. Key metrics indicating headwinds, defined as factors that decrease investment levels or cause risk tolerances to be exceeded include a decrease in:

- FDI flows;

- Capital outflows from emerging markets, which is a warning sign of overall decrease of demand for assets; and
- Gross capital formation in emerging markets, which is a warning sign of a decreasingly suitable investment environment

Meanwhile, a few indicators remain ambiguous as to their implications on overall demand levels including:

- Significant increase in perceived risk levels raise the need for PRI but may also make investors more reluctant to invest; and
- Sovereign rating downgrades signal deteriorating status of a country’s ability to meet its sovereign financial obligations, but also may mean an increase in market share for DFC who is competitively well-positioned in sub-investment grade markets.

Market Dynamics

DFC’s largest competitors are other public insurers – especially MIGA as it has a directly comparable product offering and target segment. DFC has a clear competitive niche supporting the riskiest countries with high exposures and tenors. Customer interviews indicate strong competitiveness and differentiation.

[Sensitive Market Information Redacted]

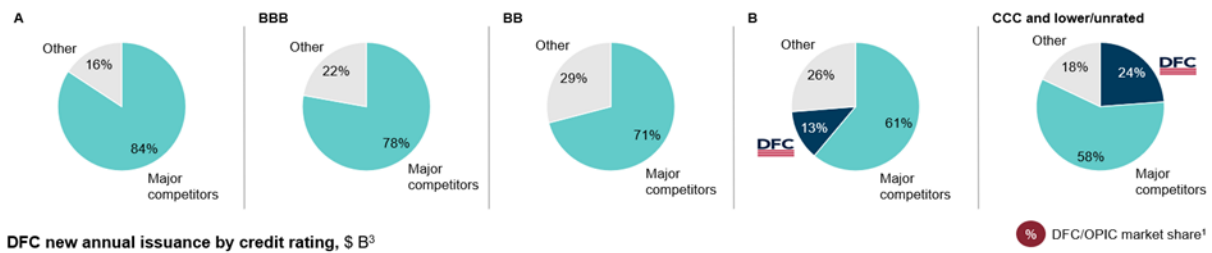
DFC has a strong and growing presence in the lowest income and most risky markets. DFC has consistently maintained a high market share in countries with sovereign debt ratings of CCC+ or lower or in those that are unrated, with 31 percent share in new annual issuance in 2021 (Exhibit 9).⁵⁹ Moreover, DFC shows a stronger presence in LICs and LMICs across both issuance and maximum liability (exposure). DFC’s clients are remarking the importance of this strategy for capital mobilization – as one investor said:

“Getting the PRI was really impactful and really helped us de-risk the whole project, and take on those massive exposures as we did in this case. DFC was willing to step in for some of the countries where our private insurer wasn’t willing to go.” – DFC client⁶⁰

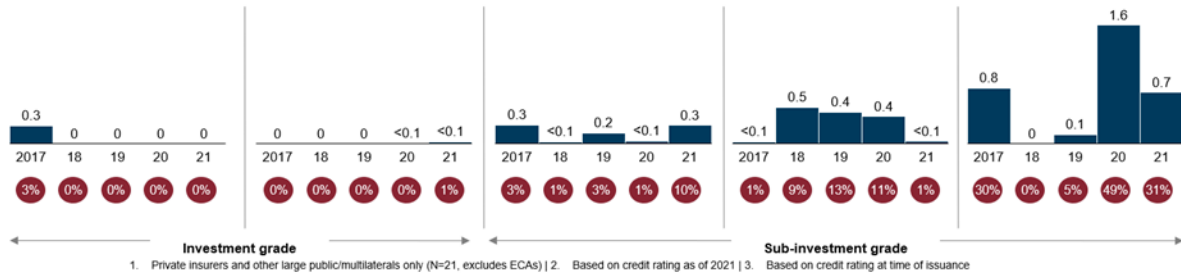
[Sensitive market information redacted] (Exhibit 10).

Exhibit 9

Market share by credit rating, total portfolio as of 2021, % of \$ B^{1,2}



DFC new annual issuance by credit rating, \$ B³



1. Private insurers and other large public/multilaterals only (N=21, excludes ECAs) | 2. Based on credit rating as of 2021 | 3. Based on credit rating at time of issuance

Despite a decline in total PRI issuance, exposure (maximum limit of liability) continues to increase, especially for ECAs, indicating an increasing market capacity. ECA exposure within LMICs has more than doubled since 2017, indicating growing risk appetite among ECAs. Similarly, ECA exposure almost doubled within LICs, though issuance remained flat / declining. Private providers have kept their exposures relatively steady. DFC, like the ECAs, has shown a rapid increase in exposures in LICs since its creation.⁶¹

[Sensitive Market Information Redacted]

Exhibit 10



Exhibit 11

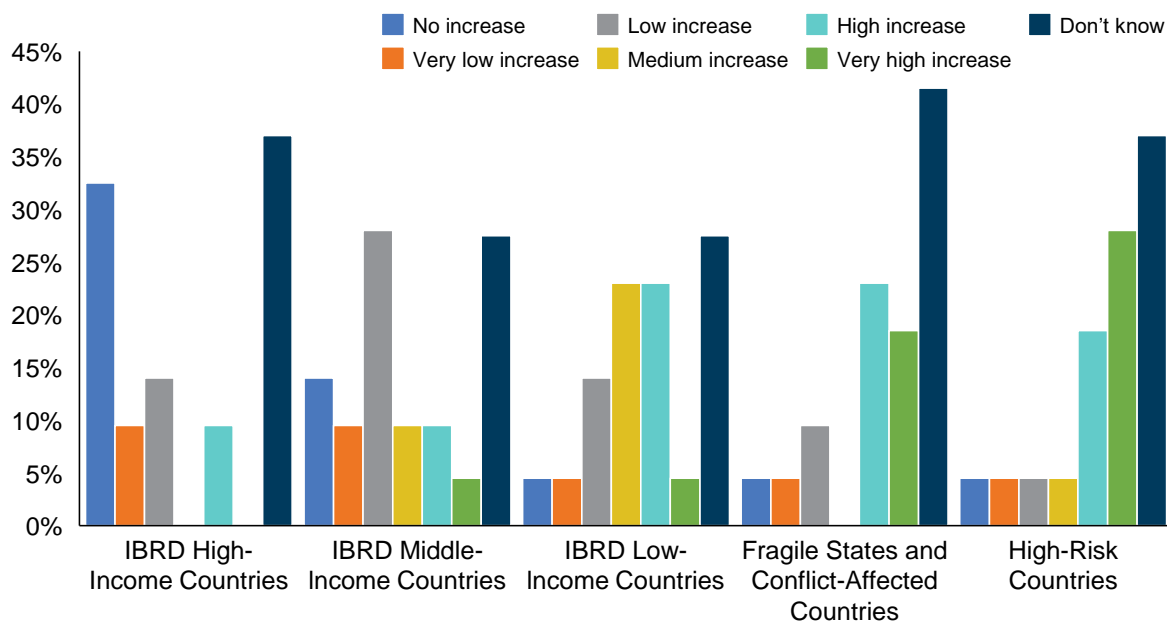


Private capital mobilized (PCM) is an important metric for measuring the impact of PRI, and competitors leverage PCM to monitor success of changes in PRI programs. There is a clear and positive relationship between PRI availability and FDI volumes, and therefore volume of PCM in LICs and other fragile/high-risk countries (Exhibit 12).⁶² As PRI availability increases in the riskiest regions, it will likely attract additional FDI. A recent report by the World Bank Group confirmed that all MIGA activities directly mobilize private capital, and specifically, that MIGA guarantees improved investor ability to raise capital. In the past decade, MIGA has made significant structural changes, including covering additional risk types (e.g., credit enhancement), covering additional underlying financial instruments (e.g., swaps and bond issuances), expanding coverage to new investor groups, and designing new project structures. The success of these changes can be measured in the doubling of MIGA’s PCM from 2015 to 2019.⁶³

Exhibit 12

Additional PRI availability would likely lead to increased PCM in LICs and fragile/high-risk countries

Impact of additional PRI capacity on FDI into Developing Countries, % of respondents (buyers of PRI)¹



1. Buyers of PRI (commercial banks and institutional investors) were asked "Do you believe that additional insurance capacity for PRI for equity investment will substantially increase or mobilize additional equity investments in developing countries?" as part of the ICIEC survey for the joint MDB G20 stock-take study

Source: MIGA, ICIEC

DFC’s core competitive advantages lie in tenor, rates, exposure size, geographical risk willingness, and flexibility. According to interviews with PRI customers and market participants, DFC is generally considered to have a strong, competitive offering; interviewees value DFC’s backing of the US government, its flexibility on coverage changes, its long tenors, and its pricing, which is generally on-par with MIGA’s. Moreover, DFC is almost comparable with MIGA in terms of maximum coverages that it’s willing to take on.

