Inside the Portfolio of the Overseas Private Investment Corporation

Benjamin Leo and Todd Moss

Abstract

The Overseas Private Investment Corporation (OPIC) is the U.S. government's development finance institution. It provides investors with financing, political risk insurance, and support for private equity investment funds when commercial funding cannot be obtained elsewhere. Its mandate is to mobilize private capital to help address critical development challenges and to advance U.S. foreign policy and national security priorities. However, balancing risks, financial needs, and development benefits is riven with numerous tensions, statutory restrictions, and tradeoffs. This raises an important policy question - how well does OPIC's actual portfolio balance these competing goals? Since much data about the OPIC portfolio is unavailable in an accessible format, we built the OPIC Scraped Portfolio database to address this question. Using this new resource, we provide descriptive statistics about OPIC commitments over time, including regional and sector-level distribution, as well as based on developing countries' commercial and political risk profiles. We conclude the paper with a number of high-level takeaways.

Benjamin Leo and Todd Moss. 2016. "Inside the Portfolio of the Overseas Private Investment Corporation." CGD Policy Paper 081. Washington DC: Center for Global Development. http://www.cgdev.org/publication/inside-portfolio-overseas-private-investment-corporation

Ben Leo is a Senior Fellow at the Center for Global Development. Todd Moss is a Senior Fellow and Chief Operating Officer at CGD. The authors thank Jared Kalow for his invaluable support in assembling the OPIC Scraped Portfolio database and with the analysis contained in this paper. CGD is grateful for contributions from the Bill & Melinda Gates Foundation, the Omidyar Network, and Ford Foundation in support of this work. The authors are thankful for input and comments on earlier drafts of this paper from Scott Morris, Charles Kenny, Alan Gelb, George Ingram, and several anonymous reviewers. The authors are solely responsible for any errors in fact or judgment.



CGD Policy Paper 081 April 2016

Center for Global Development 2055 L Street NW Fifth Floor Washington DC 20036 202-416-4000 www.cgdev.org

This work is made available under the terms of the Creative Commons Attribution-NonCommercial 3.0 license.

Contents

I.	Introduction
II.	Data and Methodology
D	ata Sources
Ν	Iethodological Notes
III.	OPIC Scraped Portfolio – Descriptive Statistics
А	. OPIC Project Pipeline and Statutory Constraints
В	. OPIC Project Commitments Between 2000 and 2014
C	. Regional Portfolio
D	. Sector Allocations
Е	. Country Income Level
F	OPIC Client Breakdown 11
G	Large Project Effect
Н	. Support for White House Initiatives
IV.	Economic and Environmental Risk Measures 14
А	. Commercial Risk Ratings 14
В	. OPIC Insurance Commitments and Political Risk Ratings 17
C	. Environment Risk Ratings
V.	Financial Need and 'Additionality' Measures
A	. Domestic Private Credit Depth
В	. US Banking Sector Exposure
C	. OPIC Leverage Ratios
VI.	Developmental Impact
VII.	Conclusion
App	endices

I. Introduction

The Overseas Private Investment Corporation (OPIC) is the development finance institution of the United States government. Its mandate is to "mobilize private capital to help address critical development challenges" and to "advance U.S. foreign policy and national security priorities." OPIC pursues this mandate by "providing investors with financing, political risk insurance, and support for private equity investment funds, when commercial funding cannot be obtained elsewhere."¹ The agency operates on a self-sustaining basis and has provided net transfers to the US Treasury for nearly 40 consecutive years.² Since its inception, it has helped to mobilize more than \$200 billion of US investment through over 4,000 development-related projects.

OPIC's mandate and toolkit place the agency in a unique position to play a potentially meaningful role in building markets and supporting American objectives abroad, including in the poorest parts of the world. These tasks are not easy: OPIC is supposed to go where private capital is largely absent, where U.S. investment can be beneficial for both the U.S. government and the target market, and do so in a way that is financially sustainable and does not cost American taxpayers.

This is a tall order, riven with numerous tensions and tradeoffs. Investing in the poorest countries may mean higher risk and lower profitability. Supporting U.S. foreign policy objectives may come at a cost to development impact. Investing in certain target sectors, like agriculture or renewable energy, may push OPIC into a different risk profile and into certain markets that may detract from its development mission. Importantly, OPIC also is a demand-driven organization with a number of statutory requirements, which further contributes to, or even exacerbates, these policy tensions and tradeoffs.

OPIC should be judged in part on how management, with approval of the Board, balances these various tradeoffs. So how well does OPIC's actual portfolio balance the risks, financial needs, and development benefits? Given current levels of public disclosure, we cannot easily answer this question since much data about the OPIC portfolio is unavailable in an accessible format.

We therefore built the new *OPIC Scraped Portfolio* dataset by collecting all publicly available information on OPIC's portfolio for the 2000-14 period. This paper explains the data collection and methodology in detail as a way to better understand how OPIC has been deploying its capital in pursuit of its various objectives. Section II summarizes our process. Section III provides descriptive statistics from the database, including commitment trends, regional and sectoral distribution, country income level allocation, and client breakdowns. Section IV analyzes allocations using proxies for commercial, political, and environmental risk. Section V considers OPIC's portfolio mix based on proxies for financial need, 'additionality,' and leverage. Section VI examines development impact, to the extent possible given current levels of public disclosure. Section VII concludes with a number of high-level takeaways. A forthcoming CGD paper will examine the related policy implications and outline a number of recommendations for consideration.

¹ www.opic.gov

II. Data and Methodology

A. Data Sources

In an ideal world, OPIC's existing portfolio database would provide greater detail in a single location. This includes readily available project-level information about: US and foreign sponsors, financing terms, economic sectors, expected development effects, and credit availability within the respective developing country. Since this did not exist, we built the *OPIC Scraped Portfolio* database.

Publicly available OPIC reports and documents are the source for almost all project-specific variables. This includes scraping information from annual reports, annual policy reports, project summaries, and the (limited) online project database. More detailed project-level data indicators – such as total project size, environmental category, loan terms, and leverage ratios – are only available between 2009 and 2014. Before that, OPIC did not systematically disclose project descriptions to the general public.

We utilize a variety of data sources for country-specific variables. The World Bank is the source for the following: GDP, income per capita, population, foreign direct investment flows, and domestic private credit depth.³ US bank exposure data comes from the Bank of International Settlements (BIS).⁴ All political and commercial risk data comes from the Belgian public credit insurance agency (Delcredere). OPIC and other major development finance institutions (DFIs) do not publicly disclose their country risk ratings. In contrast, Delcredere provides annual risk assessments of nearly 250 countries and territories. Unlike many other private providers of country risk data, these assessments track traditional political risk insurance categories (war, expropriation, and currency transfers). Given this, they are ideally suited for our analytical purposes.⁵

B. Methodological Notes

We outline the various project and country classification approaches below. Additional details are provided in the subsequent sections of this paper. Moreover, we provide further methodological information in appendix I. All OPIC commitment figures are presented in inflation-adjusted US dollars.⁶

✓ Sector Classification: First, we manually classify OPIC projects according to 16 sector-level categories, using our best judgment where necessary.⁷ Second, we assign each project with up to two sub-sector classifications. These decisions are primarily based upon OPIC's project descriptions, either from project summary documents (between 2009 and 2014) or OPIC annual reports and press releases (prior to 2009).

³ The specific World Bank indicator is 'domestic credit to private sector (% of GDP)'.

⁴ This includes US bank claims in foreign jurisdictions presented on a consolidated, immediate borrower basis.

⁵ In addition, prior reviews of political risk data found that plant location consultants often use Delcredere to evaluate risks. See Jensen, "Measuring Risk."

⁶ Based upon the US Bureau of Labor Statistics' CPI measure.

⁷ These include: agriculture, education, environment, extractives, financial services, general, government, healthcare, hospitality and tourism, humanitarian assistance, information and communication technology (ICT), industrial, infrastructure, real estate, retail, and services.

- ✓ *Income Level Classification*: We utilize the World Bank's annual country income category cutoffs (e.g., low, lower middle, upper middle, and high income) over time. All related figures correspond to countries' classification when the OPIC Board of Directors originally approved a financial commitment.
- ✓ US Sponsor Classification: We categorize US sponsors into five groups, including corporations, individuals, NGOs, mixed (some combination of individuals, corporations, and NGOs), and unspecified.⁸

III. OPIC Scraped Portfolio – Descriptive Statistics

A. OPIC Project Pipeline and Statutory Constraints

OPIC is a demand-driven development institution that responds to project proposals from US investors. OPIC can engage in broad-based investment promotion activities focused on specific countries, regions, or sectors. For instance, agency executives often host or attend investor conferences and communicate a willingness to consider new project proposals. In some instances, these outreach activities can increase the supply of investment projects that are submitted for OPIC's consideration. However, the agency ultimately remains a demand-driven entity by design. This means that its ability to promote specific US development or foreign policy priorities (e.g., agro-processing in Pakistan) is dependent upon US companies' and investors' demand to operate in these regions and/or sectors.

