DFC U.S. International Development Finance Corporation

Dalberg

Portfolio for Impact and Innovation (PI²) Evaluation

NOVEMBER 2023

EXTERNAL REPORT

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Executive Summary

Despite their impact potential, early-stage social enterprises, innovative projects, and new fund managers face significant financing gaps when scaling impact solutions in underinvested and underserved markets and communities. Historically, return-seeking investors and development finance institutions (DFIs) have overlooked these types of projects, compounding the challenges created by limited institutional and domestic financing. The Center for Global Development reports that 3% of private capital[1] and less than 10% of DFI commitments[2] flow to low-income countries (LICs), contributing to the $5.2 trillion financing gap facing micro, small and medium enterprises in emerging markets.[3]

The United States International Development Finance Corporation (DFC) has sought to address this financing gap through the Portfolio for Impact and Innovation (PI²), an investment portfolio tailored to early-stage social enterprises, innovative projects, and impact-oriented funds. This portfolio focuses on underserved markets, with 92% of PI² allocations to low- and lower-middle income countries[4] compared to ~65% across DFC's overall portfolio.[5] PI² also prioritizes mobilizing capital for underserved communities (e.g., low-income households, rural populations, etc.,) and early-stage, often venture-backed businesses that combine elevated risks with a high potential to scale. This evaluation aims to assess PI²'s performance by looking back across nearly ten years of transaction history to identify the relationship between developmental impact, financial risk, and financial returns.

Between 2014 and Sept. 2023, PI² has executed 84 transactions and built an investment portfolio of $539M in committed capital. The PI² portfolio began as a 'grassroots' program developed by Investment Officers and supported by DFC leadership, despite the institution's limited initial experience and lack of tools to serve these market segments at inception. The portfolio has since benefited from input from multiple departments across the agency (e.g., Credit Policy, Risk, Office of Development Policy, Office of External Affairs, Legal, etc.) that collectively shaped a shared vision for the risk and goals of the program.

This evaluation shows that the assessed PI² portfolio delivers developmental impact and additionality alongside positive financial returns while managing elevated financial risk.[6] The evaluated sample of 23 'mature' PI² investments[7] yields an overall 'Impactful' Impact Quotient (IQ) score of 108 out of 150 that is largely driven by high scores in the Innovation and Inclusion pillars.[8] Over half (57%) of PI² mature investments score in the two highest IQ tiers – 'Highly Impactful' and 'Exceptionally Impactful'.

1. Center for Global Development, **"Trends in Private Capital Flows to Low-Income Countries: Good and Not-So-Good News"**, July 2019.
2. Center for Global Development, **"Comparing Five Bilateral Development Finance Institutions and the IFC"**, January 2018.
3. SME Finance Forum, **"MSME Finance Gap: Assessment of the shortfalls and opportunities in financing micro, small, and medium enterprises in emerging markets"**, 2017.
4. Portfolio committed capital and percentage of investments in low-income and lower-middle-income countries is current as of Sept 2023.
5. **DFC Fiscal Year 2021 press release.** DFC's 'Roadmap to Impact' (2020-2025) notes a target of 'Focus at least 60 percent of all projects in low-income and lower-middle income countries, and in fragile states'.
6. The evaluated PI² portfolio was assessed as having a moderately high risk at origination, on average, that deteriorated to high risk over time vs. a comparison group comprised of 27 loans made during the same period which did not experience such fluctuation. PI² investments may be given an optional downgrade in its risk assessment to account for increased risks associated with the PI² portfolio, approved by Credit Policy and/or Risk Management.
7. The evaluated sample of 23 PI² investments represent the earliest projects in the PI² portfolio.
8. Inclusion and Innovation represent 92% of total IQ points awarded to the PI² mature sample group.

In addition to its developmental impact, the overall PI² portfolio has also delivered financial returns, with a cumulative projected positive net cash flow and a positive internal rate of return (IRR).[9] The mature PI² portfolio of 23 investments also yields positive projected net cash flow and a slightly positive IRR.[10,11] PI²'s investment in a company that helped scale the development of innovative, off-grid solar lantern products, is an example of how the portfolio combines high impact, elevated risk, and positive returns. The loan resulted in an 'Exceptionally Impactful' IQ score of 135 and had positive financial returns, despite relatively high risk. After repaying its loan to PI², the energy enterprise went on to raise over $50M from DFC's standard loan process and over $700M in capital from other investors, illustrating the growth potential that PI² investments can have.

The evaluated sample of 23 'mature' PI² projects yields a significant percentage (22%) of investments reaching the highest IQ threshold of 'Exceptionally Impactful'. A comparison group made up of investments illustrative of DFC's overall portfolio originated during the same timeframe saw only 4% of projects cross this threshold.[12] At the same time, the average ex-post IQ score for the PI² mature portfolio (10 8) is lower than the average ex-ante score for more current PI² investments (~125), indicating that the portfolio's elevated risk does also result in challenges (e.g., LMIC/LIC context, Covid-19, early-stage business continuity) throughout the lifecycle of the investments that can potentially reduce the intended impact of projects.

The assessed PI² portfolio also supports catalytic impact beyond the scope of each individual transaction, as shown by the relationship between IQ scores and additionality. DFC's investor-level contributions include financial additionality (e.g., providing patient capital via longer tenors and grace periods) and non-financial additionality (e.g., signaling to the wider market that a company is investable). For example, DFC's guaranty enabled a food distribution and services company to establish, for the first time, a relationship with a local commercial bank, sending market signals to local lenders that had previously been reluctant to extend credit to it and similar businesses. Following DFC's investment, the company went on to raise significant debt funding from local banks alongside equity from institutional investors.