“We used to have a very traditional contract, but now DFC has given us a more flexible deal where they allow us to change the coverage every quarter given how unpredictable the situation is.” – DFC client⁶⁴

“DFC has a lot of sway because of the backing of the US government. Simply having the DFC name affiliated is a deterrence to government or local oligarchs meddling.” – DFC client⁶⁵

DFC’s environmental and social (E&S) safeguard requirements have positive, but mixed feedback from the market. DFC’s E&S requirements are viewed as a clear risk mitigant, and DFC backing gives projects a “stamp of approval” compared to private insurers. However, this the weight of this “stamp of approval” is sometimes more limited than MIGA depending on geography (e.g., in Sub-Saharan Africa where DFC clients felt MIGA had more influence). While there is growing awareness of the importance of meeting high E&S standards among private insurers, many of them still rely on the standards of the insured parties (e.g.,

Equator Principles for banks). However, investors do note the rigor and paperwork needed to meet the requirements, which can create challenges depending on where a project is in its development timeline.

DFC lags competitors on brand recognition, perceived restrictions due to US investor focus, and capacity constraints. According to interviews with PRI customers and market participants, DFC doesn't have as strong of brand recognition as MIGA. Investors across both Africa and Latin America, DFC's main markets, mentioned that DFC isn't as well-known as MIGA amongst market participants and the most active investors. For example, one investor said:

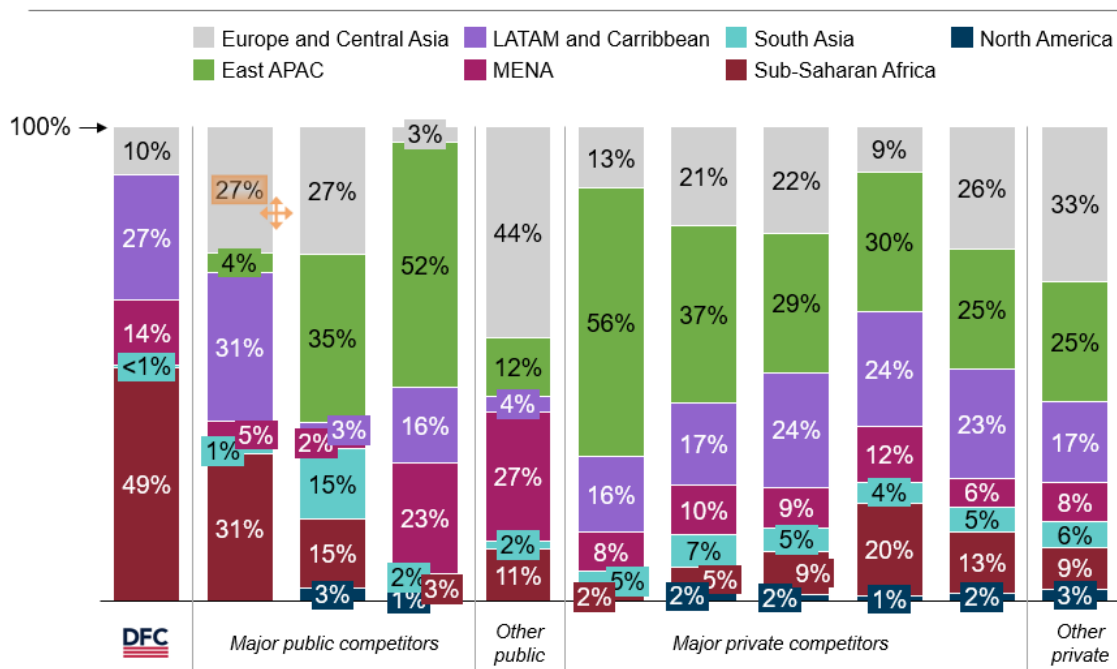
"The World Bank is very well established amongst all banks and financiers in Africa, so if you say that you have MIGA insurance, you basically don't have any follow up questions. DFC doesn't quite have this reputation; not all financiers in all countries will understand exactly what DFC is about and what their process is." – DFC client⁶⁶

Stakeholders also mentioned that DFC is seen as highly competitive amongst US investors but is seen as less focused on non-US investors. While this is a legacy from DFC's predecessor agency (OPIC's) policy on US nexus requirements (which was relaxed by DFC's authorizing legislation, the BUILD Act), the perception seems to persist in the market, discouraging non-US investors from considering DFC as a viable option. Finally, DFC is perceived to have organizational capacity constraints. Compared with other public insurers, DFC is seen as a small, collaborative, and agile organization – but its small size and capacity can have a detrimental effect on client service.

DFC's PRI issuance is concentrated in Latin America and Sub-Saharan Africa. DFC's concentration in Sub-Saharan Africa (49 percent) is significantly higher than competitors (i.e., another public insurer has the next highest share, at 31 percent) (Exhibit 13). Although another public PRI provider is also strong in Latin America and Sub-Saharan Africa, its portfolio is more evenly split across Europe and Central Asia, Latin America, and Sub-Saharan Africa. Other public insurers are more concentrated in Asia (>75 percent of issuance), while private players issue PRI more evenly across regions.⁶⁷

Exhibit 13

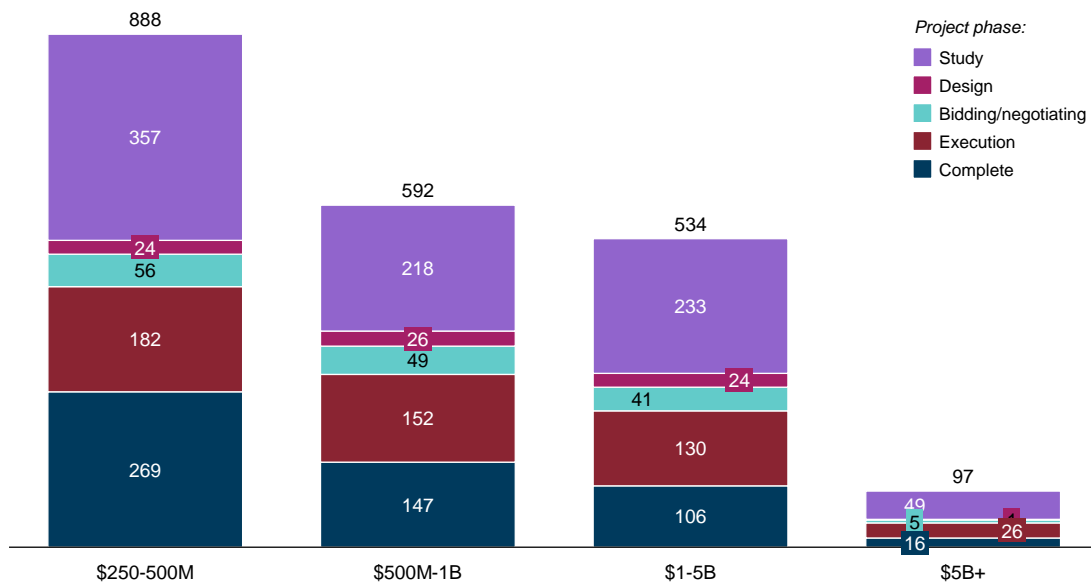
PRI issuance by insurer by region, \$ B, 2021



DFC has a competitive advantage in serving large-scale projects given its ability to offer large maximum coverages and long tenors. There are >700 large projects that will cost \$250 million to \$1 billion under development in DFC’s regions of focus – Latin America and Sub-Saharan Africa – that could serve as an opportunity for growth.⁶⁸ All of these projects have an expected completion before or by 2025 and can act as an effective pipeline for DFC (Exhibit 14). Moreover, DFC can leverage large projects to expand into additional regions. Latin America and Sub-Saharan Africa represent less than 20 percent of large-scale projects from 2015-2025 in emerging markets. DFC could leverage its unique competitive offering to support such large-scale projects in other regions of interest.

Exhibit 14

Number of large projects¹ in LATAM and Sub-Saharan Africa, expected completion 2015-2025



1. Defined as projects >\$250M. Includes Transportation and Energy/Utilities/Process industries completed/expected to be completed during 2015-2025

Several new products and expanding coverages are emerging focused on political violence; there is preliminary support for sustainable investments. Private insurance providers have launched new products and expanded their coverages in recent years. For example, with regard to political violence PRI, Chubb launched a product in 2020 aimed at bridging the gaps in traditional terrorism business interruption policies. In 2016 and 2017, AXA more than doubled the available liability limits for standalone terrorism insurance. In 2018, Liberty expanded its coverage to include a range of new risks, including loss of attraction (e.g., coverage of negative business impacts from terrorism despite lack of physical damage), denial of access, and damage caused by firearms/weapons and unmanned vehicles. In terms of environmental and climate risk, Parhelion, designed and executed a “policy risk” insurance for EU carbon markets, and in 2020, Vantage launched as a specialty reinsurer focused on renewable energy and infrastructure development.⁶⁹

DFC's PRI Portfolio and Capital Mobilization Impact

Chapter Summary

DFC currently has 174 active PRI contracts and eight commitment letters with a total maximum contingent liability (MCL) of \$7.7 billion. Of this exposure, the biggest 20 contracts and commitment letters make up around 90 percent of its total exposure, while DFC's five biggest contracts and commitment letters make up around 50 percent of its total exposure. DFC has a high proportion of exposures in low credit-rating countries; about 25 percent are in CCC+ or lower-rated countries, while a further 50 percent are in B rated countries.