Beyond this, several statutory restrictions constrain OPIC's ability to support US development and foreign policy priorities. First, OPIC currently can only support firms or investors with significant American ownership or operational control (e.g., US nexus requirement).⁹ No other major DFI ties their financial engagement to national firms (see appendix II for details). This restriction has prevented OPIC from supporting strategic objectives where US investors are not active or prospective participants in a given developing country market or sector. Second, OPIC can only provide two broad types of financial products – debt financing and political risk insurance. In practical terms, the lack of equity investment authority has limited OPIC's ability to support earlier stage ventures that lack an extensive operational track record and profitability. Nearly every other major DFI has equity investment authority.

These statutory restrictions have limited the types of projects that OPIC can consider, and therefore, the composition of its portfolio over time. For instance, the agency received roughly 20,000 project inquiries (e.g., 'pre-screening') between 2000 and 2012. During this stage, prospective investors provide basic information about their project, financial needs, and other

⁸ There are only nine OPIC projects that do not specifically cite the US sponsor name. In most cases, the US sponsor category is clear; although, we used our best judgment in some instances.

⁹ To be eligible for OPIC support, a project must include the meaningful involvement of the US private sector, including: (1) any for-profit entity that is organized within the US with at least 25 percent of its equity/share capital that is US-owned; (2) any for-profit entity that is organized outside of the US with more than 50 percent of its equity/share capital that is US-owned. The 25 percent benchmark level may be met with equity investment (ownership/contribution), long-term debt investment in the project or other U.S. contracts (e.g. construction contracts), or by combining these types of involvement in the project among one or more U.S. participants.

issues.¹⁰ Slightly less than one-in-seven inquiries then advanced to the formal 'application intake' stage. According to OPIC, the US nexus requirement and lack of equity authority were both significant factors in screening out project proposals. OPIC's project selection, pipeline management, and approval processes should be considered when interpreting the subsequent analysis in this paper.





B. OPIC Project Commitments Between 2000 and 2014

Between 2000 and 2014, OPIC supported over 1,400 projects totaling over \$40 billion in commitments.¹¹ Within this, project finance (e.g., loans and guarantees) accounts for \$26 billion, political risk insurance for nearly \$10 billion, and debt capital for privately managed investment funds for just over \$4 billion. More recently, OPIC has supported roughly 100 projects and \$3 billion in commitments per year.

¹⁰ For details, see <u>https://www.opic.gov/what-we-offer/financial-products/apply</u>.

¹¹ As noted previously, this figure is adjusted for inflation based upon the US Bureau of Labor Statistics' CPI measure. In unadjusted terms, OPIC committed roughly \$35 billion between 2000 and 2014.





OPIC's project finance segment has increased significantly over time relative to other

segments. Project finance accounted for roughly half of OPIC commitments in the early 2000s. That figure has risen to nearly 80 percent in recent years. This has been driven both by absolute growth in its loan and guaranty portfolio, and an absolute decline in OPIC's political risk insurance business. By illustration, OPIC provided only \$379 million in insurance coverage in 2014, compared to \$1.7 billion a decade before.

¹² The decline in 2008 was primarily due to a lapse of OPIC's congressionally provided authorities to commit new financial commitments.



Figure 3 – OPIC Commitments by Type, 2000-2014

Source: OPIC and authors' calculations

C. Regional Portfolio

Since 2000, over half of OPIC commitments have focused on Latin America and Sub-Saharan Africa. Latin America and the Caribbean has accounted for roughly one-third of OPIC commitments (\$13.7 billion). Sub-Saharan Africa and the Middle East and North Africa (MENA) are the next largest regional recipients, with OPIC commitments of \$7.2 billion and \$5.5 billion respectively.

	OPIC Projects				nents
Region	# of Projects	% of Total	Average Project Size (mlns)	Total Commitments (mlns)	% of Total
Latin America	436	31%	\$31.3	\$13,664	34%
Sub-Saharan Africa	257	18%	\$28.0	\$7,201	18%
MENA	127	9%	\$43.5	\$5,521	14%
Asia	220	15%	\$22.0	\$4,839	12%
Europe	112	8%	\$34.8	\$3,894	10%
NIS	241	17%	\$15.4	\$3,711	9%
Global	32	2%	\$46.4	\$1,485	4%
TOTAL	1,425	100%	-	\$40,326	100%

Figure 4 – OPIC Commitments by Region

Source: OPIC and authors' calculations

OPIC commitments have increased the most in Sub-Saharan Africa, emerging Asia, and Eastern Europe over the last five years. OPIC commitment volumes *at least* doubled in each of the regions. On the other hand, the agency's MENA exposure declined by one-third during this period. OPIC commitments in Latin America have remained largely static over the last 15 years. Although, they would have declined if a handful of large renewable projects in Chile (high-income country) were omitted.



Figure 5 - OPIC Commitments by Region, Five-Year Periods

Source: OPIC and authors' calculations

D. Sector Allocations

OPIC has become primarily focused on supporting infrastructure and financial services projects. These two sectors have accounted for two-thirds of OPIC commitments since 2000. Moreover, their combined share has grown over time and reached 85 percent of new OPIC commitments in 2014. The most notable shift occurred in the mid-2000s when OPIC began prioritizing support for on-lending facilities for small- and medium-sized enterprises (SMEs) and microfinance institutions.¹³ The share of support for infrastructure projects declined during the mid-2000s before increasing again during the 2010-2014 period.¹⁴ The most important infrastructure sub-sector has been electricity (124 projects), followed by intermodal transport (34 projects) and water (27 projects).

At the same time, OPIC has moved away from supporting enclave projects in the extractive sector, including mining and oil and gas exploration and production. Between 2000 and 2004, extractive industries accounted for roughly 30 percent of total OPIC commitments. This covered 36 projects in 28 countries, primarily in support of oil pipelines; oil and gas exploration and production; and gold and silver mines.¹⁵ However, the extractive sector share has fallen to less than 1 percent over the last five years. In fact, OPIC has provided small-scale support for only 7 extractive sector projects in Afghanistan, Brazil, and Colombia during this period.¹⁶ Of these, only Colombia has involved the expansion of oil production facilities.¹⁷

¹⁶ Between 2010 and 2014, OPIC commitments for extractive projects totaled roughly \$70 million.

¹³ Financial services accounted for only 13 percent of OPIC commitments between 2000 and 2004. Its share increased to 47 percent during the 2005-2009 period.

¹⁴ OPIC support for infrastructure projects declined from 31 percent of total commitments between 2000 and 2004 to 19 percent of total commitments between 2005 and 2009. Low relative commitment levels in 2006 and 2007 (9 percent and 8 percent, respectively) largely explain this trend. However, the infrastructure share reached 37 percent during the 2010-2014 period.

¹⁵ The recipient countries included: Algeria, Angola, Argentina, Azerbaijan, Bolivia, Brazil, Chad, Chile, Colombia, Cote d'Ivoire, Egypt, Equatorial Guinea, Ethiopia, Ghana, Guatemala, Indonesia, Jordan, Mongolia, Namibia, Nicaragua, Nigeria, Kazakhstan, Pakistan, Papua New Guinea, Russia, Serbia and Montenegro, Sierra Leone, and Venezuela,

¹⁷ In Afghanistan and Brazil, OPIC supported the establishment and/or expansion of granite and marble quarry facilities.



Figure 6 – Financial Services, Infrastructure, and Extractive Sector Commitments¹⁸

Education and healthcare have remained small overall recipients of OPIC support despite several large individual projects. OPIC has supported only 59 projects in the education and healthcare sectors since 2000, or roughly 4 percent of OPIC projects. However, it provided \$500 million for two major healthcare projects in Malaysia and Turkey in 2013.¹⁹ Both of these projects are public-private partnerships with a build and operate model. Within education, OPIC has primarily supported the construction or expansion of international schools.²⁰

OPIC support for agricultural production and agro-businesses has increased in recent years, but remains a modest component of its portfolio. Overall, agriculture-related projects accounted for 6 percent of OPIC commitments between 2010 and 2014.²¹ This makes it the fourth largest sector after financial services, infrastructure, and healthcare. Nearly three-quarters of OPIC's agriculture projects have focused on Sub-Saharan Africa and Latin America.

¹⁸ Figures exclude support for privately managed investment funds.

¹⁹ In Malaysia, OPIC provided \$250 million in project finance for a medical school and 600-bed teaching hospital in Selangor. For additional details, see

https://www.opic.gov/sites/default/files/files/Academic%20Medical%20Centre%20Sdn%20Bhd.pdf. In Turkey, OPIC provided \$250 million in project finance for the construction and operation of an integrated health campus in Ankara. For additional details, see

https://www.opic.gov/sites/default/files/files/Bilkent%20Integrated%20Health%20Campus%20Public%20Summary.pdf. ²⁰ Since 2000, OPIC has supported 26 education-related projects, half of which have been related to constructing or

expanding international schools. It has also supported four higher education projects in Bulgaria (2011), Georgia (2011 and 2012), and the Kyrgyz Republic (2014), Georgia (2011 and 2012). The remainder has been privately run primary, secondary, or technical schools.