Beyond its immediately measurable impact, PI2 has generated valuable learnings on investing in innovative business models, deploying unique structures and terms, and operating in investment environments unfamiliar to DFIs that can inform DFC's and other investors' priorities moving forward. At the company level, PI2 has demonstrated that impact for early-stage social enterprises and funds is strongly correlated with their ability to be innovative and inclusive, suggesting DFC should focus heavily on those aspects of a company's business model during the origination and monitoring phases. At the investor level, DFC can achieve impact by strengthening internal collaborations across sector and functional teams; increasing its use of innovative financial products, patient capital, and partnerships with local intermediaries; and providing targeted post-investment support to first-time borrowers.

9. See methodology section for details on net cash flow and IRR calculations and details on the cumulative PI2 portfolio.
10. The 23 mature investments are among the first investments originated in the PI2 portfolio. Investments in the cumulative portfolio include more recent investments (with commitment dates up to 2022)
11. Realized cash returns as of Sept 2023 (i.e., realized interest, fees, and net of write offs).
12. This comparison group comprises 27 commitments of under $30M to enterprises or under $20M to funds that were generated by DFC's Office of Development Credit team. The comparison group was used to benchmark PI2's performance against an 'overall DFC portfolio'; however, PI2's unique thesis means the comparison group cannot be treated as a control group. In addition, the development impact assessment is not directly comparable to DFC's current IQ framework, which also complicates true comparisons.

PI^2's performance has been enabled by DFC's decision to tolerate risk, deploy subsidies, and allocate significant staff time throughout the investment monitoring period. Over 60% of evaluated PI^2 deals required restructuring[13] due to a variety of factors (e.g., market shocks and the effects of Covid-19, among others) that triggered extensions and write-offs. PI^2 monitoring teams have worked closely with investees to help them financially withstand external shocks, effectively manage high growth, and drive future financial sustainability. DFC's level of effort has been significant, and in many cases challenging to anticipate at origination.

Delivering high direct and indirect developmental impact has required operational investments that DFC may be uniquely positioned to make even more effectively and efficiently moving forward. The institution's shift towards a sector-centric configuration means catalytic activity[14] taking place at the sector level can not only build on the historical lessons of PI^2 but also ensure learnings from future catalytic deals are more directly translated into sector-wide investment strategies. Under this setup, catalytic investments act as 'R&D' opportunities that will enable DFC to better calibrate risk, reduce transaction costs and generate incremental impact on larger allocations at more mature stages. With the right structuring capabilities, DFC can make the most of its ability to offer a range of instruments to design and underwrite innovative transaction types that otherwise may not have been possible.

By continuing to be a pioneer in the field and sharing learnings from the PI^2 portfolio and future catalytic investments, DFC can strengthen the overall ecosystem and help bridge the funding gap for early-stage social enterprises, innovative projects, and new fund managers across developing markets.

13. The presence of restructuring does not necessarily lead to poor financial returns for DFC. Additional details on how PI^2 supports investees through the restructuring process can be found later in this document.
14. I.e., catalyzing capital flows towards underserved geographies or populations, emergent sectors, business models or deal types.

I. Introduction

Early-stage social enterprises, innovative projects, and first-time entrepreneurs or fund managers face significant financing gaps when seeking to scale development solutions in emerging markets. As a result, low- and lower-middle income countries are facing a $400B annual shortfall in funding for the Sustainable Development Goals.[15] Barriers to capital are even more pronounced for historically marginalized entrepreneurs and social enterprises. In East Africa, for example, over 70% of women entrepreneurs reported self-funding their businesses,[16] while social enterprises around the world report being trapped in the "missing middle"—too big for microfinance, too small for banks, and without the growth profile sought by venture capitalists.[17]

Historically, development finance institutions have overlooked early-stage, innovative projects in favor of larger investments in proven industries and / or markets. Per a 2018 analysis from the Center for Global Development, the average project size across five DFIs[18] ranged from approximately $11-42M,[19] with most capital deployed to the finance and insurance,[20] utilities, and manufacturing sectors.[21] Of the $8.9B of commitments analyzed, 7% was deployed in low-income countries.[22]

Despite recent efforts by DFIs to increase capital flows to early-stage, innovative projects in low- and lower-middle income markets, significant institutional challenges remain. For DFIs that lack specialized processes, smaller deals typically have higher transaction costs as a percentage of the total deal compared to larger investments. Low transaction volume may mean origination and monitoring staff are less familiar with how to source and manage small deals, contributing to institutional inertia. Finally, DFIs and other institutional investors may believe that smaller deals have imbalanced risk-reward profiles, making them less commercially attractive. Ultimately, the perception that small-scale, innovative companies combine elevated risk with uncertain impact and poor financial returns has perpetuated low investment levels and exacerbated existing funding gaps.

In 2014, DFC's predecessor agency, OPIC, launched what is now the Portfolio for Impact and Innovation (PI²) to help address the financing gap for small-scale, high-impact, innovative companies operating in underserved markets. To qualify for PI², investments must be $10M or less ($5M or less for deals originated between 2014-2020)[23] and targeted to early-stage, high impact projects that are inherently riskier than the overall DFC portfolio. As of September 2023, ~$539M in net commitments has been made across 84 loans and guaranties in Asia, Africa, Latin America, and the Middle East, with 92% of the portfolio's investments being made in LMICs or LICs.[24]