To assess the private capital mobilization impact of DFC's PRI portfolio, this report analyzed 14 cases, accounting for 30 percent of DFC's total MCL from active contracts, across 10 countries and several sectors to estimate the first order and second order private capital mobilization impact. Across the 14 cases analyzed, DFC directly mobilized approximately \$2 billion in private sector capital, with five contracts accounting for \$1.7 billion. In addition, 80 percent of DFC contracts reviewed had identifiable second order private capital mobilized.

Portfolio overview

DFC's \$7.7 billion in PRI exposure is mostly focused on LIC and LMIC countries in Africa and Latin America at the time of the analysis. Exposure is highly concentrated with 91 percent of the MCL coming from the top 20 contracts and commitment letters² that are expected to be executed soon, mainly in energy and nature conservation.

DFC currently has 174 active PRI contracts and eight commitment letters. DFC's most common coverage is expropriation, which is used in 82 percent of the active contracts, in 75 percent of the commitment letters, and involves \$47 million of average maximum coverage. Political violence coverage is used in 56 percent of active contracts, 38 percent of commitment letters, and has a maximum average coverage of \$24 million. Finally, currency inconvertibility coverage is used in 24 percent of active contracts, in 38 percent of commitment letters and has an average maximum coverage of \$76 million.

Of DFC's \$7.7b PRI portfolio, 6 percent is reinsurance and 94 percent is direct insurance, of which about one-third is ceded to private insurers. Of the total exposure, active contracts represent 55 percent of the MCL, and commitment letters represents 45 percent. Within active contracts, 9 percent are reinsurance, while 91 percent are direct insurance, of which 16 percent is ceded to private reinsurers. For DFC's commitment letters portfolio, 1 percent is reinsurance, and 99 percent is direct insurance, of which about half is ceded to private insurers.

DFC has a long tail of small projects. 70 percent of the total number of contracts and commitment letters are smaller than \$10 million in MCL. About 20 percent of its portfolio in terms of number of contracts is between \$10 million and \$100 million, and only three percent is bigger than \$100 million. However, the contracts larger than \$100 million represent about 80 percent of the total exposure of DFC's portfolio. It is relevant to highlight that there is only one contract (a resource extraction commitment letter) with an exposure larger than \$1 billion.

² Letters of intent by both parties to enter into a legal contract

At a portfolio level, DFC has a high proportion of exposures in countries with a low sovereign credit rating; about 25 percent are in CCC+ or lower-rated countries, while 60 percent are in B rated countries. DFC is a market leader with a 16 percent share in this segment. This is driven mostly by DFC's geographical focus. The region with the biggest maximum contingent liability is Sub Saharan Africa, which represents 40 percent of DFC's exposures. These contracts are concentrated mostly in high-risk countries, with 62 percent of the DFC's contracts in this region being in countries with a sovereign credit rating of CCC+ or lower. The second biggest region in terms of exposure is Latin America, representing 25 percent of DFC's exposures. Contracts in this region are more skewed towards middle income countries and more stable economies, with 75 percent of contracts being in countries with a sovereign debt rating of B (+/-)³. In Europe and the Middle East, DFC has a pool of contracts predominately in medium risk countries, with 65 percent of contracts in countries with credit rating B (+/-)¹ and a small percentage of contracts in low-credit countries. Lastly, in Asia, DFC's portfolio is focused on medium risk countries, with 92 percent of the contracts with B (+/-)¹ rating and the rest 8 percent of the projects in countries with a lower risk profile.

DFC's exposures are highly concentrated in a few contracts and commitment letters; its top five contracts make up more than 50 percent of its total exposures, and its top 20 contracts make up 91 percent of total exposures. The top 20 exposures are mostly within nature conservation, resource extraction, and the energy sector, adding up to a total of \$7 billion in MCL. The top five contracts and commitment letters are: resource extraction – \$1.5 billion, nature conservation – \$800 million, nature conservation - \$725 million, nature conservation - \$604 million, and energy - \$400 million.

Nature conservation, resource extraction, and energy are the biggest sectors in terms of maximum contingent liability and average maximum coverage size. Ranked by the share of the total MCL, nature conservation is the DFC's biggest sector, comprising 32 percent of the total MCL but only 3 percent of total number of contracts. The five active contracts and commitment letters in this sector are large-scale projects, with average maximum coverage size of \$371 million, compared to the DFC portfolio average of \$116 million. The resource extraction sector has a similar profile, with four contracts representing 23 percent of total MCL, and an average maximum coverage size of \$456 million. The energy sector is the third in terms of share of total MCL, representing 16 percent of the total, but with smaller contracts. DFC has 31 active contracts and commitment letters in the energy sector with an average maximum coverage size of \$39 million. The contracts and commitment letters across the remaining sectors have a total exposure of around \$2 billion, with an average maximum liability of \$14 million.

Private Capital Mobilization Impact

Across 14 cases analyzed in 10 countries, DFC's PRI enabled nearly \$2 billion of private capital mobilization (PCM) and set a pathway for further investments by decreasing risk perception of the host countries, improving critical infrastructure, and pioneering better institutions.

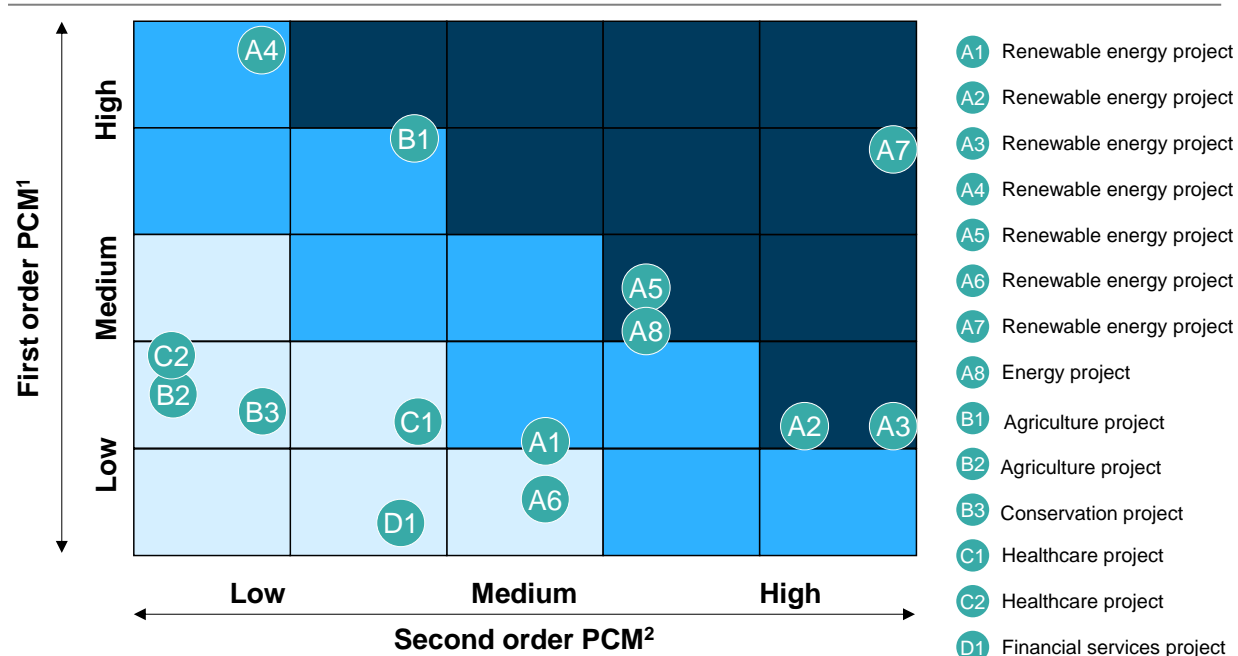
To assess the private capital mobilization impact of DFC's PRI portfolio, this report analyzed 14 cases across 10 countries and estimated the first order and second order capital mobilization impact. Over half of the cases had significant or very high first and second order PCM impacts (Exhibit 15). The cases considered represent almost 30 percent of DFC's exposure from active contracts, and are spread across five sectors – energy, agriculture, nature conservation, healthcare, and finance. Across the cases, DFC mobilized approximately \$2 billion of private sector capital. Most of the cases (78 percent) showed some level of

³ B, B+, B-

second order PCM. In particular, 68 percent of the cases showed demonstration effects and infrastructure improvements.

Exhibit 15

Very high impact Significant impact Limited impact



1. Measured by the number of dollars mobilized for every dollar of PRI exposure provided
 2. Measured by the number and evidence of second order effects identified

First Order Private Capital Mobilization

Across the 14 cases analyzed, DFC directly mobilized nearly \$2 billion in private sector capital. Amongst these cases, five of them mobilized \$1.7 billion of private capital.