²¹ This time period also corresponds to the implementation period of the L'Aquila Global Food Security Initiative at the G8 Summit in 2009. While the US government did not make any OPIC-specific commitments, the Obama Administration did pursue a "whole-of-government" approach to addressing food security and hunger in developing countries.

E. Country Income Level

Since 2000, nearly half of OPIC's country-specific commitments have focused on upper middle-income and high-income countries,²² such as Brazil, Israel, Mexico, Russia, and Turkey.²³ In 2014, these wealthier countries accounted for over 70 percent of new OPIC commitments. Low-income countries have accounted for roughly 10 percent of total commitments over the last 15 years.²⁴ In addition, the average commitment size is significantly smaller in the poorest countries.

	OPIC Projects			OPIC Commitr	nents
Income Category	# of Projects	% of Total	Average Commitment Size (mlns)	Total Commitments (mlns) ²⁶	% of Total
Low Income	296	21.0%	\$14.2	\$4,209	10.5%
Lower Middle Income	533	37.9%	\$25.2	\$13,457	33.5%
Upper Middle Income	436	30.9%	\$33.0	\$14,392	35.8%
High Income	29	2.1%	\$64.1	\$1,860	4.6%
Multi-Country Projects	115	8.2%	\$54.7	\$6,287	15.6%
TOTAL	1,411	100%	-	\$40,206	100%

Figure 7 – OPIC Commitments by Country Income-Level, 2000-2014²⁵

Source: OPIC and authors' calculations

Beyond this, over one-third of OPIC's commitments in 2014 focused on OECD

countries. Between 2012 and 2014, OPIC provided roughly \$2.8 billion in support for projects in OECD countries, or 26 percent of the total. This includes countries like Chile, Israel, Mexico, and Turkey. While the OECD share has increased significantly in recent years, OPIC has provided longstanding support for this group. Nearly one-fifth of OPIC commitments between 2005 and 2014 focused on OECD countries.

The share targeting the poorest countries has been on a downward trend for over a decade, and now accounts for only 1 percent of OPIC's annual commitments. The outliers were 2009, when OPIC committed almost \$150 million to a power generation project in Togo, and 2011, when OPIC committed more than \$400 million for renewable energy projects in Kenya and Liberia. Several macro-level trends partially account for this decline. Most importantly, there are now far fewer low-income countries and many of the remainder are small and/or fragile states (see appendix III for details). Nonetheless, there are several OPIC-specific factors as well, such as a significant increase in support for wealthy countries like Aruba, Chile, Israel, and Uruguay in recent years. Nearly all of this support has focused on renewable energy

²² In 2014, the World Bank defined upper middle-income status as having a GNI per capita between \$4,125 and \$12,745. Any country with an income per capita above this level was considered high income.

²³ This excludes multi-country projects, which totaled \$6.3 billion between 2000 and 2014. Therefore, the share for specific income category groupings is based upon the adjusted country-specific total (\$33.9 billion).

²⁴ Figures correspond to respective developing countries' income classification in the year when OPIC approved the

financial commitment.

²⁵ Portfolio share figures may not sum to 100 percent due to rounding.

²⁶ There are a number of projects in countries (like Kosovo and St. Maarten) without an income classification, so they are not counted in this table.

projects (e.g., solar and wind).²⁷ In addition, the US nexus requirement and lack of equity authority have constrained OPIC from engaging more in the poorest countries as well.





However, OPIC utilizes an alternative methodology for determining country income thresholds based upon historical statutes from the US Congress. Currently, OPIC is supposed to limit support for projects in high-income countries.²⁸ However, there are significant differences with World Bank income classifications, which are widely used by development organizations (see figure 9 below). Therefore, we also analyzed OPIC's portfolio using its unique income classification methodology. See appendix IV for details.

Figure 9 - OPIC versus World Bank Income Category Thresholds, 2014

Income Classification	OPIC Guidelines	World Bank Thresholds
LIC	< \$1,803	< \$1,045
MIC	\$1,803-\$7,822	\$1,045 - \$12,745
HIC	> \$7,822	> \$12,745

Source: OPIC and World Bank

²⁷ By illustration, in 2013 and 2014, OPIC provided \$697 million in support for solar power projects in Chile. In addition, OPIC committed \$250 million in 2014 for a solar power project in Israel. However, OPIC has backed several smaller projects in wealthy countries outside of the power sector. For example, it has supported SME and microfinance on-lending programs in Kazakhstan and Russia.

²⁸ Source: USAID (2015), Assessment of the Overseas Private Investment Corporation's Development Outcome and Compliance Risks, Report No 8-OPC-15-002-S, May 15, 2015.

F. **OPIC Client Breakdown**

The overwhelming majority of OPIC clients are US corporations, as expected. Since 2000, nearly 90 percent of OPIC commitments have involved US corporate sponsors. However, OPIC has supported a growing number of non-profit organizations and individual investors – particularly when compared to the early 2000s. These two segments each accounted for roughly 8 percent of OPIC commitments during the 2010-2014 period.

OPIC has a diversified client base, including within its corporate project sponsors.

Between 2010 and 2014, the ten largest clients accounted for roughly 40 percent of total OPIC commitments. Citibank and Wells Fargo were the largest US sponsors by OPIC commitment size, although Wells Fargo did not become a significant sponsor until 2013.²⁹ During this period, OPIC supported 53 Citibank-sponsored projects in 27 different developing countries.³⁰ In addition, OPIC supported 15 Wells Fargo-sponsored projects; of which, only three were not related to SME lending facilities.³¹

US Sponsor	Primary Sector	Total Commitments (mlns)	% of OPIC Commitments
Citibank	Microfinance, SME Lending	\$1,672	10%
Wells Fargo	SME Lending	\$1,142	7%
Sun Edison	Power	\$634	4%
MEMC Electronic Materials	Power (Solar)	\$606	4%
AES Corporation	Power	\$582	4%
Contour Global	Power	\$535	3%
Belstar Capital Limited	Agriculture	\$491	3%
MBIA Insurance Corporation	Infrastructure	\$412	3%
CHF International (NGO)	SME Lending, Housing	\$366	2%
Ormat International	Power	\$326	2%
TOTAL	-	\$6,766	42%

Figure 10 - Ten Largest OPIC Clients, 2010-2014

Source: OPIC and authors' calculations

Nearly every Citibank and Wells Fargo project has focused on supporting local lending facilities for microfinance institutions and SMEs. OPIC and the U.S. government has taken concerted steps over time to promote these types of lending activities throughout the world, and to encourage a greater role for US financial institutions. Consistent with this, Citibank and Wells Fargo have partnered with local financial institutions, such as First City Monument Bank in Nigeria, to support targeted lending to these traditionally under-served client segments. In turn, OPIC typically provides a loan guarantee instrument for a limited period of time for demonstration effect purposes.

²⁹ Before 2013, Wells Fargo did not commit more than \$30 million for any one project.

³⁰ These include: Armenia, Costa Rica, Ecuador, Egypt, El Salvador, Georgia, Ghana, Guatemala, Honduras, India, Indonesia, Jamaica, Jordan, Kazakhstan, Lebanon, Morocco, Nigeria, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Sri Lanka, Turkey, and Ukraine.

³¹ In 2014, OPIC committed roughly \$8 million for a HIV/AIDS treatment program. In 2011, OPIC provided a \$10 million loan for a global equipment leasing project. The remainder of Wells Fargo-sponsored projects focused on SME lending facilities.

Large US corporations (e.g., Fortune 500 companies) accounted for roughly 30 percent of OPIC commitments between 2000 and 2014. Citibank and Wells Fargo explain a significant component of this support in recent years, as noted above. More broadly, OPIC does not publish detailed information about its clients, such as annual sales and number of employees. In addition, there are not any corporate registry resources that provide comprehensive and historical coverage of the majority of OPIC clients.³² Therefore, we were unable to conduct detailed analysis of OPIC's operations by client firm size beyond Fortune 500 status.



Figure 11 – OPIC Commitment Share, Fortune 500 Sponsors

G. Large Project Effect

Any analysis of OPIC's portfolio can be highly skewed by large projects. In any given year, one or two very large projects can have a significant effect on the portfolio. This can present a highly distorted snapshot if taken out of context. This "lumpiness" problem means that any year-on-year trends should be considered with caution, particularly in the early 2000s, when large extractive sector projects dominated OPIC's portfolio. This effect is especially pronounced as commitments are counted in the year of Board approval, even if the investment is implemented, and remains in OPIC's portfolio, over many years.

Source: OPIC and authors' calculations

³² The US federal government does not have a centralized corporate registry outside of listed companies.