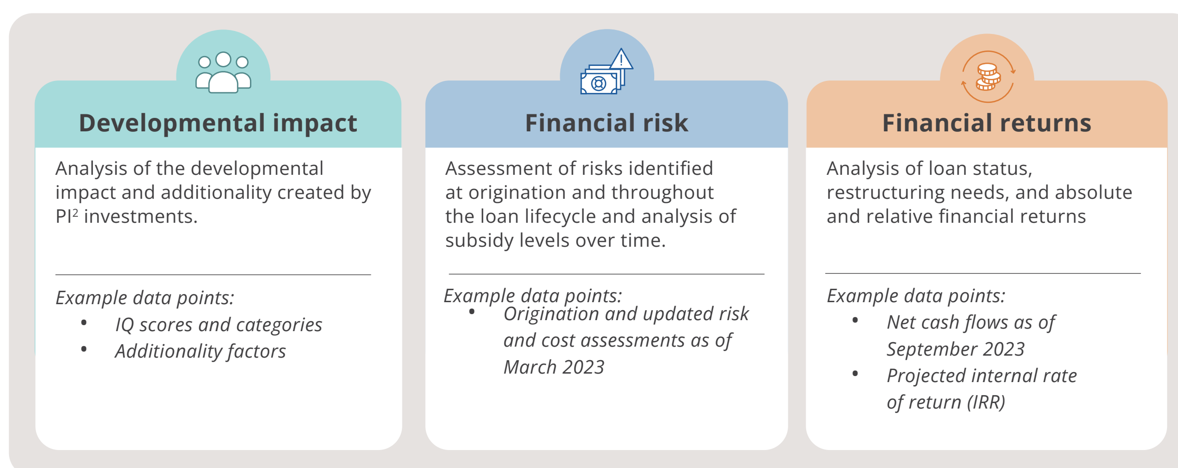
To launch the PI² portfolio, DFC developed new processes and assumed new risks. New processes included the introduction of a 'pre-screen' rubric to determine eligibility for the PI² investment track; an interdepartmental working group including Credit Policy, Risk, Office of Development Policy, Office of External Affairs, and Legal; customized investment templates; and a streamlined credit approval process.

15. Sustainable Development Solutions Network, **"SDG Costing & Financing for Low-Income Developing Countries"**, September 2019. The report estimates that 59 low-income and lower-middle income countries would require a total of $400 billion in additional funding each year from 2019 through 2030 to achieve the SDGs.
16. Graca Machel Trust, "Survey to explore growth barriers faced by female entrepreneurs in East Africa", 2018.
17. Hornberger, Kusisami, "Scaling Impact: Finance and Investment for a Better World", Palgrave Macmillan Press 2023, Chapter 5
18. The Center for Global Development (CGD) assessed 2012-2016 commitments from Britain's CDC Group (now BII), Germany's DEG, the Netherlands' FMO, France's Proparco, the United States' OPIC (now DFC), and the IFC.
19. FMO had the lowest average project size ($11.41M), followed by Proparco ($18.46M), DEG ($19.89M), CDC Group / BII ($32.7M), the IFC ($39.94M), and OPIC / DFC ($42.35M).
20. Finance and insurance, which includes small and medium enterprise (SME), microfinance institution (MFI), and private equity funds investments, is the largest sector of projects by volume.
21. Center for Global Development, **"Comparing Five Bilateral Development Finance Institutions and the IFC"**, 2018.
22. FMO deployed the greatest percentage of its overall portfolio in LICs (11%), followed by Proparco (9%), DEG (8%), CDC Group / BII (6%), IFC (6%), and OPIC / DFC (5%).
23. Most investments in the evaluated 'mature' portfolio originated when the PI² program limits were $1M to $5M. The $5M cap was increased to $10M in 2020.
24. DFC portfolio data

These new processes helped PI² be intentional in taking on elevated risks, including investing in companies with as little as $1M in revenues or assets or that are not yet breakeven; investing in low- and lower-middle income countries; reaching underserved customers and SMEs; committing capital to new business models and sub-sectors; supporting first-time fund managers; and/or adapting financing terms and products to fit investees' needs.

Given PI²'s established track record and considering the continued financing gap facing PI²-eligible projects, DFC engaged Dalberg Advisors to assess the relationship between the portfolio's developmental impact, financial risk, and financial returns. This report evaluates this question through the analyses summarized in Figure 1.

Figure 1: Key components of this evaluation



The sample group for this evaluation of PI²'s impact, risk, and return profile included 18 loans and 5 guaranties originated in the early stages of the program and totaling ~$98M in disbursed capital.[25] The evaluated portfolio spanned four major sectors—funds, health and agriculture, small business support, and energy—across Africa, Asia, and Latin America.[26]

This evaluation also assessed how this sample of mature PI² investments performed against a comparison group of 27 loans made over a similar period. The comparison group comprises commitments of under $30M to enterprises or under $20M to funds that were generated by DFC's Office of Development Credit team. The intention of the comparison group is to benchmark PI²'s performance against an 'overall DFC portfolio'; however, PI²'s unique thesis means this comparison group should not be treated as a control group. The maximum commitment size in the comparison group is $20M, or four times the maximum allowed under the PI² program for the evaluated sample.[27] In addition, the comparison group does not share PI²'s focus on emerging enterprises and first-time funds. Additionally, the development assessment of the investments in the comparison group utilized a different impact framework than DFC's current IQ framework, which complicates direct comparison of impact results.

25. Dalberg analysis of DFC data
26. Going forward, DFC plans to focus on five key sectors, four of which are represented in the PI² portfolio. The fifth sector focus, infrastructure and minerals, is not represented within our sample of PI² mature deals.
27. Excludes 8 of the 27 loans in the comparison group that did not provide data on the commitment amount.