Private capital mobilization refers to the amount of private capital that is invested in a project, sector or country as a result of some type of DFI investment. In the case of the DFC PRI, private capital mobilization refers to the amount of private capital that is invested because PRI was provided to the projects. There are two main drivers of PRI that enable first order private capital mobilization. First, PRI attracts investments into high-risk countries by managing unacceptable levels of risks. Political risk insurance can help secure investor buy-in that is conditional on reducing risk to an acceptable level and can also help secure affordable debt by improving the credit ratings of project debt. Second, PRI, and especially those coverages provided by public entities, reduces the likelihood of political risk events as a result of political and diplomatic engagement.

First order capital mobilization is measured with one of two industry-standards through the Organization for Economic Cooperation and Development (OECD) methodology. The OECD methodology requires assumptions within its application because it does not provide guidance related directly to PRI. In its current application at the DFC, the methodology is split into two components to attribute capital amongst official (public) investors and insurers:

- 1) *Anchor component*: assigns 50 percent of the private investment equally among only the public investors and insurers with the riskiest stake, e.g., in some cases only equity investors.
- 2) *Proportional component*: assigns 50 percent of private funding proportionally among all public investors and insurers based on their share of total official investment.

Combining these two components, it is possible to get an estimation of the private capital mobilized through PRI (Exhibit 16)

Exhibit 16

Following OECD Methodology, PRI is split into 2 components to attribute capital to official investors

$$\begin{array}{c}
 \text{Anchor component}^1 \\
 \hline
 \text{PCM}_{\text{DFC}} = \frac{1}{\# \text{ official investors}} \times 50\% \times \text{private investment} \\
 + \\
 \text{Proportional component}^2 \\
 \hline
 \frac{\text{DFC investment}}{\text{Official investment}} \times 50\% \times \text{private investment}
 \end{array}$$

1. Divided equally among most junior official investors
2. Divided among all official investors proportional to their investment share

Applying this methodology in the 14 cases analyzed, it is estimated that DFC’s PRI directly mobilized nearly \$2 billion in private sector capital, as shown in the exhibit below. Among these cases, five of them mobilized \$1.7 billion of private capital. Projects in the healthcare sector mobilized a total of \$899 million, C2, recognized as the project mobilizing the largest amount of capital of \$632 million across more than 10 different countries. The eight projects in the energy sector mobilized \$601 million, and the three projects within agriculture and conservation mobilized \$476 million. Among the 14 cases, B1 mobilized the greatest amount of private capital (\$364 million) into a single country (Exhibit 17).

To illustrate how the calculation works, we examine A4, which mobilized a significant amount of private capital (\$278 million) into a single country, in the next section.

DFC helped mobilize \$278M through its PRI coverage of the A4. A4 is a 100 MW wind power project in Africa. It is one of the largest wind farms in the country and serves to support the country in achieving its clean power goals by 2030.

In this case, DFC provided a \$233 million investment guarantee, as well as reinsured \$50 million of equity of another insurer’s \$100 million political risk coverage. DFC participation was complemented by an \$18 million equity investment by another development finance institution.

Following the equations in Exhibit 16, the anchor component is split between DFC and the other development finance institution equally and the proportional component is split in pro rata shares between DFC and the other development finance institution based on the \$50 million of DFC reinsurance and the

\$18 million the other development finance institution’s investment. The \$233 million investment guarantee is private capital mobilized that is fully attributed to DFC.

Exhibit 17

Project		DFC max PRI exposure, USDm	Private capital mobilized, USDm	Exposure to PCM ratio ¹
A Energy	A1 Renewable energy project	24	24	1.00
	A2 Renewable energy project	14	16	1.13
	A3 Renewable energy project	12	14	1.13
	A4 Renewable energy project	50	278	5.56
	A5 Renewable energy project	2	5	2.63
	A6 Renewable energy project	3	2	0.63
	A7 Renewable energy project	12	49	4.02
	A8 Energy project	100	214	2.14
B Agriculture & conservation	B1 Agriculture project	6	24	4.07
	B2 Agriculture project	54	88	1.63
	B3 Conservation project	305	364	1.19
C Healthcare	C1 Healthcare project	246	267	1.09
	C2 Healthcare project	383	632	1.65
D Banking	D1 Financial services project	34	0	0.00
Total		1,246	1,976	1.59

1. Defined as the amount of dollars mobilized for every dollar of PRI exposure provided

Source: DFC project data

This OECD methodology provides a good high-level understanding of PCM and enables comparison across international institutions. However, OECD doesn’t capture the full range of second order capital mobilization effects, which may imply some amount of under-counting of the full range of private capital mobilization.

Second Order Private Capital Mobilization

Most of the DFC projects reviewed refer to projects in sectors with low maturity and high levels of country-risk, which implies a pool of projects with significant expected second order PCM.

Second order capital mobilization refers to situations where investments in projects result in additional capital investments in different projects after the initial investment was made (i.e., not the project that was specifically being invested in). Political risk insurance enables PCM through three second order capital mobilization effects including: 1) Demonstration effects; 2) Improving infrastructure; 3) Improving formal and informal institutions (Exhibit 18).





First, demonstration effects decrease risk perception by reducing information asymmetries, while proving an investment thesis in the sector or country. For instance, among the cases analyzed, A5 was one of the first renewables projects in the country. At the time, the country was a medium-risk market with a stable political context, but low economic development. Its energy sector lagged lower-middle income countries but was ahead of low-income countries in terms of electricity rates, consumption, and electricity generation. Its electricity generation mix was predominantly based on oil, with low share of renewables. Each DFC investment, which included PRI, helped set a precedent for the next investment opportunity. For example, the A5 project paved the way for the investor to raise the financing for its subsequent investments in the country. In addition, the projects provided a critical upgrade to the grid enabling it to handle a higher generation capacity and promoted the construction of the biggest storage/battery project in the region.




Second, improving infrastructure (e.g., increasing transmission capacity) facilitates business engagements for later investors. For instance, the A8 project provided gas storage infrastructure that supported the trading of gas and the development of the country as a regional gas hub. It resulted in gas price reductions of >25 percent by enabling the introduction of competition into the market. This price reduction enabled incremental capital investment in businesses that utilize this gas.

Third, improving formal and informal institutions such as pioneering better contracting or purchasing agreement regimes in the host country accelerates the completion process and attracts investor attention. For example, the A3 project was the first renewable energy project in the country, helping the government set up an improved PPA regime, enhance contracting quality, and institute strong public-private partnership processes. Moreover, the project resulted in an increased installed generation capacity of 14 percent in the country which could enable additional FDI by providing critical infrastructure.

Currently, second order private capital mobilization is not consistently tracked or communicated. Given the development goals of DFC, these second order effects are potentially even more important than the first order PCM and should be both actively pursued and communicated by the PRI team.

Exhibit 18

		Second order PCM		
		Demonstration effects	Building infrastructure	Strengthening institutions
A Energy 	A1 Renewable energy project	✓	✓	–
	A2 Renewable energy project	✓	✓	✓
	A3 Renewable energy project	✓	✓	✓
	A4 Renewable energy project	–	✓	–
	A5 Renewable energy project	✓	✓	–
	A6 Renewable energy project	✓	✓	–
	A7 Renewable energy project	✓	✓	✓
	A8 Energy project	✓	✓	–
B Agri-culture & conservation 	B1 Agriculture project	✓	–	–
	B2 Agriculture project	–	–	–
	B3 Conservation project	✓	–	–
C Healthcare 	C1 Healthcare project	–	–	–
	C2 Healthcare project	–	–	–
D Banking 	D1 Financial services project	–	✓	–

 Clear evidence of impact
 Some evidence of impact
 Limited or no evidence of impact

We have identified three project characteristics which could be used as indicators for high second- order PCM:

- 1) Level of country risk;
- 2) Maturity of the sector in which the project took place; and
- 3) Provision of critical infrastructure.

Providing PRI to high-risk countries increases additionality and may provide demonstration effects for other insurers or investors. In high-risk countries, there is also usually a higher second order capital mobilization effect from improving the physical infrastructure and enhancing institutions. In most cases, these countries

have not had many successful projects funded by foreign or local private investors and often do not have critical infrastructure in place. Hence, in LICs and other vulnerable countries, successful FDI in revenue-generating projects (especially infrastructure) can generate positive spill overs, such as increasing productivity, spurring incremental private investment, and stabilizing domestic prices.⁷⁰ This report measures the level of country risk based on key indicators of political risk (expropriation, currency inconvertibility, and political violence), economic indicators (credit ratings, investment, and growth rates), and governance indicators (government effectiveness and rule of law).

Ensuring political risk of projects in immature sectors or first-of-its-kind projects is an opportunity for outsized PCM as it creates demonstration effects for other foreign investors. Moreover, it can help the PRI market mature so that in subsequent investments, private insurers are willing to go in or match, or even improve upon, the original price and tenure terms. This report assesses the sector maturity from the size of the sector, the extent of previous investments in the sector, and the growth of the sector.

Lastly, providing PRI to projects that enable or improve critical infrastructure such as electricity supply or financial systems, increases the potential for second order PCM. Among the four sectors analyzed, the energy and financial sectors most naturally involve investments that provide infrastructure critical to attract further private capital. For instance, the A5 and A6 projects provided critical upgrades to the grid that enabled a higher electricity generation capacity in the country. As a result, future projects could benefit from this infrastructure upgrade.