Year	Country	Sector	US Sponsor	OPIC Commitment (mlns)	% of Annual Commitments
2002	Indonesia	Extractives (oil & gas)	Unocal Corporation	\$461	34%
2008	Mexico	Infrastructure (roads)	MBIA Insurance Corporation	\$440	30%
2012	Turkey	Financial Services (SMEs)	MBIA Insurance Corporation	\$412	11%
2004	Nigeria	Extractives (oil & gas)	Exxon Corporation	\$407	12%
2013	Brazil	Financial Services (SMEs)	Wells Fargo	\$407	10%
2005	Israel	Extractives (oil & gas)	Citibank	\$388	13%
2004	Egypt	Extractives (oil & gas)	Apache Corporation	\$376	11%
2005	Colombia	Infrastructure (power)	Citibank	\$376	12%
2011	Kenya	Infrastructure (geothermal power)	Ormat International	\$326	12%
2003	Philippines	Infrastructure (power)	U.S. Bank National Association	\$322	13%

Figure 12 - Ten Largest Projects, 2009-2014

Source: OPIC and authors' calculations

H. Support for White House Initiatives

Over time, OPIC has been tasked with helping to implement a number of presidential initiatives, such as Power Africa and Feed the Future. In 2013, OPIC committed to provide up to \$1.5 billion in financing and insurance for energy projects in Sub-Saharan Africa over five years. The agency has also committed to provide financial support for agriculture and agro-processing value chain projects in Feed the Future countries, although there are not any specific monetary targets.³³

OPIC's track record at implementing presidential commitments has been quite strong in absolute terms. The agency has clearly focused more of its agriculture-related investments in Feed the Future focus countries over time. For instance, OPIC agriculture-related commitments averaged only \$4 million per year in these countries prior to 2009, whereas they have averaged over \$60 million annually since then. Their relative share of OPIC's total agriculture-related commitments has risen significantly as well, increasing from 12 percent (before 2009) to over 43 percent (since 2009). The Power Africa implementation picture has been more nuanced, largely due to timing effects. While OPIC committed \$213 million for African power projects in 2014, this was a modest share of the agency's overall electricity-related commitments that year. However, OPIC announced further increases in 2015 and expects to support numerous large-and small-scale power projects over the coming years.³⁴

³³ For a list of Feed the Future countries, see http://www.feedthefuture.gov/countries.

³⁴ OPIC has not released official, project-level commitments for 2015. Therefore, we do not include individual power project announcements in our analysis.

			Avg A Commitme	nnual ents (mlns)	Annual Commitment Share (% of Sector Total)	
Presidential Initiative	# ofTotal RelatedRelatedCommitmentsProjects(mlns)		Before After		Before After	
Feed the Future	10	\$307	\$5	\$61	12%	43%
Power Africa	6	\$237	\$104	\$118	20%	9%

Figure 13 – OPIC Commitments to Presidential Initiatives, Focus Countries

Source: OPIC and authors' calculations

IV. Economic and Environmental Risk Measures

We now assess OPIC's portfolio commitments according to a range of economic and environmental risk factors at either the country- or project-level. Country-level commercial risk ratings are used only for OPIC finance projects (loans and guarantees). Political risk ratings are applied to OPIC insurance projects. For both measures, all data comes from the Belgian public credit insurance agency (Delcredere). Unlike OPIC and other DFIs, Delcredere publishes its risk ratings on an annual basis and covers nearly every developing country. For environmental risks, we simply use OPIC's internal project-level ratings, which are produced by the Office of Investment Policy.

There is a natural tension between OPIC's demand-driven business model and its desire to support commercially viable projects with high development potential in higher risk countries. As noted previously, OPIC has a number of non-financial tools to support US investor demand for specific sectors, countries, or regions. Examples include investment forums, missions, and calls for investment proposals. Despite this, OPIC remains relatively passive in terms of responding to investors' own risk appetite, which should be considered when interpreting the following analysis.

A. Commercial Risk Ratings

OPIC finance support in developing countries with high commercial risk ratings has declined sharply over the last five years despite a concerted effort by management and the introduction of several new financial instruments. An example of the latter includes OPIC's *Portfolio for Impact*, which focuses on facilitating financing for highly developmental and innovative early stage projects in higher risk countries (e.g., least developed countries and post-conflict states).³⁵ Overall, the share of high-risk country projects has fallen from roughly 70 percent of commitments in 2009 to 38 percent in 2014. This trend partially mirrors OPIC's shift away from low-income countries over time. In contrast, nearly one-third of OPIC finance commitments in 2013 were targeted to low-risk countries.³⁶ Interestingly, OPIC experienced a

³⁵ For additional details, see <u>https://www.opic.gov/opic-action/impact-investing/recent-impact-innovations/portfolio-for-impact</u>.

³⁶ This includes six projects in Chile, Malaysia, and Uruguay. Of these, five were for renewable energy projects totaling \$775 million in OPIC commitments. In 2014, there was only one OPIC finance project in a low-risk country (Aruba), which supports the installation of solar-based power solutions for commercial customers. OPIC supported additional projects in

similar cycle between 2005 and 2008, when the share of high-risk country commitments dropped from 97 percent to 49 percent.



Figure 14 - Commercial Risk Rating Share, OPIC Finance Commitments by Year

At the same time, the global share of countries with high commercial risk ratings has remained largely static since 2000, with the notable exception of the global financial crisis in 2008 and 2009. In 2000, 46 percent of all countries globally were classified as high-risk, while they accounted for 48 percent in 2014. In different terms, there were 98 high-risk countries in 2000 and 104 in 2014. However, that number increased during the global financial crisis, reaching 147 countries in 2009. Since then, the number of high-risk countries has returned to pre-crisis levels.³⁷

Another notable shift occurred in 2008 and 2009 when many low-risk countries moved to the medium-risk category. In 2008, the number of low-risk countries declined from 46 to 16, with a further decline the following year. In fact, there was only one low-risk country globally in 2009 (Brunei). Unlike high-risk countries, the number of low-risk countries has not returned to pre-global financial crisis levels.³⁸ The medium-risk category experienced similar changes during these periods, including a failure to return to pre-crisis levels in aggregate terms.³⁹ Put simply, there are fewer low-risk countries, more medium-risk countries, and roughly the same number of high-risk countries in the world today compared to before the global financial crisis. OPIC's

Source: OPIC, Delcredere, and authors' calculations

Chile, however the country's commercial risk rating fell from low-risk to medium-risk. In 2004, OPIC invested \$255 million in Chile and \$4 million in Ireland, which were both rated as low-risk countries.

³⁷ There were 104 high-risk countries in 2014 compared to 109 in 2007.

³⁸ In 2014, there were 30 countries with low commercial risk ratings compared to 46 in 2007.

³⁹ There were 73 medium-risk countries in 2014 compared to 51 in 2007.

shift away from higher risk countries is particularly striking in light of these global commercial risk trends.



Figure 15 – Commercial Risk Rating Share, by Percent of All Countries Globally

Importantly, these ratings correspond only to country-level risks and do not reflect the complete risk profile for individual OPIC-supported projects.⁴⁰ Such project-level risks include financial performance, sector-level regulations, and other factors, along with the aforementioned country-level risks. The OPIC Board and management consider all of these factors during the formal approval process as well as over time. As a financial institution, OPIC naturally does not disclose the financial performance of individual projects. However, it does disclose performance metrics at the portfolio level, such as provisioning for non-performing loans and loan write-offs.

Direct loan provisioning levels suggest that OPIC may have a substantial risk appetite.

These provisions for potential loan write-offs have fluctuated between 10 percent and 20 percent of total direct loans outstanding by volume. These are significant levels for a financial institution. However, actual direct loan write-offs have remained quite modest over time. Between 2001 and 2013, these write-offs have averaged roughly 1 percent of total outstanding direct loans each year. The disparity between these two metrics suggests that OPIC management has conservative operating practices for monitoring its direct loan risk exposure. Moreover, it may also indicate that OPIC has active, ongoing engagement with its clients to improve loan repayment performance.

⁴⁰ For instance, some may argue that OPIC's renewable energy commitments in Chile, Uruguay, or Aruba were high-risk projects due to technological, market, or regulatory based factors.



B. OPIC Insurance Commitments and Political Risk Ratings

The majority of OPIC insurance commitments over time have been in developing countries with "medium" political risk ratings. Medium-risk countries, such as Kenya and Lebanon, accounted for over 70 percent of insurance commitments between 2002 and 2014. High-risk countries (e.g., Afghanistan and Nigeria) accounted for roughly one-fifth of insurance commitments during this period. However, this share reached much higher levels in some years due to large individual transactions.⁴¹

Consistent with other broader OPIC risk trends, the relative share of OPIC insurance projects in low-risk countries increased sharply in recent years. In 2013 and 2014, they totaled nearly 30 percent of all OPIC insurance commitments. However, this trend appears to be primarily driven by two large projects. This includes a \$307 million solar power project in South Africa and a \$280 million bank expansion project in Brazil.⁴²

⁴¹ For example, the high-risk share was 66 percent of total OPIC insurance commitments in 2010. This was due to a \$38 million cogeneration power project by Contour Global in Nigeria.