II. Evaluation Findings

Evaluation findings show that the assessed PI² portfolio has achieved developmental impact and additionality alongside positive financial returns while managing elevated risk through differentiated origination and monitoring processes. PI²'s approach has yielded several highly impactful investments including a leading off-grid energy company, a primary care provider and a carbon credit finance provider among others. These companies create impact by scaling new products or services and providing significant benefits, such as clean energy, healthcare, and sanitation services to end-beneficiaries in underserved communities around the world.

In doing so, PI² investments take on significant risk, with elevated risk at origination that reflect volatile political environments, unproven business models, and/or expansion into new sub-sectors**.** As Figure 2 shows below, PI² investments have created developmental impact[28] in this elevated risk environment, with over half of the portfolio achieving a 'Highly Impactful' or 'Exceptionally Impactful' IQ score and over 80% of investments having projected net positive cash flows. Additionally, several PI² investments in the mature portfolio have leveraged PI²'s catalytic funding to continue to scale, receiving follow-on commitments through the standard DFC lending process or from other private investors and development finance institutions.

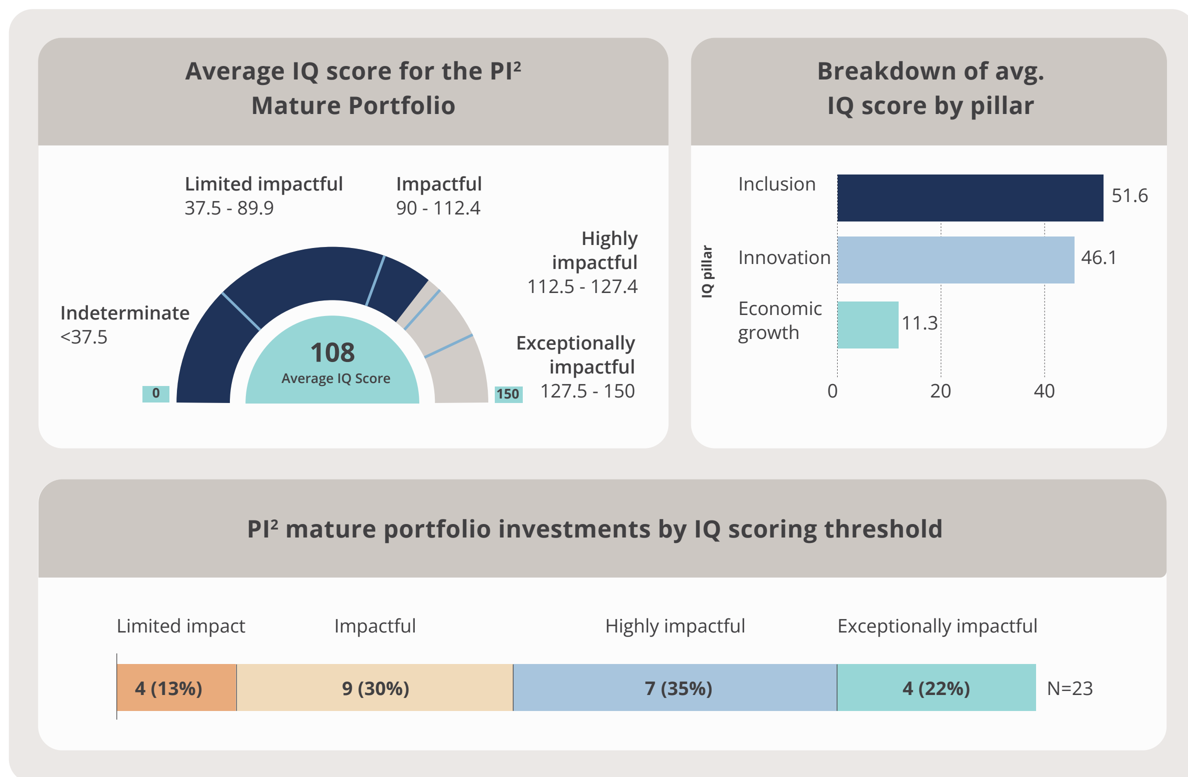
Figure 2: Comparison of Impact Quotient, risk, and financial returns for PI² mature investments

28. Methodology on assessing developmental impact via Impact Quotient (IQ) scores is outlined in the annex

The PI² mature portfolio's average Impact Quotient score corresponds to an "Impactful" rating that is driven by high marks on inclusion and innovation. Overall, the 23 investments in the PI² evaluation sample resulted in higher development scores than a comparison group of 27 comparison loans from the same period, with an average IQ score of 108 for the sample group vs. an average IQ score of 96 for the comparison group.[29,30]

Figure 3 below shows that PI² evaluated portfolio's average IQ score of 108 is driven by innovation and inclusion, with these two pillars jointly contributing approximately 90% of points awarded across the evaluated portfolio. Over half (57%) of the evaluated portfolio achieved 'Highly Impactful' or 'Exceptionally Impactful' scores, the two highest thresholds of IQ scores.