Most of the DFC projects reviewed involved projects in sectors with low maturity and high levels of country risk, which implies a pool of projects with high expected second order PCM impact. This aligns well with the qualitative analysis of the three drivers of second order PCM in the 14 cases considered. Across the projects reviewed, there were significant demonstration effects (in 11 out of 14 projects), infrastructure improvements (in 9 out of 14 projects), and institution building (in 3 out of 14 projects). Some of the projects had particularly high second-order PCM impact. For example, A5 helped unlock three more renewable projects in the country's nascent renewables sector, and the four projects provided critical infrastructure by increasing the generation capacity of the country by 5 percent. A few projects had slightly lower, though still significant, second order PCM impact. For example, B3 did not achieve the same level of second order PCM impact as other case studies because it included investments in less risky countries and supported already established agricultural sectors that did not provide critical infrastructure that other sectors could benefit from.

The second order PCM impact of projects varies by sector. In general, projects in the energy sector have higher second order PCM effects. These projects typically took place in high-risk countries where fewer or no projects were developed before due to the overall risk profile of the countries. Moreover, the energy sector, specifically renewable energy, is a less mature sector. The low maturity of the reviewed African energy markets is indicated by low electrification levels and the small share of renewables in the electricity generation mix, which amplifies the second order PCM impact of the projects.

For instance, A3 improved electricity capacity in the country, and kickstarted regulatory changes to enhance further investments in the energy sector. At the time of the project, the country was a high-risk market with low economic development and poor governance. In addition, its energy and electricity sector lagged the average of low-income countries on most key metrics. A3's investment was the first renewable energy project in the country. This project delivered against all three elements of second order private

capital mobilization. It increased total grid electricity by 10 percent, doubling the solar generation capacity and resulting in improved infrastructure for other investors trying to build other capital projects. It improved the country's formal institutions by improving both PPP and contracting practices for subsequent investors. And it created significant demonstration effects, since after this project, the government signed contracts with at least four more IPPs for renewable projects.

Key insights and Recommendations Going Forward

Five areas have been identified as potential priority areas for DFC to strengthen its competitive position and catalyze its private capital mobilization impact: 1) Targeting high impact segments that match DFC's strengths; 2) Building out go-to-market capability; 3) Crowding in private insurers through reinsurance; 4) Building up internal capacity of PRI underwriting and support structure; and 5) Recognizing second order PCM effects when evaluating projects.

Priority area 1: Targeting high impact segments that match DFC's strengths

As discussed in the first section of this document, PRI issuance has declined by 10 percent per annum since 2018. This is driven by declining FDI flows; 2022 cross border flows are expected to decline by 28 percent compared to 2020. However, opportunity continues to exist in riskier geographies. For example, there are more than 700 large infrastructure projects under development in Latin America and Sub-Saharan Africa, and interest in PRI is increasing amongst investors who are assessing possible projects in Ukraine. DFC is well positioned to drive new FDI in several high impact segments, including projects with high potential for second order PCM impact (e.g., first-of-its-kind or infrastructure projects), long-tenor and large-scale FDI projects (>\$250 million), as well as projects in the riskiest and most fragile markets (less than CCC+ sovereign credit rating). The following actions can be considered:

Recommendation 1a: Set strategy and align this across all departments (Office of Structured Finance and Insurance, Office of Development Policy, Office of General Counsel, Office of the Chief Executive) on pursuing projects along 2 dimensions: (i) higher second order PCM impact projects, (ii) long tenor, large scale projects. Specifically, high impact projects would include "first-of-it-kind" projects", projects in CCC and below sovereign credit rated markets, and projects that contribute to critical infrastructure. Moreover, DFC can continue emphasizing long-tenor, large-scale FDI projects, e.g., by increasing collaboration between the business development and underwriting team.

Recommendation 1b: Align incentives across all departments to ensure priority projects are effectively pursued (given incremental challenges to underwriting and approval processes of pursuing higher impact / riskier projects). Specifically, DFC can seek to create KPIs that all departments are measured against in terms of the target amounts of high-PCM project exposure.

There are three key intended outcomes from pursuing these recommendations:

- Improving collaboration and alignment across departments on challenging projects across the end-to-end project development process
- Increasing PCM impact of DFC's PRI portfolio
- Strengthening competitive positioning amongst large-scale, long-tenor investments

Priority area 2: Building out go-to-market capability

DFC is seen as passive in its PRI deal sourcing, limiting the PRI activities to investors already familiar with DFC. For example, one investor said *“Working with DFC is highly private sector driven. You really have to be the one coming to the DFC and pushing everything forward.”* Moreover, DFC has an opportunity to improve its visibility in the market by correcting the perception that it has a US-ownership requirement, promoting its advocacy capabilities further, and strengthening its image as an agile and private-sector friendly organization. The following actions can be considered:

Recommendation 2a: Cultivate new relationships with high potential clients, e.g., through roundtables or roadshows with top (e.g., 20-30) priority investors. This can include developing a list of priority clients (not currently served) in DFC’s key markets and assigning responsible staff and tracking outreach and engagement for those clients. It can also include organizing roadshows and roundtables, inviting key stakeholders and decision makers from top priority clients.

Recommendation 2b: Upskill regional and on-the-ground business development DFC staff on PRI. Roll out training program for existing staff as well as for new staff as the organization is growing.

Recommendation 2c: Improve finance-to-insurance cross-selling through measurable incentives. This will be particularly relevant for smaller scale projects where the total exposure risk is smaller, or for projects where DFC is not the only lender and does not bear the entire risk on the debt side.

There are three key intended outcomes from pursuing these recommendations:

- Deepening relationships with existing priority clients, enabling DFC to better meet client needs and priorities
- Bringing on new clients, thus enabling additional capital mobilization and development impact

Priority area 3: Crowding in private insurers through reinsurance

DFC is perceived in the insurance market as a potential and trusted target of reinsurance from private insurers. Obtaining private reinsurance can reduce DFC’s exposure while maintaining PCM and may additionally prepare the private insurer to provide direct insurance on subsequent transactions in the market. Willingness amongst private insurers to provide reinsurance to DFC is high, as it allows them to enter riskier markets and to benefit from DFC’s advocacy in claim events. Moreover, reinsurance can be used as a tool for achieving additionality in cases where investors are insisting on using a public insurer but where the project itself is not meeting DFC’s additionality requirements. DFC currently lacks a streamlined approach for sourcing reinsurance. In order to increase the share of reinsurance of the PRI portfolio, DFC can pursue the following activities:

Recommendation 3a: Allowing DFC’s additionality requirement to be met through private market reinsurance. DFC can leverage the reinsurance panel presented below to source this increased reinsurance in an efficient way.

Recommendation 3b: Launching a reinsurance panel to coordinate the procurement of private sector reinsurance. The panel will serve as a coordinated forum for the efficient procurement of facultative private sector reinsurance. The panel will be formed by experienced private insurers with a track record of

delivering on the type and scale of projects that DFC supports For projects above a certain threshold,⁴ DFC will solicit reinsurance from the panel members, and each insurer will have the opportunity to submit an indication of interest for reinsurance.

Recommendation 3c: Streamlining documentation requirements for reinsurers to improve process efficiency. To enable increased reinsurance, DFC can implement more simplified and standardized documentation requirements for private insurers to aid efficiency of procurement and reporting.

Recommendation 3d: Tracking the value of insurance ceded to private insurers as a KPI to demonstrate DFC's additionality. Set reinsurance target for portfolio as a KPI to demonstrate additionality to DFC stakeholders.

There are four key intended outcomes from pursuing these recommendations:

- Streamlining DFC's approval process by revising the way the additionality requirement can be met.
- Setting a faster and private market friendly reinsurance procurement process
- Establishing a high-quality reinsurance service sourced for DFC's PRI projects
- Enabling DFC to drive increased developmental impact where private insurers or investors would not have proceeded with the transaction but for DFC reinsurance

Priority area 4: Building internal capacity of PRI underwriting and support team

One of DFC's key competitive advantages in the market is that its underwriting process is perceived as considerably faster and smoother than those of key competitors (e.g., MIGA). However, a significant number of the interviewed market participants still considered DFC's diligence and underwriting process as lengthy. Moreover, if DFC is to increase its PRI activities, especially given an increase in the exposure ceded to reinsurers, it likely will need an increase in its PRI underwriting capacity to maintain and reinforce its reputation as an efficient and private-sector friendly underwriter. This could involve the following:

Recommendation 4a: Expanding PRI-dedicated underwriting team capacity to maintain speedy and responsive underwriting process. Increasing the size of the team dedicated to the PRI underwriting can allow DFC to maintain its reputation of being speedy and responsive as a public insurer, while also supporting the need for increased underwriting to maintain its premiums as DFC increases the volume of reinsurance through the reinsurance panel.

Recommendation 4b: Launching review of DFC's underwriting process to identify opportunities for reducing roadblocks. DFC can review its internal process (as they pertain to the underwriting process and the department that the underwriting team interfaces with), to allow DFC to identify bottlenecks and roadblocks currently limiting its capacity to provide an efficient service.