⁴² In South Africa, the OPIC insurance project component included \$34 million. The primary US project sponsors are SunEdison and MEMC. In Brazil, the OPIC insurance component is \$40 million and the US sponsor is Assurant Incorporated.



Figure 17 – Political Risk Ratings, OPIC Commitments by Year⁴³

Source: OPIC, Delcredere, and authors' calculations

C. Environment Risk Ratings

The overwhelming majority of OPIC projects have been classified as having either minimal, or limited and largely reversible environmental and social impacts.⁴⁴ These projects are classified as category B or C. There have been only 19 projects that have been classified as category A, meaning that they require the preparation of a full environmental and social impact assessment (ESIA), which must be publicly disclosed for comment.

⁴³ Political risk ratings are not available for 2000 and 2001. Therefore, these figures do not capture roughly \$2.4 billion in OPIC insurance commitments during these two years.

⁴⁴ This information is taken from OPIC's publicly available project summaries. For examples, see <u>https://www.opic.gov/opic-action/all-project-descriptions</u>.

Category	# of Projects	Commitments (mlns)	Description ⁴⁵	Examples
А	19	\$2,175	Projects that are "likely to have significant adverse environmental and/or social impacts that are irreversible, sensitive, diverse, or unprecedented."	Projects with greenhouse gas emissions exceeding 100,000 tons of CO equivalent per year, large-scale power projects
В	181	\$6,415	Projects that are "likely to have limited adverse environmental and/or social impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures."	Most projects involving construction (majority of infrastructure, education, agriculture, real estate, ICT, and hospitality & tourism projects), financial services projects with leasing components
С	246	\$5,834	Projects that are "likely to have minimal environmental or social impacts."	Most financial services projects
D	27	\$2,249	This designation is "reserved for initial approval of guarantees to Financial Intermediaries" which make investments or provide financing to subprojects. OPIC evaluates all sub- projects based on the potential environmental and social risk.	Mostly investment funds, along with some finance and insurance projects

Figure 18 - OPIC Environmental Risk Categories and Project Commitments





Source: OPIC and authors' calculations

⁴⁵ "OPIC – Environmental and Social Policy Statement," October 15, 2010.

OPIC typically assumes that financial services projects will have minimal adverse environmental effects. In addition, the agency almost always screens investment funds for possible environmental and social impacts only once these funds consider sub-projects at a later date.⁴⁶ As noted in a recent OIG report, OPIC's operating procedures concerning financial services projects could potentially expose the agency to higher than expected environmental risks.⁴⁷ At a minimum, they could lead to reputational risk, especially when OPIC is providing broader financial support to a specific bank.⁴⁸

V. Financial Need and 'Additionality' Measures

Next, we examine OPIC's portfolio commitments based upon a series of financial depth/need measures, including domestic private credit depth and US banking sector exposure. Both metrics are proxies for the broader availability of private financing – whether from local or US financial institutions – in respective developing countries. As a development agency, we would expect OPIC to prioritize support for projects in countries with lower levels of financial sector development, and therefore, greater need for public sector-backed tools.

A. Domestic Private Credit Depth

The share of OPIC commitments targeting countries with high domestic private credit depth has increased significantly in recent years.⁴⁹ In fact, it has increased for six consecutive years and totaled nearly 40 percent of all country-specific OPIC commitments in 2014, up from only 4 percent in 2009.⁵⁰ This includes countries such as Chile (110 percent of GDP), Vietnam (100 percent), Turkey (75 percent), and Morocco (71 percent). Moreover, OPIC support in developing countries with relatively shallow financial sectors has been more modest. However, the agency also supported projects in a number of bottom quartile countries including Afghanistan, Nigeria, and Pakistan.

 ⁴⁶ These are considered category D projects, which are reserved for financial intermediaries (e.g., investment funds).
 ⁴⁷ See USAID (2015), Assessment of the Overseas Private Investment Corporation's Development Outcome and Compliance Risks, Report No 8-OPC-15-002-S, May 15, 2015.

⁴⁸ OPIC collects information on policy compliance through its annual self-monitoring questionnaires. In the absence of site visits, OPIC must rely on the financial institution to accurately and comprehensively report on all related lending activities and their potential environmental and social effects.

⁴⁹ We divide countries into four credit depth categories, which are determined for that particular year in the universe of all countries. As such, the top 25 percent of all countries ranked are classified as having "high" private domestic credit depth. Since the quartiles are determined on an annual basis, the makeup of each quartile changes. This approach controls for broader credit depth increases within most developing countries over time. Nonetheless, it has some drawbacks. Most importantly, it does not reflect any empirically based thresholds. Given this, we also provide a second approach that draws upon several recent empirical studies that estimate the impact of domestic credit depth on economic growth at various levels.

⁵⁰ This excludes regional projects from the calculation.



Figure 20 – OPIC Commitments by Domestic Private Credit Depth Quartile

Source: World Bank, OPIC, and authors' calculations

We also pursued an alternative approach to assessing OPIC's prioritization for countries with lower domestic credit depth. This approach is based on several recent empirical studies.⁵¹ See appendix IV for details and related findings, which are broadly consistent with the analysis above.

B. US Banking Sector Exposure

Given OPIC's mission to promote 'additional' US private capital flows, we would expect that the agency would prioritize projects in developing countries with more modest engagement by large US financial institutions. However, banks' foreign claims are an imperfect measure of US financial support. This is due to the inclusion of sovereign debt obligations, trade finance, and other non-investment related areas within this measure. Nonetheless, US bank exposure statistics provide a reasonable proxy of familiarity and engagement with specific developing countries.

Half of OPIC commitments between 2000 and 2014 focused on countries with "high" US banking sector exposure. This has been a longstanding trend and does not reflect a recent shift. In practical terms, these are countries with a minimum of roughly \$2 billion and \$6 billion in US bank exposure (e.g., foreign claims) during this period.⁵² Examples include: Mexico (\$114 billion), India (\$74 billion), Turkey (\$24 billion), South Africa (\$14 billion), and Chile (\$10 billion).

⁵¹ Jean Louis Arcand, Enrico Berkes, and Ugo Panizza, "Too Much Finance?," IMF Working Paper, (2012); Felix K. Rioja and Neven T. Valev, "Does One Size Fit All?: A Reexamination of the Finance and Growth Relationship," *Journal of Development Economics* 74 (2004): 429–47.

⁵² US banking institutions' foreign claims have risen steadily since 2000. Therefore, the top quartile of country exposure has increased from roughly \$2.4 billion in 2000 to approximately \$6.6 billion in 2015.



Figure 21 - OPIC Commitments by US Bank Exposure Category

C. OPIC Leverage Ratios

Simple project leverage ratios can be an imprecise metric for gauging OPIC's 'additionality' and developing countries' financial needs.⁵³ First, they do not capture whether OPIC catalyzed other financiers' involvement through early stage support. In other words, did OPIC validate the project's commercial viability or did it join a transaction after other public and/or private creditors?⁵⁴ Second, some sectors, sub-sectors, or specific transactions may involve new or unproven technologies or business models. In these instances, OPIC may decide to provide a disproportionate share of the respective project's financing for demonstration effect purposes. Due to OPIC's relatively limited public disclosure practices, it is difficult to identify when these factors have been present.⁵⁵ Therefore, we urge appropriate caution when interpreting OPIC project leverage ratio results.

Extractive, real estate, and ICT projects have demonstrated the highest OPIC leverage ratios since 2009. For these sectors, every \$1 of OPIC commitments has been matched by \$4.3, \$2.8 and \$2.8 of other investment capital, on average.⁵⁶ Infrastructure and financial services projects, which account for the overwhelming majority of OPIC commitments, also exhibit relatively high leverage ratios (\$2.7 and \$2).

⁵³ These leverage ratios measure OPIC commitments (finance and insurance) as a percentage of the total project size.
⁵⁴ Importantly, we attempted to identify additional details about the timing of OPIC's involvement in recently approved projects. Specifically, we attempted to look at whether OPIC's support preceded other financiers' involvement. However, OPIC does not publicly report this type of information and publicly available sources (e.g., investor press releases, media)

articles, etc.) are highly fragmentary. Therefore, we were unable to add a timing dimension to the assessment of OPIC's 'additionality'.

⁵⁵ As noted above, OPIC typically does not disclose whether other public or private financiers are involved in a project, or the specific terms of that involvement. Moreover, OPIC's publicly available project descriptions rarely note whether the project involves a new or unproven technology or business model.

⁵⁶ This is based on the un-weighted average of 10 extractive sector projects, 14 real estate-related projects, and 12 ICT-related projects.