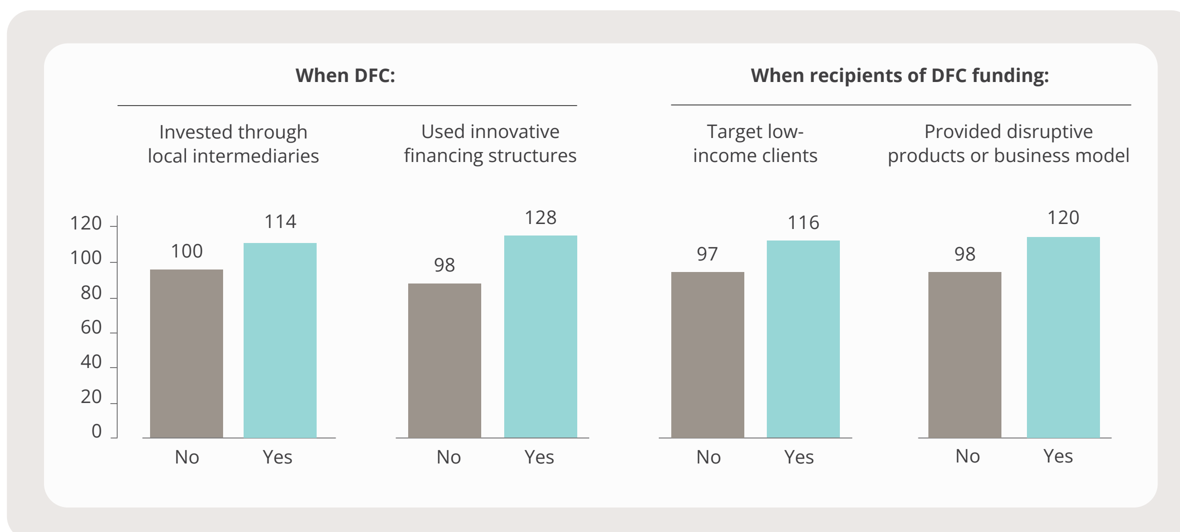
Figure 3[31]: Impact performance of PI² portfolio



Analysis also uncovered common characteristics among loans with higher Impact Quotient scores at maturity. Figure 4 below shows that when DFC invested through local intermediaries or used innovative financial structures, or when the recipient successfully served low-income customers or provided disruptive, innovative products, Impact Quotient scores were higher.

29. The comparison group used an impact scoring system that pre-dated the Impact Quotient and scored projects on a scale of 1-100 rather than 1-150. To translate these scores into IQ scores, we multiplied each of the comparison group's ex-ante impact scores by 1.5. Since the two frameworks are inherently different, the actual impact results between the two groups are not comparable.
30. These two enterprises represent outliers in the PI² sample group, with IQ scores of 52.5 and 57.5, respectively. Impacts of these investments were diminished due to severe operational and financial challenges that the companies faced, including higher costs of working with mobile network operators for the financing enterprise and production/supply chain issues for manufacturing enterprises. Without these outliers, the IQ score for the evaluated PI² portfolio would be 112, which a more upward sloping trend line between IQ score and risk rating at origination.
31. The sum of the three pillars is less than the average score due to deductions not shown in the breakdown graph.

Figure 4: IQ score broken down by common loan characteristic



The following case studies bring these common characteristics to life.

Case Study: Water enterprise

Impact through investing in local intermediaries

Water enterprise provides direct loans to water service providers in a country where 10% of the population lacked access to piped water in their homes as recently as 2019. Water enterprise helps capitalize small community, municipal, or privately-run water service providers that frequently lack the credit history and technical capacity to apply for loans.

As of 2023, Water enterprise has provided loans to 20 water service providers, resulting in improved access to water services for nearly 27,000 households as well as first-time access to water services for an additional 13,600 households. The 'Impactful' IQ score for this investment reflects Water enterprise's ability to provide an uncommon service via flexible loans and technical assistance to local intermediaries—the water service providers—that in turn serve low-income and marginalized communities.

**investee name has been anonymized in order to maintain confidentiality*

Case Study: Health enterprise

Impact through innovative financing

DFC invested in a first of its kind specialized Health enterprise based in Africa. The enterprise is improving health outcomes directly, by providing care to patients, and indirectly, by building capacity in the country it operates via the professional development of clinical and administrative staff. As of 2022, the Health enterprise had performed over 10,000 surgeries of which 76% of achieved a 'good outcome' as defined by WHO standards one day post-op. The facility is improving health outcomes directly, by providing care to patients, and indirectly, by building the country's health care capacity via the professional development of clinical and administrative staff.

At the time of origination, the Health enterprise loan was the largest loan using an innovative, impact-first structure and one of the only of these structures backed by a development finance institution. The 'Exceptionally Impactful' IQ rating for this investment reflects the demonstration effects created through this innovative financing facility and the high degree of inclusion enabled by targeting underserved segments in the country it operates.

**investee name has been anonymized in order to maintain confidentiality*

Case Study: Education enterprise

Impact through innovative financing

Education enterprise is a non-bank financial company which provides debt financing to private schools in India. In doing so, it aims to increase access to affordable education for low-income populations. Large numbers of school-age children in India are not enrolled in school (as of 2016, UNICEF estimated that 6% of primary, 7% of lower secondary and 23% of upper secondary school-age children are not attending school), while concerns about the quality of the public education have led to an increase in demand for private schools.

PI^2 provided a $5M guaranty to a financial intermediary for a $8M loan to Education enterprise, committed in 2015. By 2019, Education enterprise had increased the number of schools it was lending to five-fold (to 3,607), serving 3.4 million students. By providing financing to private schools that offer affordable tuition rates, Education enterprise aimed to expand access to quality education for lower- and middle-income students.