Recommendation 4c: Increasing resource capacity to prevent approval backlogs and support high-quality customer service by ensuring adequate staffing in support offices, including legal, E&S, development

⁴ Private insurers require a certain amount of insurance in order to undertake the effort to underwrite a project. Traditionally, private insurers require a minimum share of more than \$10 million of insurance in order to allocate resources.

impact, and the KYC process. This will allow more efficient and effective service of the PRI underwriting business.

There are three key intended outcomes from pursuing these recommendations:

- Maintaining its reputation in the market of being an easy, responsive public insurer to work with
- Freeing up resources from the underwriting team to be more proactive in client development

Priority area 5: Recognize second order PCM effects when evaluating projects

As it was mentioned before, DFC follows the industry standards and uses the OECD methodology to measure PCM. The OECD methodology is a useful tool for comparison of PCM across development institutions; however, it is not specific in its guidelines on how to treat PRI when estimating PCM. Therefore, there is scope and need for interpretation in the application of the methodology for PRI. A couple of options have been laid out for DFC's application of the methodology. Additionally, while a useful tool, the OECD methodology does not provide a holistic and comprehensive picture of the full capital mobilization impact of DFC's portfolio. The methodology doesn't capture second-order capital mobilization effects, such as demonstration effects, building enabling infrastructure, and strengthening institutions. Hence, there is scope for DFC to also take a broader lens on PCM in both its measurement and communication effects or risk the issue of OECD under-counting. To address these points, the following actions can be considered:

Recommendation 5a: Implementing qualitative framework for assessing second order PCM, which can be communicated as 'market building'. DFC can implement a framework for holistically assessing PCM including at least three second order PCM drivers: (a) *Demonstration effects*: Improving risk perception by decreasing information asymmetries and proving investment thesis in sector/country; (b) *Building enabling infrastructure*: Improving physical or financial infrastructure (e.g., increasing transmission capacity) enhancing ease of doing business; (3) *Strengthening institutions*: Improving institutions, enhancing regulations, and pioneering better public-private collaboration.

Recommendation 5b: Reviewing application of the OECD methodology for PRI. DFC has a few different options for adapting the application of the OECD methodology as it relates to its PRI portfolio: First, it can maintain its current approach, where it treats PRI on equity/debt as the same as making a direct equity/debt investment in terms of PCM attribution. Secondly, DFC can move PRI below equity and debt in the attribution hierarchy, which would result in an average decrease of 2 percent in PCM across the 14 cases analyzed. Finally, it can treat PRI the same way that the OECD methodology treats guarantees, which would result in an average increase of 3 percent in PCM across the 14 cases (Exhibit 19).

The intended outcome of pursuing these recommendations is:

- Achieving a more holistic picture of DFC'S PCM impact, which can be communicated to internal and external stakeholders.

PRI remains a critical tool for DFIs to mobilize private capital and support developmental impact. There is immense opportunity for DFC to expand, serve, and evaluate projects, and continuing to create new opportunities for its stakeholders and society at large.

Exhibit 19

Current application Proposed application

Options	Description	Pros	Cons	Impact compared to current calculations
Option 1 Keep as-is	PRI on equity/debt is treated the same as making a direct equity/debt investment	✔ Leverages the guidelines from other parts of the OECD methodology	✘ Doesn't clearly link the amounts mobilized to the instruments mobilizing them ✘ Assumes that PRI has the same risk profile as the underlying investment	None
Option 2 Move PRI below equity & debt in the attribution hierarchy	PRI is treated as below equity & debt in the PCM attribution hierarchy	✔ More accurately reflects the logic in the OECD methodology that DFIs that take on more risk have a higher mobilization impact	✘ Doesn't clearly link the amounts mobilized to the instruments mobilizing them ✘ Risk is not always a good indicator of actual capital mobilization ✘ Doesn't account for the disproportionate impact PRI may have (e.g., where a project would have without PRI)	2% average decrease in PCM across the case studies -55% average decrease in the 4 cases where it applies (>1 DFI involved), with one case being up to -95%
Option 3 Treat PRI like guarantees	PRI is treated as a guarantee (face value of the investment covered by PRI is what is attributed to the PRI provider)	✔ Has a more direct attribution logic; PRI provides direct coverage of an investment, so should be able to attribute that investment to DFC	✘ May be over-counting the impact of PRI, not leaving enough room for attribution to direct investors	3% average increase in PCM across the 14 case studies -70% average increase in the 6 cases where it applies, with one case in particular driving it due to a 250% increase

Appendix

Overview of 14 selected DFC Projects

In this appendix, we have laid out the calculation of both the primary and secondary private capital mobilization effects for the 14 analyzed projects. The detail is structured by sector, beginning with the energy sector, then followed by agriculture and conservation, healthcare, and finally financing.

Energy Projects: Country and Sector Overview

A Across the energy projects, most host countries have medium risk levels

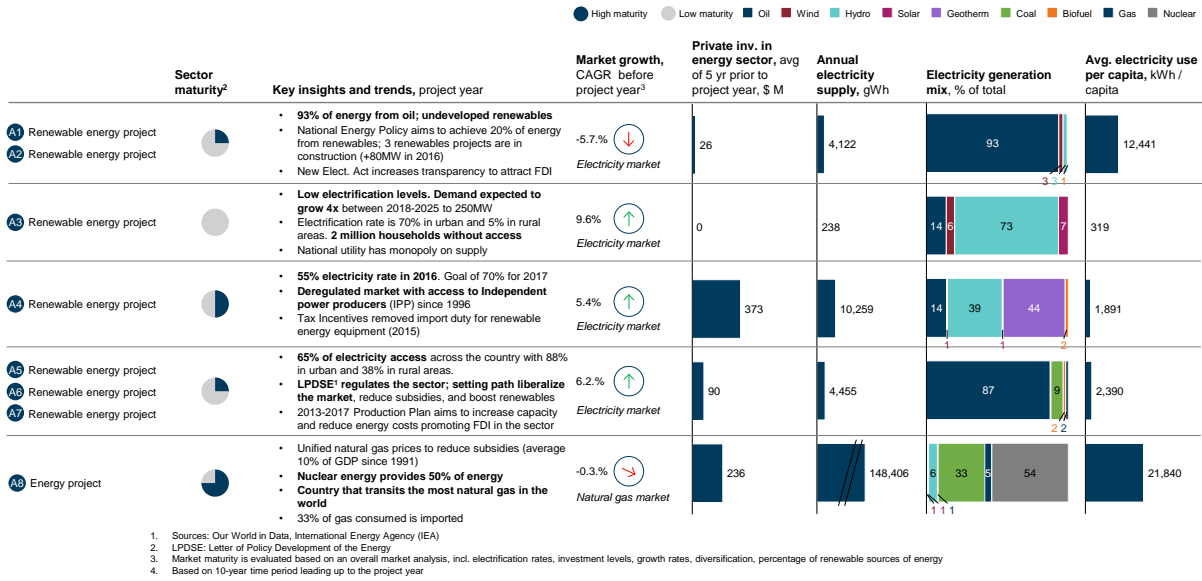
Host country deep dive – all data anchored in project year

Overall country risk	Economic indicators, project year			Political risk indicators, project year ¹			Governance indicators ⁵		
	Economic risk	Credit rating	Annual FDI inflow ⁴ , \$ M	GDP per capita, \$	Expropriation	Currency inconvertibility	Political violence and terrorism	Rule of Law	Govern. Effectiveness
A1 Renewable energy project	Weak GDP growth and high debt-service burden impair creditworthiness. Economy vulnerable to external shocks	B	925	4,586	Not an issue. Land could be expropriated at market value under Land Acquisition Act	No restrictions on the flow of funds for remittance or profits from foreign investments	High violent crime rooted in poverty, unemployment and criminal organization		
A2 Renewable energy project									
A3 Renewable energy project	Lower diversification, high deficit and debt-to-GDP ratio, and extreme poverty make the country vulnerable to shocks	Unrated	9	234	De facto capital control implemented in 2019 limits foreign exchange for remittances	No recent cases. Law allows expropriation for exceptional reasons	Politician tension remains although frequent violence after election declined after 2015		
A4 Renewable energy project	Monetary tightening and low dependence on exports help reduce vulnerability; Instability in the banking sector	B	1,138	1,525	Guaranteed capital remittances. No restriction on converting fund from investments	2010 Constitution guarantees safety from expropriation. Land right issues remains contentious	Electoral violence has been reduced. Threat of instability from regional conflict		
A5 Renewable energy project	Stable political context and manageable debt levels, but high exposure to commodity price shocks and euro zone weakness.	BB-	472	1,362	Bilateral agreement with US secures no restriction on repatriation of capital and transfer of funds	No records. Bilateral Inv. Treaty with US supports international standards for expropriations	Stable democracy with sporadic and declining political violence in one region		
A6 Renewable energy project									
A7 Renewable energy project									
A8 Energy project	Reforms implemented in 2016 stabilized the financial situation. Yet, high vulnerability to price shocks and trade bans	B-	3,727	2,638	No legal restriction on flow financial resources. Yet, enforcement of key laws and transparency is low	Possible if criminal proceedings of FDI, not fulfillment of privatization process or due to military reasons	Conflict and violence on country territory		