Several sectors have failed to meet OPIC's informal benchmark ratio, whereby every \$1 of commitments should be matched by at least \$2 from other sources. These include: environment, humanitarian services, retail, services, hospitality and tourism, and industrial sectors. However, these sectors account for a very modest share of total OPIC commitments over the last five years.⁵⁷



Figure 22 – Average OPIC Leverage Ratio, by Sector⁵⁸

Source: OPIC and authors' calculations

Project leverage ratios have been highest in the Middle East and North Africa, in wealthy countries, and some regional projects. OPIC projects in MENA and Sub-Saharan Africa had higher leverage ratios compared to other regions. OPIC leverage ratio in high-income countries were twice the size of low-income country projects, while OPIC leverage ratios averaged only \$1.6 in the poorest countries during the last five years.

⁵⁷ There were only 49 projects in these six sectors. Moreover, humanitarian assistance projects typically only involve political risk insurance coverage for consultancies, shipment of goods and services, or other short-term operational activities. Therefore, we would not expect to find high leverage ratios for these projects.

⁵⁸ This figure excludes sectors with fewer than 10 projects during the 2009-2014 period.

Region	Average Leverage Ratio	Number of Projects (2009-2014)
MENA	3.07	56
Global	2.95	22
Africa	2.83	101
Asia	2.46	83
Europe	2.07	29
Latin America	2.04	159
NIS	2.03	97
Income Group	Average Leverage Ratio	Number of Projects (2009-2014)
High Income	3.48	22
Regional	3.31	65
Lower Middle Income	2.27	213
Upper Middle Income	2.03	181
Low Income	1.64	64

Figure 23 – Average OPIC Leverage Ratio, by Region and Income Group

VI. Developmental Impact

OPIC utilizes a Development Impact Matrix tool to evaluate and monitor both prospective and approved investment projects; however, the information is not publicly reported. Based on the current methodology, OPIC's Office of Investment Policy assigns each prospective project a score between 1 and 100. A "highly developmental" project must have a score of 60 or higher. "Developmental" projects receive a score between 40 and 60.

While OPIC does not disclose projects' impact scores, the agency's project descriptions contain specific qualifier language that correspond to the respective impact categories. Therefore, we utilize these descriptors to categorize OPIC projects as "highly developmental", "developmental", or "indeterminate". More information is available in Appendix I. Importantly, while these classification decisions appear intuitive, they should be considered only in illustrative terms. More definitive and refined analysis will only become possible once OPIC begins to disclose project-level development impact scores.

Based on this rough methodology, the overwhelming majority of recent OPIC commitments appear to support "developmental" projects. This category accounts for roughly 80 percent of OPIC commitments (and number of projects as well) over the last five years. Interestingly, the share of "highly developmental" projects steadily declined between 2009 and 2013, before rebounding the following year.⁵⁹

Over three-quarters of "highly developmental" projects, by commitment size, have been concentrated in MENA, Sub-Saharan Africa, and Asia. At the same time, these regions accounted for only half of OPIC commitments between 2009 and 2014, thereby suggesting a disproportionate share of highly developmental projects. Former Soviet republics and Eastern European countries had the lowest share of highly developmental projects. These two regions

⁵⁹ The share of "highly developmental" project commitments is as follows: 2010 (20 percent), 2011 (17 percent), 2012 (9 percent), 2013 (9 percent), and 2014 (30 percent).

accounted for 17 percent of OPIC commitments over the last five years, yet only 6 percent of highly developmental project commitments.



Figure 24 - Developmental Impact Ratings at Project Approval, by Region

Source: OPIC and authors' calculations

Low-income and lower middle-income countries had the highest relative share of "highly developmental" projects over the last five years. Roughly 25 percent of OPIC commitments *within* these two income groups supported projects with significant expected development effects. By comparison, only 4 percent of OPIC commitments to upper middle-income countries were related to "highly developmental" projects.⁶⁰ This is particularly striking in light of OPIC's shift towards wealthier countries in recent years.

⁶⁰ Between 2009 and 2014, OPIC committed \$226 million for "highly developmental" projects in upper middle-income countries (out of nearly \$5.8 billion).



Figure 25 - Development Impact Ratings at Project Approval, by Income Group

Infrastructure, real estate, agriculture, and education projects have received the highest relative share of "highly developmental" projects.⁶¹ Infrastructure and financial services projects account for roughly 85 percent of OPIC's highly developmental activities over the last five years, which is larger than their share of total commitments. There were several sectors without any high impact projects, such as hospitality and extractive projects.⁶²



Figure 26 - Development Impact Ratings at Project Approval, by Sector

■ Highly Developmental ■ Developmental ■ Indeterminate

Source: OPIC and authors' calculations

⁶¹ There may be relatively few projects for some of the referenced sectors, especially outside of infrastructure and financial services. Therefore, appropriate caution should be taken when interpreting these relative results.

⁶² There were no "highly developmental" projects in the following sectors between 2009 and 2014: humanitarian services, services, retail, extractives, and hospitality and tourism.

VII. Conclusion

Based on the detailed data analysis above, we draw a few high-level conclusions about OPIC's portfolio commitments since 2000:

- (1) OPIC has become primarily focused on supporting infrastructure and financial services projects. These two sectors top the list of business constraints and citizen demands in the overwhelming majority of developing countries. At the same time, OPIC has moved away from supporting enclave projects in the extractive sector, including oil, gas, and mining.
- (2) Transparency has improved significantly, but still remains lacking in several important areas. Current levels of public disclosure are inadequate to answer several key questions about OPIC's activities, especially in the area of development impact.
- (3) Competing objectives. In selecting projects, OPIC management (and its Board) often face several tradeoffs when balancing various risks, financial needs, statutory restrictions, and potential development and/or foreign policy benefits. Although reporting has improved since 2009, even greater transparency would enable a better perspective on how well those competing objectives may (or may not) be matched by the agency's activities.
- (4) OPIC is not a boon to large U.S. corporations, but 'additionality' could be clearer. OPIC's current activities are not dominated by large U.S. corporations and thus the portfolio does not support claims that the agency is principally a mechanism to subsidize large US firms. However, OPIC could do a better job in articulating where its involvement is crowding in private capital rather than potentially crowding it out. Again, greater transparency would assist in determining OPIC's catalytic effect (or not) and could create internal incentives to avoid projects beyond the agency's developmental mandate.
- (5) OPIC's portfolio has become increasingly skewed toward higher income countries and recent policies to promote renewable energy seem to have worsened this trend. Given OPIC's mandate as a development agency, the portfolio should exhibit a bias toward low- and lower-middle income countries. Instead, OECD members and higher-income countries comprise a larger share of the portfolio than might be expected. This is especially true when using more granular (and more widely-accepted) country income categories than those currently reported by OPIC. Moreover, the rich country bias appears to be worsening as pressures to increase OPIC's renewable energy investments have created additional exposure to higher income markets.

Methodological Notes

Data Sources

To build the *OPIC Scraped Portfolio* database, we started with the list of projects from the annual reports between 2000 and 2014. The annual reports provide the project name, the US sponsor name(s), a short project description, the OPIC commitment amount, and the type of project (e.g., finance, investment fund, or insurance).

For projects approved by the board after April 2009, we supplemented the annual report data with additional, more detailed data from project summaries published on OPIC's website.⁶³ These project summaries typically include: total project size, whether the project was a guaranty or a loan, a more detailed project description, descriptive language about developmental effect (e.g., "strong", "significant", etc.), and the environmental risk category.

In the case of discrepancies between OPIC sources, we always rely upon information from the annual reports since they were published at a later date and therefore provide more recent information. There were several cases of discrepancies between the annual reports and the project summaries. The discrepancies generally concerned the size of the project.⁶⁴ There were also a number of projects that had project summaries but did not appear in the annual report, thereby suggesting that they either were not officially considered or approved by the board.

We also collected country-level data from the World Bank's Databank and the Bank for International Settlements. The statistics used include: GNI per capita, country income classification⁶⁵, and private credit depth. To determine whether a Fortune 500 company sponsored a project, we gathered the list of Fortune 500 Companies over time. Specifically, this coding reflects whether the company was considered a Fortune 500 company when OPIC made its related financial commitment.

Data on country-level risk comes from Delcredere Ducroire, the Belgian public credit insurer. Delcredere evaluates country risks for a number of different categories, including commercial risk, war risk, expropriation risk, and transfer risk. A previous review of political risk indicators found that Delcredere was the best source for country-level risk data.⁶⁶ The

⁶³ OPIC announced that they would disclose additional project-level information as part of a new commitment to transparency in a press release from April 9, 2009.

⁶⁴ There were several cases where the OPIC commitment in the annual report was larger than the project size stated in the project summary. In these cases, we increased the project size to match the new OPIC commitment. For example, the project summary of an insurance project sponsored by Belstar Capital Limited recorded the OPIC commitment as \$180 million with total project costs of \$180 million. The annual report reported OPIC's commitment as \$286.4 million. In this case, we increased both the OPIC commitment and the project size to \$286.4 million.