**investee name has been anonymized in order to maintain confidentiality*

Case Study: Financing enterprise

Impact through disruptive products or business model

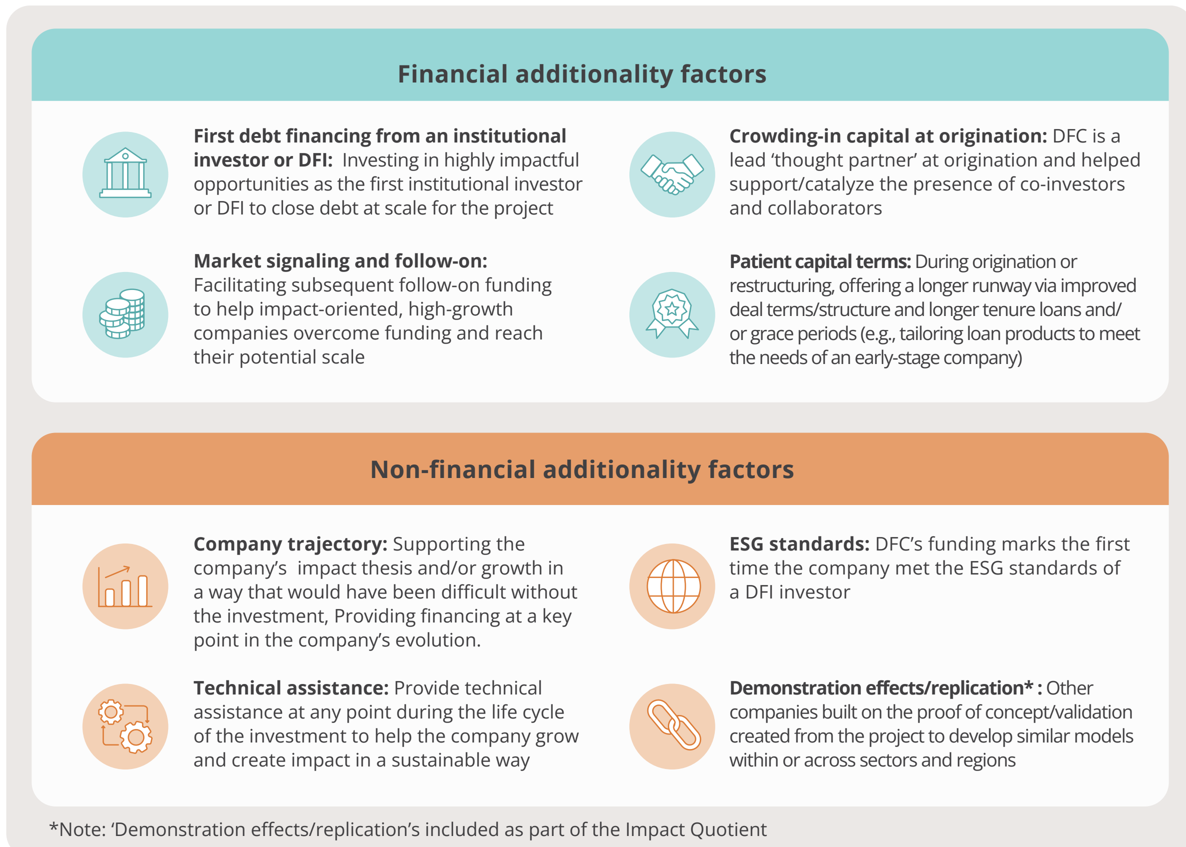
investee name has been anonymized in order to maintain confidentiality

Financing enterprise is an impact-focused investment fund that provides financing to small and medium enterprises (SMEs) that deliver clean cooking, fuel, water, and other household products to a global customer base by using potential revenue from future carbon credits as collateral.

PI² support helped Financing enterprise expand its portfolio, which has provided clean products to nearly 1.6 million customers globally as of 2021.The 'Exceptionally Impactful' IQ rating for this investment reflects the fact that, at the time of loan origination, there were no other funds providing a similar model of lending to companies in Financing enterprise's target sectors.

Beyond individual transactions, the assessed PI² portfolio has catalyzed markets through its focus on financial and non-financial additionality, with a clear relationship between higher Impact Quotient scores and higher levels of additionality. The figure below summarizes seven financial and non-financial additionality factors present across the mature PI² portfolio.[32]