1. Based on information from Marsh Political Risk Assessment and Investment Climate Statements from US Department of State. 3. Numbers based in 20164.
4. Information of Annual FDI is based on the year of the project per country. 5. Based on World Bank governance indicators

A Energy market maturity varies significantly by project country; highest market growth rates found in less mature markets, especially in SSA

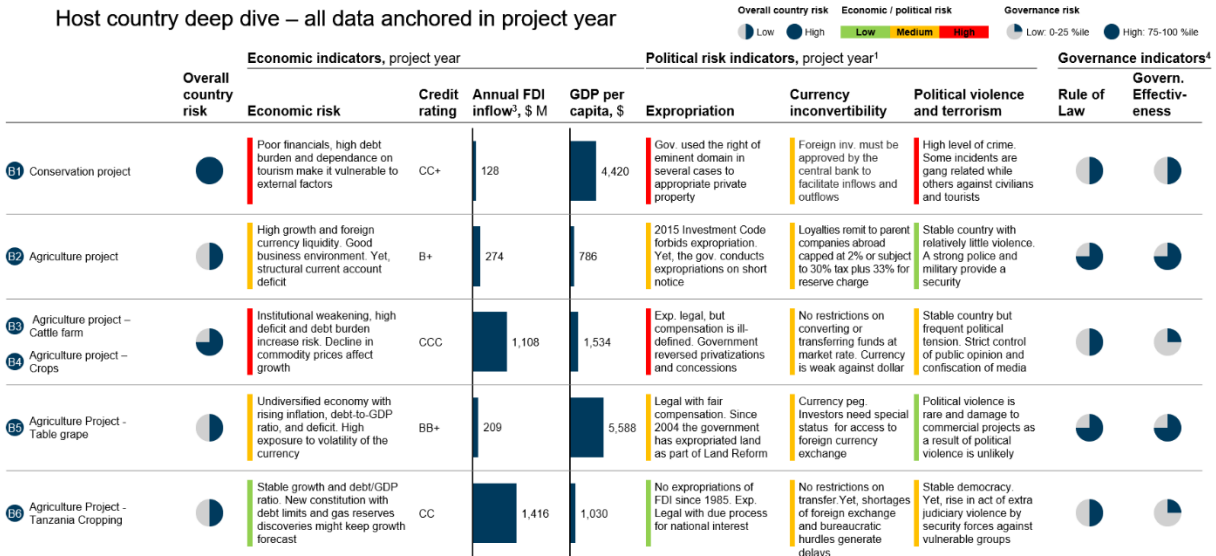
Deep dive on energy sector across host countries – all data anchored in project year



Agriculture and Conservation Projects: Country and Sector Overview

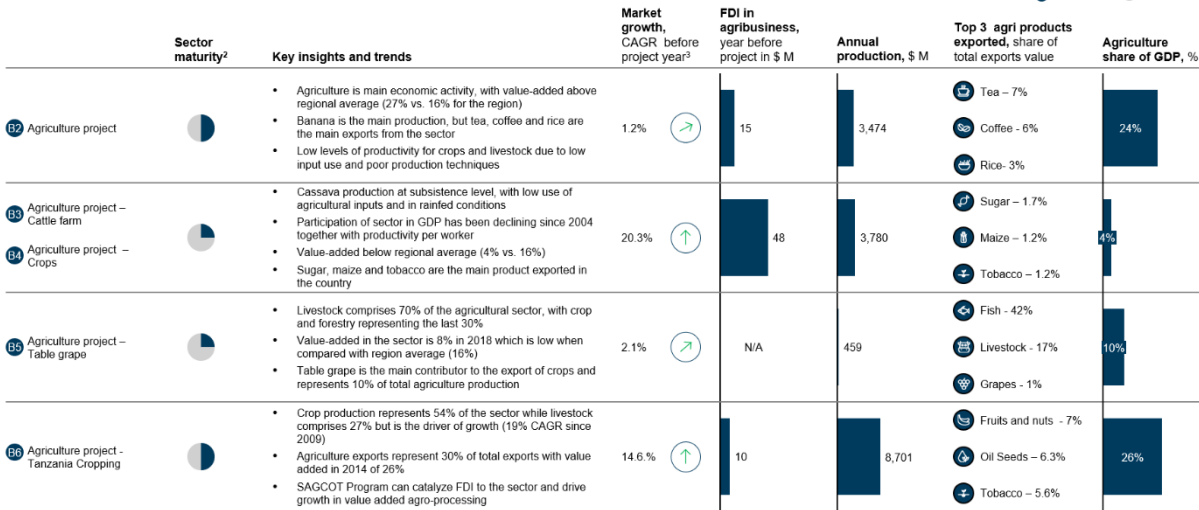
B Across agribusiness and conservation projects, most host countries have medium political risk; B1 an exception with high crime, economic, and expropriation risk

Host country deep dive – all data anchored in project year



B Relatively mature agricultural sectors in B2 and B6 with value-add production above regional average; B3, B4, and B5 less mature

Deep dive on agribusiness sector across host countries – all data anchored in project year³

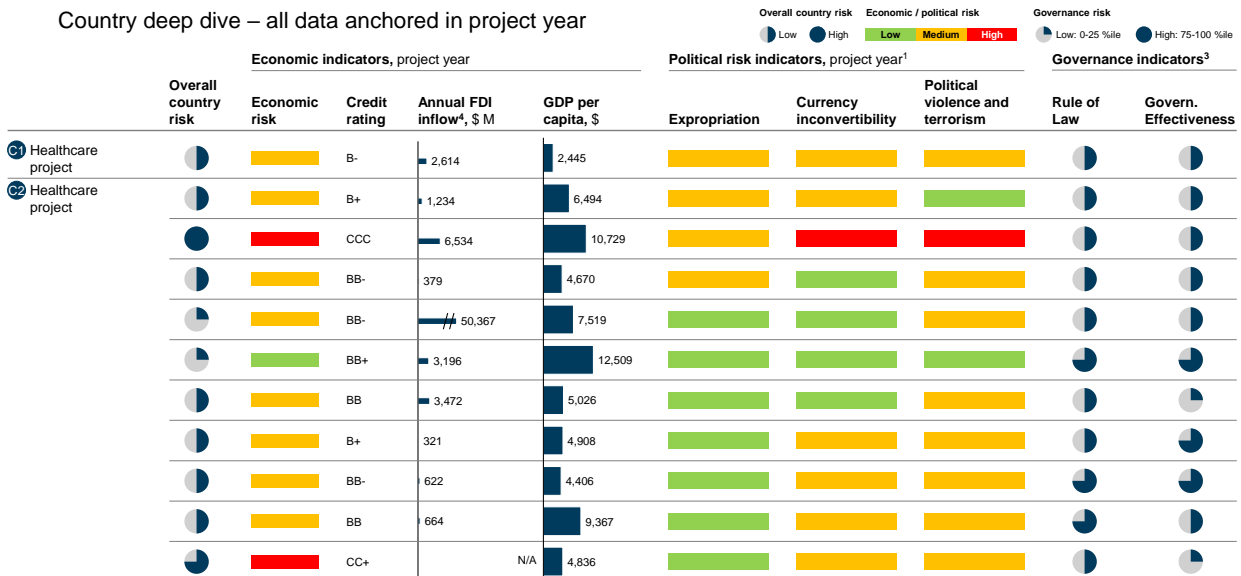


1. Sources: FAO; World Bank; Trend Economy
 2. Agribusiness market maturity assessment is based in two criteria: 1) Agriculture sector share of GDP, 2) Value-added of the sector. A country with low share of agriculture sector in GDP and low value-added will have a low maturity in the agribusiness market. 3. B3 Conservation project is not considered in this analysis as it is not linked to the agribusiness sector. 4. Information presented in this analysis is based on data from 2017

Healthcare Projects: Country and Sector Overview

C The healthcare projects selected have low to medium country risk levels

Country deep dive – all data anchored in project year



1. Based on information from Marsh Political Risk Assessment, Investment Climate Statements from US Department of State and Economist Intelligence Unit reports for the years of the projects considered
 2. Information of Annual FDI is based on the year of the project per country
 3. Based on World Bank governance indicators

- Debt is senior to equity, so junior investors are prioritized in attribution and take greatest share (official equity investment has a higher mobilization impact than mezzanine and senior debt)
- DFC is treated as the insurer in PCM calculations
- If there is no official equity in the accounting period, this component of private funding attribution may be split equally among official senior debt and mezzanine investors
- PRI on equity and an equity investment are treated as equivalent (as is PRI on debt and debt investments)

Equity PRI

In this scenario for equity PRI, DFC is treated as an official investor. This is reflected in the specifications for each of the components mentioned above. First, for the anchor component, this scenario assigns 50 percent of private funding in equal shares among the official equity investors only. In addition, if there is no official equity in the accounting period, this component of private funding attribution may be split equally among official senior debt and mezzanine investors. For the proportional component, this scenario assigns 50 percent of private funding pro rata based on DFC's share of total official investment, inclusive of non-equity investment.