⁶⁵ We utilized the World Bank's historical "analytical classifications" for all countries. In some countries, the World Bank has made ex-post adjustments to GNI per capita figures due to GDP rebasing exercises or statistical adjustment reasons. The historical World Bank analytical categories correspond to a given country's classification at the time of OPIC board approval. For additional details, see https://datahelpdesk.worldbank.org/knowledgebase/articles/378834-how-does-the-world-bank-classify-countries.

⁶⁶ Nathan M. Jensen, "Measuring Risk: Political Risk Insurance Premiums and Domestic Political Institutions," International Finance, (2005). Jensen found that plant location consultants use Delcredere data to evaluate risks, even if they do not

current risk ratings are available on their database. We were able to obtain historical data by directly contacting Delcredere Ducroire.

Additional Notes

We developed a sector tree fit to classify OPIC projects into sectors. We classified all projects into sectors based on the project descriptions from the annual reports and project summaries. We classified projects into subsectors and secondary subsectors when appropriate. There were several cases where the sector classification was unclear, so in these cases, we attempted to develop a few general rules:

- Lending projects in a specific sector (like an agriculture lending project) are coded as Financial Services project, and the specific sector is coded as the sub-sector.
- Sales projects are coded as Retail projects, and then the specific sector in which they focus is coded in the sub-sector.
- Projects in the banking sector are classified into SMEs, MFIs, housing, leasing, or consumer loans in the second sub-sector. Projects that explicitly did more than one of these activities in their project description are coded as "General".
- Large investment funds with no focus are coded as "General".

We determined whether a Fortune 500 company sponsored a project using a set of historical Fortune 500 lists dating back to 2000.⁶⁷ We standardized the Fortune 500 lists, where appropriate, to match directly with the names of the US sponsors.

Project leverage rates are calculated as the ratio of the total project size to the OPIC commitment. There is no uniform methodology for calculating leverage ratios. However, the ratio of total funding to public funding is one of the common ways of calculating leverage ratios.⁶⁸ It should also be noted that because total project sizes are only available in the project summaries, we were unable to calculate leverage ratios for projects approved before 2009. In addition, all average leverage ratios presented in the paper are for categories with at least 10 projects.

We classified US sponsors into three categories: individual, NGO, and corporation. Since there can be multiple US sponsors, there are several cases of mixed sponsor categories (for example, one corporation and two individuals). In addition, there were several cases where it was not clear whether the US sponsor was a NGO or a corporation; in this case, the US sponsor was classified as a corporation.

Development effect categories are determined based on the descriptive adjective used in the project summary. In each project summary, there is common language for describing the developmental effect, usually along the lines of, "this project is expected to have [adjective]

purchase Delcredere political risk insurance. In addition, the Delcredere prices reflect other agencies' prices for insurance contracts, implying that Delcredere's risk rankings are in line with other risk measures.

⁶⁷ "Fortune 500 Companies - Archived List of Best Companies from 1995," *Fortune 500*, n.d., 500, accessed February 9, 2016.

⁶⁸ Jessica Brown and Michael Jacobs, "Leveraging Private Investment: The Role of Public Sector Climate Finance," Background Note (Overseas Development Institute, April 2011).

development impact." Based on informal discussions with OPIC staff, these descriptive adjectives would suggest the following categories:

- "Highly Developmental": high, highly, significant, strong, and upper end.
- "Developmental": *moderate, positive, some,* and *substantial.* Based on discussions with OPIC staff, we assume that the lack of descriptive adjectives suggests that the project is in the "developmental" category.
- "Indeterminate": *minimal*.⁶⁹

OPIC commitments and total project sizes were adjusted for inflation using the US **Bureau of Labor Statistics' CPI measure**. Therefore, commitments are presented in 2014 real dollars.

For private credit depth and US bank exposure statistics in this paper, we divide countries into four credit depth quartiles for each given year. As such, the top 25 percent of all countries ranked as having "high" private domestic credit depth. Since the quartiles are determined on an annual basis, the makeup of each quartile may change in any given year. This approach controls for broader credit depth increases within most developing countries over time. Nonetheless, it has some drawbacks. Most importantly, it does not reflect any empirically based thresholds. Given this, we also provide a second approach in Appendix V that draws upon several recent empirical studies that estimate the impact of domestic credit depth on economic growth at various levels.

⁶⁹ There are two other projects coded as indeterminate with clearance in progress, one project with multiple downstream investments to be scored separately, and one project that was not scored on the developmental effect matrix.

Sector Tree Classifications

KEY

-

018.6

Sec.

(Med)

- Sub-Sector 2



Appendix II

a .

	Country	Institution	Year Established ⁷⁰	Requirement	Loans	Guarantees	Equity	Assistance	Independent Institution ⁷¹	Parent Ministry
	Austria	OeEB	2008	No	\checkmark	\checkmark	\checkmark	\checkmark	No	OeKB
	Belgium	BIO	2001	No	\checkmark	\checkmark	\checkmark	\checkmark	No	Development Coop
	Belgium	SBI-BMI	1971	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
	Canada	DFI	2015	No	\checkmark	\checkmark	\checkmark	\checkmark	No	Export Development
	Denmark	IFU	1967	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
	EU	EIB	1958	No	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
	Finland	FINNFUND	1980	\checkmark	\checkmark	\checkmark	\checkmark	No	No	Foreign Affairs
2	France	PROPARCO	1977	No	\checkmark	\checkmark	\checkmark	\checkmark	No	AFD
ers7	Germany	DEG	1962	No	\checkmark	\checkmark	\checkmark	\checkmark	No	KfW
emb	Greece ⁷³	BSTDB	1997	No	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
M	Italy	SIMEST	1991	No	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
DAC	Japan	JBIC	1999*	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
D-I	Korea	KoFC	2009	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	-
EC	Multilateral	IFC	1956	No	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
0	Netherlands	FMO	1970	No	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
	Norway	Norfund	1997	No	\checkmark	\checkmark	\checkmark	\checkmark	No	Foreign Affairs
	Portugal	SOFID	2007	\checkmark	\checkmark	\checkmark	\checkmark	No	\checkmark	-
	Spain	COFIDES	1988	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
	Sweden	Swedfund	1979	No	\checkmark	\checkmark	\checkmark	\checkmark	No	Enterprise & Innovation
	Switzerland	SIFEM	2011*	No	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
	UK	CDC Group	1948	No	\checkmark	\checkmark	\checkmark	No	No	DfID
	US	OPIC	1971	\checkmark	\checkmark	\checkmark	No	No	\checkmark	-
s	Brazil	BNDES	1952	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
lber	China	CDB ⁷⁴	1994	No	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
Aen	India	ExIm Bank	1982	\checkmark	\checkmark	\checkmark	No	\checkmark	\checkmark	-
C	Malaysia	ExIm Bank	1995	\checkmark	\checkmark	\checkmark	No	\checkmark	No	Finance
-DA	Saudi Arabia ⁷⁵	ICD	1999	No	\checkmark	\checkmark	\checkmark	\checkmark	No	IsDB
lon-	South Africa	DBSA	1983	No	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-
4	Turkey	TSKB ⁷⁶	1950	No	\checkmark	\checkmark	No	\checkmark	\checkmark	-

. . . .

DFI Comparison: Instruments, Ownership, and Structure

⁷⁰ Asterisk denotes a restructuring or consolidation of previous DFI-related body.

⁷¹ Indicates whether the organization is subsumed or controlled by another government agency according to publicly available information.

⁷² With the exception of Australia, every OECD-DAC member country with at least \$1b in ODA commitments (2013) has a bilateral DFI.

⁷³ The BSTDB is based in Greece and invests in Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russia, Turkey, and Ukraine.

⁷⁴ Includes wholly controlled CDB subsidiaries, such as the China-Africa Development Fund.

⁷⁵ The ICD is a member of the Islamic Development Bank Group. While not controlled by Saudi Arabia, it is based in Jeddah and has a large Saudi ownership stake.

⁷⁶ Privately controlled national development bank, which receives financial support from the IFC, EIB, and a number of bilateral DFIs. Turkey also is a BSTDB member.

Appendix III

Country Income Level Trends

There have been significant changes in the number of countries classified as low, lower middle, and upper middle income since 2000. This is due to strong and widespread economic growth throughout most developing regions, particularly over the last decade. The graduation of low-income countries into middle-income status has been the most notable shift. For instance, there were 63 low-income countries in 2000. In 2014, that figure had fallen to only 31 countries.



Number of Countries and Territories with Specified Income Groups

Many of the remaining low-income countries have small, fragmented markets that offer more limited investment opportunities. Several countries have a relatively large population in absolute terms, such as Afghanistan, the Democratic Republic of Congo, Ethiopia, Tanzania, and Uganda.⁷⁷ However, the low-income country group has a combined GDP of only \$380 billion.⁷⁸ Moreover, without the more populous countries listed above, the average market size is only \$8.2 billion.