Figure 5

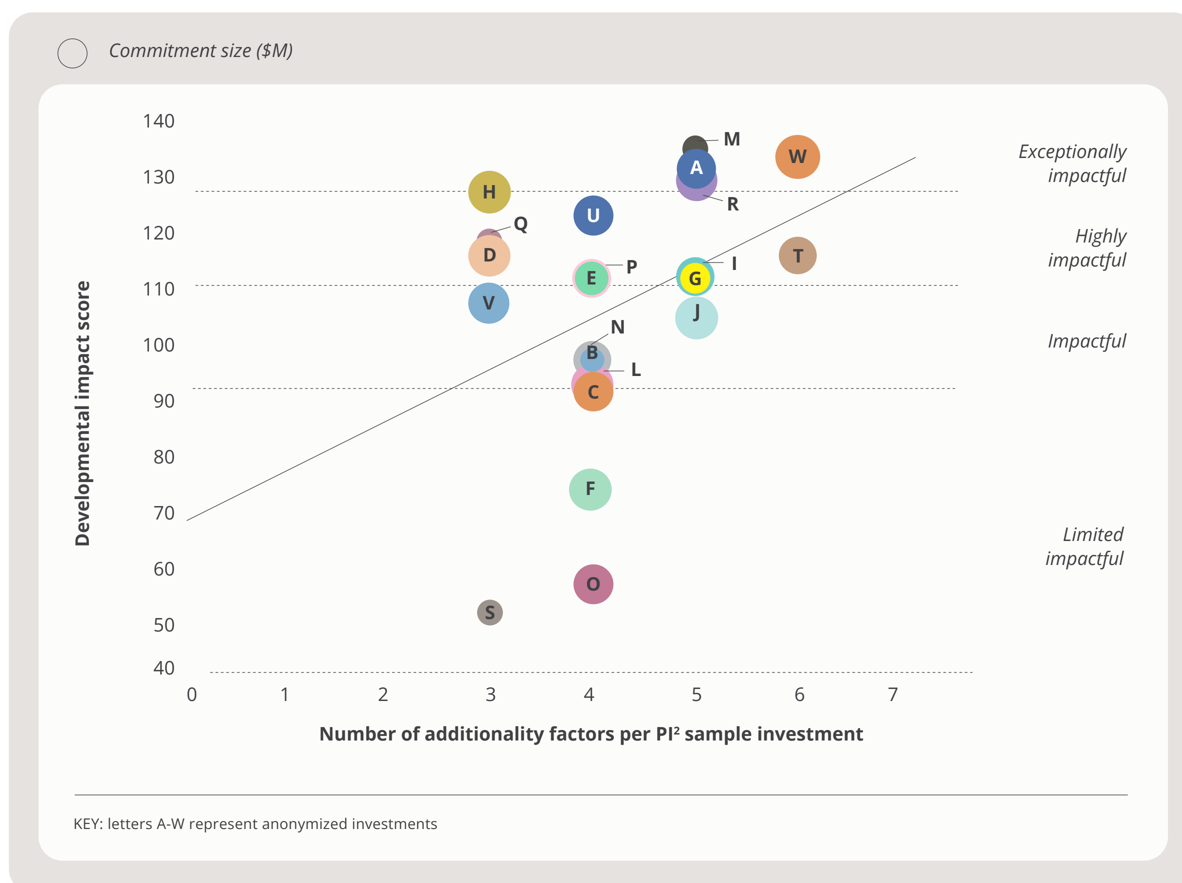


32. For the ESG standards additionality factor, this evaluation assumes that companies that had not received financing from a DFI before DFC had to meet the rigorous ESG standards required by DFIs through the PI² investment for the first time.

The assessed PI² projects' most common form of financial additionality is its patient capital terms, with 78% of PI² investments receiving terms not available from other lenders at origination and/or during restructuring. Examples of patient capital terms include longer tenors, with an average tenor of 6.5 years across the 23 PI² deals as compared to an average tenor of 2-3 years offered by other institutional investors. Additionally, DFC was the first institutional investor or DFI to provide debt financing for 52% of evaluated transactions. Approximately 70% of projects in the PI² mature sample successfully raised follow-on funding, with 65% receiving funds from at least one private investor. From a non-financial additionality perspective, DFC's funding helped nearly 70% of PI² investees develop or expand products and services tailored to low-income customers.

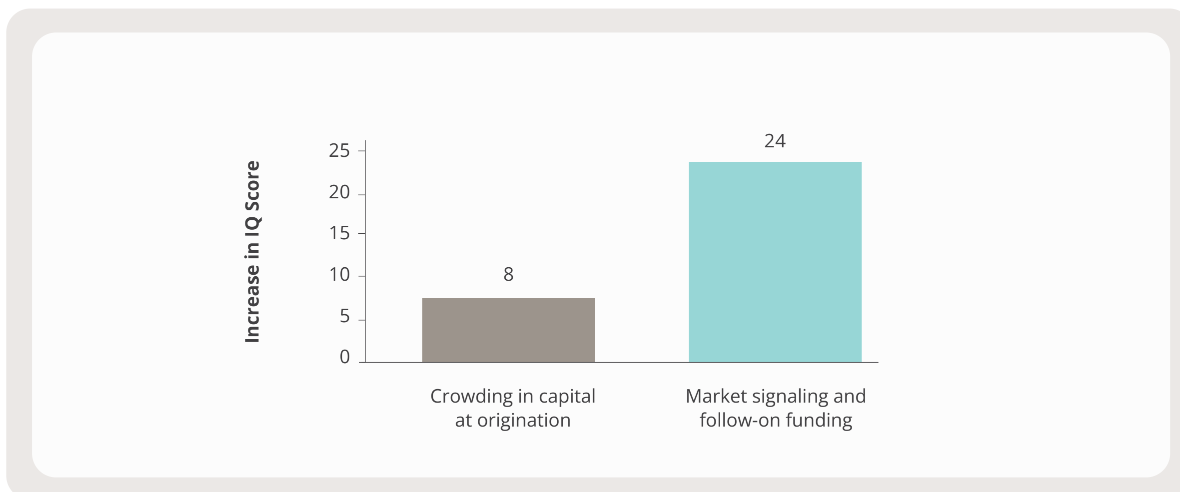
As Figure 6 shows below, there is a positive correlation between an investment's Impact Quotient score and the number of additionality factors present in the deal.

Figure 6: Impact Quotient score compared to total additionality factors present by investment



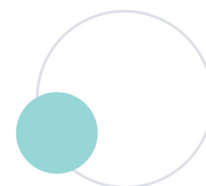
The additionality factors most strongly correlated with higher Impact Quotient scores include 'crowding in capital at origination' (i.e., unlocking capital from co-investors who value DFC's participation) and providing 'market signaling and follow-on funding' (i.e., directly or indirectly contributing to a company's ability to raise additional capital in subsequent rounds).

Figure 7: Additionality factors with the largest effects on IQ scores



The following case study of an African startup that upcycles human waste into agricultural inputs, illustrates the links between additionality and high developmental impact.

Sanitation social enterprise



COMPANY CONTEXT

PI² provided an African social enterprise that converts waste into agricultural inputs, with a $5M direct loan to expand its production facilities. The social enterprise deploys self-contained toilets in unplumbed informal settlements, improving local sanitation, and uses the resulting waste as feedstock to produce organic fertilizer or compress into ecofuel.

PI² ADDITIONALITY

PI² made financial and non-financial contributions to the social enterprise's impact. As a result, five of the seven categories of additionality were present in the deal.