Example 1 shows a project \$100m from private investors, structured with \$70m equity and \$30m debt from private investors. In this case DFC PRI covers 50 percent of the equity (\$35m) and there is no other PRI coverage. Applying the OECD approach, DFC mobilizes \$100m of private capital.

Example	
Total project	\$100M (\$70M equity, \$30M debt)
Total private investment	\$100M (\$70M equity, \$30M debt)
Total official investment	\$0M
DFC PRI coverage	\$35M (50% equity)
Other PRI coverage	None
$PCM_{DFC} = \frac{1}{1} \times 50\% \times \$100m + \frac{\$35M}{\$35M} \times 50\% \times \$100M = \$100M$	

Debt PRI

In this scenario for debt PRI, DFC is treated as debt investor. This is reflected in the specifications for each of the components mentioned above. First, for the anchor component, this scenario assigns 50 percent of the private funding in equal shares to the public investors, subject to the following: if public equity investors involved, then only assign this 50 percent among those investors. For the proportional component, this scenario assigns 50 percent of private funding pro rata based on DFC's share of total official investment, inclusive of non-equity investment.

Example 2 shows a project \$100m in which \$90m are provided by private investors and \$10m provided by official investors (MIGA). The total project amount is composed by 70 percent of equity and 30 percent of debt. In this case, DFC PRI covers 50 percent of the debt (\$15m) and there is no other PRI coverage. Applying the OECD approach, DFC mobilizes \$27m of private capital.

Example 2

Total project	\$100M (\$70M equity, \$30M debt)
Total private investment	\$90M (\$60M equity, \$30M debt)
Total official investment	\$10M equity (MIGA)
DFC PRI coverage	\$15M (50% debt)
Other PRI coverage	None

$$PCM_{DFC} = 0 + \frac{\$15M}{\$15 + \$10M} \times 50\% \times \$90M = \$27M$$

Reinsurance

In this scenario, PCM is calculated at the point in which insurance is provided. The estimated PCM depends on who is the provider of reinsurance and what is the state of the transaction. In this case, the report assumes that the other party is a private insurer. To contemplate different alternatives for providers and state of transaction this report considers three scenarios with different outcomes in terms of PCM.

The first scenario contemplates that another insurer cedes part of the coverage to DFC and the transaction takes place at similar times. In this case, the private capital mobilized by DFC is estimated using the approach in the two previous cases (Equity PRI or Debt PRI). The second scenario assumes that DFC provided reinsurance to the private insurer in a secondary transaction, after private risk insurance is in place. In this scenario, there is no private capital mobilized by DFC. Lastly, in the third scenario DFC cedes part of the coverage to the private insurer in a secondary transaction. In this case there is no change in the private capital mobilized by DFC.

Scenario 1

Another insurer cedes part of coverage to DFC; transactions take place at similar times

$$PCM_{DFC} = PCM_{DFC \text{ Equity}} \text{ OR } PCM_{DFC} = PCM_{DFC \text{ Debt}}$$

Scenario 2

Private risk insurance is in place; later (e.g., 1-2 years) DFC provides reinsurance to private insurer in a secondary transaction

$$PCM_{DFC} = 0$$

Scenario 3

DFC insurance in place; DFC cedes part of coverage to private insurer in a secondary transaction

$$PCM_{DFC} = \text{No change}$$

Note: If second insurer is an official insurer, re-allocate based on relative split (e.g., PCM_{DFC} decreases)

Wraps

In this scenario, DFC provides insurance for a project where DFC is also providing financing or equity investments. In this case, it is relevant to incorporate adjustments to not double count PCM. In these scenarios, the proportional component will increase and DFC may be able to claim a portion of the anchor component, if at least one of the instruments is equity. Hence, the formula in this scenario is:



Formula for attribution of private capital mobilization for DFC wraps

$$PCM_{DFC} = \frac{1}{\# \text{ official investors}} \times 50\% \times \text{private investment} + \frac{\text{DFC investment}}{\text{Official investment}} \times 50\% \times \text{private investment}$$

Considering Example 3, it shows a \$100m project financed by \$70m of equity and \$30m of debt. In this case, the debt is composed of \$20M from official investment (excluding DFC) and \$10m of DFC investment. In addition, DFC PRI covers 50 percent of the equity (\$35m) and there is no other PRI coverage. Applying the OECD approach and considering that DFC investment is the sum of the financing and PRI (\$10m + \$35m), the total private capital mobilized is \$59.2m.

Example 3

Total project	\$100M (\$70M equity, \$30M debt)
Total private investment	\$70M (equity)
Total official investment (excl. DFC)	\$20M (debt)
Total DFC investment	\$10M (debt)
DFC PRI coverage	\$35M (50% equity)
Other PRI coverage	None

$$PCM_{DFC} = \frac{1}{1} \times 50\% \times \$70M + \frac{\$10M + \$35M}{\$10M + \$35M + \$20M} \times 50\% \times \$70M = \$59.2M$$

If any of these scenarios include investment guarantees, we can assume that DFC mobilizes the total amount of the underlying investment. The calculations would then proceed as described above, with the guaranteed amount removed from the total private investment to avoid double counting.

Data required

To estimate PCM using the OECD approach there is critical data needed in the scenarios considered above. These data points are:

- Investment amount committed by DFC (including guarantees)
- Number of official investors in equity
- Number of official investors in mezzanine/senior debt
- Official investment by player
- Total private investment
- Amount covered by original PRI insurer (for reinsurance)
- Transaction date (for reinsurance)
- Amount covered by DFC PRI
- Capital type covered

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Endnotes

¹ International Monetary Fund, Balance of Payments and International Investment Position Statistics (IMF BOP/IIP)

² ISDB, 2020

³ SDB/ ICIEC. 2020

⁴ IMF BOP/IIP

⁵ IMF BOP/IIP

⁶ Asiedu and Lien, 2011

⁷ Asiedu and Lien 2011

⁸ Matime and Gossel, 2022

⁹ Henisz, 2000; Ali, Fiess and MacDonald, 2010

¹⁰ Brunetti and Weder, 1998

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- ¹¹ Hamdani et al., 2015; Mayer, 2018
- ¹² Akhtaruzzaman, 2019
- ¹³ Asiedu, 2009
- ¹⁴ Asiedu, 2009
- ¹⁵ Galvao, 2001
- ¹⁶ ISDB, 2020
- ¹⁷ ISDB, 2020
- ¹⁸ Galvao, 2001
- ¹⁹ ISDB, 2020
- ²⁰ MIGA, 2011
- ²¹ Galvao, 2001
- ²² S&P Global, 2022
- ²³ ISDB, 2020
- ²⁴ ISDB, 2020
- ²⁵ Waters, 2015
- ²⁶ Waters, 2015
- ²⁷ Based on a survey conducted by MIGA and presented at MIGA,2013
- ²⁸ MIGA, 2011
- ²⁹ ISDB, 2020
- ³⁰ ISDB, 2020
- ³¹ MIGA, 2013
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- ³³ IEE, 2018
- ³⁴ Galvao, 2001
- ³⁵ IIE, 2018
- ³⁶ McLennan and Hansen, 2022; MIGA, 2011; Benedict at al, 2022
- ³⁷ IMF BOP/IIP, Berne Union
- ³⁸ World Economic Forum Global Risk Perception Survey 2021-2022
- ³⁹ Berne Union

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- ⁴⁰ IMF BOP/IIP
- ⁴¹ Berne Union
- ⁴² IMF BOP/IIP
- ⁴³ Berne Union
- ⁴⁴ IMF BOP/IIP, World Bank
- ⁴⁵ IMF BOP/IIP, World Bank
- ⁴⁶ IMF BOP/IIP, Dealogic, FDI Markets
- ⁴⁷ IMF BOP/IIP, Dealogic, FDI Markets
- ⁴⁸ Berne Union
- ⁴⁹ This only includes ECAs PRI coverage; i.e., it excludes all credit and credit insurance products
- ⁵⁰ Berne Union
- ⁵¹ Berne Union
- ⁵² Berne Union
- ⁵³ World Economic Forum Global Risk Perception Survey 2021-2022
- ⁵⁴ World Economic Forum Global Risk Perception Survey 2021-2022
- ⁵⁵ World Economic Forum Global Risk Perception Survey 2021-2022
- ⁵⁶ World Bank, Oxford Economics
- ⁵⁷ World Bank, Oxford Economics
- ⁵⁸ S&P Global, Fitch
- ⁵⁹ Berne Union
- ⁶⁰ Interviews with DFC political risk insurance clients
- ⁶¹ Berne Union
- ⁶² ICIEC survey for the joint MDB G20 stock-take study
- ⁶³ World Bank Group
- ⁶⁴ Interviews with DFC political risk insurance clients
- ⁶⁵ Interviews with DFC political risk insurance clients
- ⁶⁶ Interviews with DFC political risk insurance clients
- ⁶⁷ Berne Union
- ⁶⁸ IPAT - Infrastructure Projects Analytics Tool, leveraging GlobalData

⁶⁹ Press search

⁷⁰ Yin Germaschewski, 2016