Source: World Bank and authors' calculations

⁷⁷ This includes: Afghanistan (32 million), the Democratic Republic of Congo (75 million), Ethiopia (97 million), Tanzania (52 million), and Uganda (38 million).

⁷⁸ Source: World Bank World Development Indicators.

At the same time, 30 countries moved from lower middle to upper middle-income status between 2000 and 2014.⁷⁹ Three additional countries moved from low-income to upper middle-income during this time (Angola, Azerbaijan, and Mongolia). As a result, the number of countries defined as either low income or lower middle income declined to 82 countries (from 116 in 2000).

These macro-level trends should be considered when assessing the share of OPIC projects that have been focused on specific income groups, such as low-income countries. As a result, OPIC and its stakeholders likely should consider utilizing a multi-faceted approach for prioritizing operations within sets of countries.

⁷⁹ These include: Albania, Algeria, Belarus, Belize, Bosnia and Herzegovina, Bulgaria, China, Colombia, Cuba, Dominican Republic, Ecuador, Fiji, Iran, Jordan, Kazakhstan, Macedonia, Maldives, Marshall Islands, Namibia, Paraguay, Peru, Romania, St. Vincent and the Grenadines, Suriname, Thailand, Tonga, Tunisia, and Turkmenistan.

Appendix IV

Alternative Country Income Analysis – OPIC Classification Methodology

OPIC utilizes a unique methodology for determining country income thresholds. This methodology is based upon historical statutes from the US Congress. Specifically, the respective legislative provision stipulates that OPIC should restrict its activities in countries with a GNI per capita exceeding \$4,269 in 1986 dollars, adjusted annually using the GNP deflator.⁸⁰ In FY16, this alternative methodology corresponds to the following country income thresholds: (1) low-income (GNI per capita less than \$1,803); (2) middle-income (between \$1,803 and \$7,822); and (3) high-income (greater than \$7,822).⁸¹ Importantly, OPIC's operational decisions and public reporting is based upon these country income groupings.

There are significant differences with World Bank income classifications, which are widely used by development organizations. For instance, OPIC classifies 17 countries as low-income, while the World Bank classifies them as lower middle-income.⁸² This includes several large, yet relatively poor, country markets such as Bangladesh, India, and Pakistan. In addition, there are 16 more countries classified as high-income.⁸³ This includes several large emerging markets such as Brazil, Malaysia, Mexico, and Turkey. The net effect is that OPIC's methodology leads to much larger groups of low- and high-income countries, and a significantly smaller set of middle-income countries.

	OP	IC	World Bank		
Income Classification	Thresholds	Number of Countries ⁸⁴	Thresholds	Number of Countries	
LIC	< \$1,803	46	< \$1,045	31	
MIC	\$1,803-\$7,822	55	\$1,045 - \$12,745	104	
HIC	> \$7,822	56	> \$12,745	80	

OPIC versus World Bank Income Category Thresholds, 2014

Source: World Bank, OPIC, and authors' calculations

⁸⁰ Source: OPIC.

⁸¹ "Assessment of the Overseas Private Investment Corporation's Development Outcome and Compliance Risks" (Frankfurt, Germany: Office of Inspector General, USAID, May 15, 2015).

⁸² These include: Bangladesh (\$1,080), Cameroon (\$1,360), Cote d'Ivoire (\$1,460), Ghana (\$1,600), India (\$1,570), Kenya (\$1,290), Kyrgyz Republic (\$1,250), Laos (\$1,650), Lesotho (\$1,340), Mauritania (\$1,270), Myanmar (\$1,270), Pakistan (\$1,410), Senegal (\$1,040), Sao Tome and Principe (\$1,670), Sudan (\$1,710), Tajikistan (\$1,080), Zambia (\$1,680). OPIC is statutorily prohibited from operating in some developing countries, such as Sudan.

 ⁸³ These include: Brazil (\$11,530), Colombia (\$7,970), Costa Rica (\$10,120), Gabon (\$9,450), Grenada (\$7,850), Kazakhstan (\$11,670), Lebanon (\$9,800), Libya (\$7,910), Malaysia (\$10,760), Mauritius (\$9,710), Mexico (\$9,860), Palau (\$11,110), Panama (\$11,130), Romania (\$9,370), Turkey (\$10,840), and Turkmenistan (\$8,020).

⁸⁴ The number of countries only includes those with a reported GNI per capita in the World Development Indicators. Without GNI per capita, we were unable to calculate the number of countries in each classification under OPIC's thresholds.

⁸⁵ MIC under the World Bank Classification refers to both UMICs and LMICs.

Country	GNI Per Capita	World Bank Classification	OPIC Classification
Bangladesh	\$1,080	MIC	LIC
Brazil	\$11,530	MIC	HIC
Cameroon	\$1,360	MIC	LIC
Colombia	\$7,970	MIC	HIC
Costa Rica	\$10,120	MIC	HIC
Cote d'Ivoire	\$1,460	MIC	LIC
Gabon	\$9,450	MIC	HIC
Ghana	\$1,600	MIC	LIC
Grenada	\$7,850	MIC	HIC
India	\$1,570	MIC	LIC
Kazakhstan	\$11,670	MIC	HIC
Kenya	\$1,290	MIC	LIC
Kyrgyz Republic	\$1,250	MIC	LIC
Lao PDR	\$1,650	MIC	LIC
Lebanon	\$9,800	MIC	HIC
Lesotho	\$1,340	MIC	LIC
Libya	\$7,910	MIC	HIC
Malaysia	\$10,760	MIC	HIC
Mauritania	\$1,270	MIC	LIC
Mauritius	\$9,710	MIC	HIC
Mexico	\$9,860	MIC	HIC
Myanmar	\$1,270	MIC	LIC
Pakistan	\$1,410	MIC	LIC
Palau	\$11,110	MIC	HIC
Panama	\$11,130	MIC	HIC
Romania	\$9,370	MIC	HIC
Sao Tome and Principe	\$1,670	MIC	LIC
Senegal	\$1,040	MIC	LIC
Sudan	\$1,710	MIC	LIC
Tajikistan	\$1,080	MIC	LIC
Turkey	\$10,840	MIC	HIC
Turkmenistan	\$8,020	MIC	HIC
Zambia	\$1,680	MIC	LIC

Countries with Differing World Bank and OPIC Classifications, 201485

Under these OPIC-specific income thresholds, the agency has provided greater support for low-income countries. Between 2000 and 2014, they accounted for more than one-quarter of total OPIC commitments. This is twice the relative share compared to our World Bank-based methodology. In 2014, OPIC commitments to its low-income group of countries totaled \$365 million, or 16 percent of total commitments. By comparison, under our baseline methodology, OPIC provided only \$30 million.



Annual Commitments by OPIC Country Income Category, 2000-2014⁸⁶

OPIC also provided even larger commitments for high-income countries under its distinct methodology, especially in recent years. OPIC commitments to high-income countries totaled nearly \$10 billion between 2000 and 2014, or approximately 30 percent of total commitments. The high-income country share actually exceeded 50 percent in 2013 and 2014. This compares to 19 percent of total commitments in 2014 under our World Bank-based methodology.

Source: OPIC and authors' calculations

⁸⁶ We calculated OPIC country income category thresholds from 2000 and 2014 using the U.S. gross national product implicit price deflator.



Annual Commitment Share by OPIC Country Income Category, 2000-2014

Source: OPIC and authors' calculations

Appendix V

Domestic Private Credit Depth – Alternative Analysis Approach

We also provide a second approach to assessing OPIC's prioritization for countries with lower domestic credit depth, which is based on several recent empirical studies.⁸⁷ These studies suggest that private credit depth has a declining impact, and potentially a negative impact, on economic growth once it reaches roughly 80 percent of GDP. In addition, it may have a negative impact at particularly low-levels, such as 14 percent of GDP. Therefore, we categorize developing countries into three broad categories: (1) low private credit depth (less than 14 percent of GDP); (2) medium credit depth (between 14 percent and 80 percent of GDP); and (3) high credit depth (greater than 80 percent of GDP).

Under this approach, the overwhelming share of OPIC commitments has focused on countries with "medium" private domestic credit depth. This is not particularly surprising given the large associated range (14 percent to 80 percent of GDP). However, a significant share of OPIC commitments has focused on "high" credit depth countries in recent years.⁸⁸ This is consistent with findings from our quartile-based approach.

⁸⁷ Arcand, Berkes, and Panizza, "Too Much Finance?"; Rioja and Valev, "Does One Size Fit All?"

⁸⁸ The following share of OPIC commitments were targeted at "high" credit depth countries: (i) 2010 (55 percent); (ii) 2011 (29 percent); (iii) 2012 (27 percent); (iv) 2013 (37 percent); and (v) 2014 (47 percent).