DFC financial additionality	
Was DFC the first institutional investor to provide debt financing?	✓
Did DFC's commitment help catalyze capital at origination?	✗
Did DFC offer terms not available from other lender at origination and/or restructuring?	✓

DFC non-financial additionality	
Did DFC's support make a critical contribution to the company's impact trajectory?	✓
Did DFC's market signaling contribute to the company raising follow-on funding in subsequent rounds?	✓
Did DFc's provide technical assistance to the company?	✓
Did DFC's funding mark the first time the company met the ESG standards of a DFI investor?	✗

Major drivers of **financial additionality** included the fact that PI^2 was the first development finance institution to provide the social enterprise with debt financing. PI^2 also offered better terms than commercial investors at origination (e.g., a seven-year tenor and interest rate of 4.5% plus cost of funds) and during Covid-19-related restructurings (e.g., suspending interest and principal repayments to enable the close of a $5.0M Series C round).

Major contributors to **non-financial additionality** included the fact that PI^2's flexibility regarding the use of loan proceeds enabled the social enterprise to successfully weather the Covid-19 pandemic. In addition, PI^2 provided the social enterprise with technical assistance as it scaled its operations.

COMPANY IMPACT

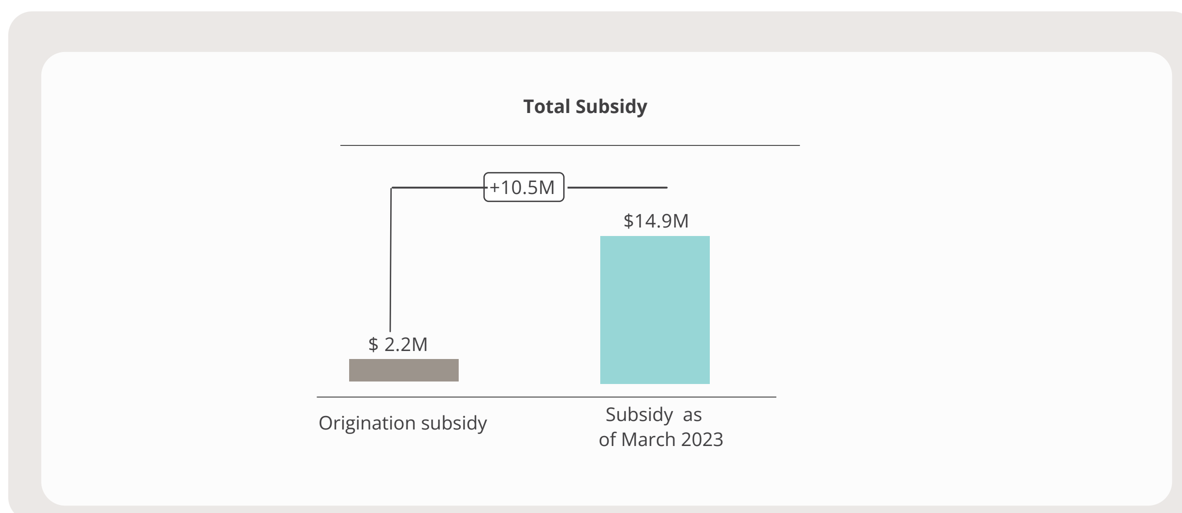
The social enterprise's Impact Quotient (IQ) rating is 'Exceptionally Impactful', corresponding to a score of 130 out of 150. Since its founding, the company's self-contained toilets have served 170,000 low-income people across informal settlements in three African cities and helped 8,000 farmers adopt regenerative practices. The company scores highest on the two pillars—inclusion and innovation—which collectively account for 90% of the PI^2 portfolio's overall IQ score.

PI² contributed to the social enterprise's high inclusion and innovation scores by providing affordable, flexible financing for a novel product targeting underserved consumers (i.e., financial additionality) and helping the company preserve its impact mandate throughout the Covid-19 pandemic (i.e., non-financial additionality). For the social enterprise, and for many companies with high IQ scores in the PI² portfolio, PI²'s investor-level additionality helps ensure the company's impact objectives scale alongside its business.

Accepting elevated risks, higher subsidies,[33] and more hands-on monitoring has been a crucial factor in enabling PI²'s impact. The PI² mature portfolio has relatively elevated risk levels, showing higher risk at origination and currently than the comparison group.

The elevated risk for PI² is driven by the types of investments that fit within portfolio's impact thesis and mandate (e.g., early-stage companies, innovative product and business offering, relatively unproven business models, underserved reach populations, and less developed markets). PI²'s elevated risk levels carry through to the subsidy process. The PI² mature portfolio has an overall positive subsidy, meaning the portfolio requires a budgetary allocation to fund potential losses related to elevated risk. While PI²'s risk and subsidies increased over time, the relatively greater increase in subsidies reflects PI² defaults and/or restructurings.

Figure 8: Subsidy at Origination and as of March 2023



Many PI² deals required restructuring and frequent engagement by portfolio monitoring teams. Of the 23 evaluated PI² investments, nearly 60% have undergone restructuring. Restructuring occurs due to a variety of factors, including company-specific issues (e.g., cash flow or business continuity challenges, ability to manage rapid growth) and exogenous shocks (e.g., COVID-19, political upheaval).

33. Subsidy levels reflect the projected amount of return or loss for a given project based on the total commitment amount and the project's risk. See methodology annex for additional details.

There is a distinction between different types of restructurings in the PI² portfolio, however, as restructuring does not necessarily result in poor financial returns for DFC. Some closed projects had restructurings that resulted in significant write-offs while others shifted their business model and have since paid back the full amount of DFC funding. Other active investments that have been restructured will need more time to determine whether their forecasted impacts and financial returns come to fruition.

DFC can support investees undergoing restructuring through patient capital terms (e.g., extending grace periods) that help stabilize the company's financial situation and preserve its potential to create or maintain positive developmental impact. The two case studies below illustrate select scenarios.

Case Study: Sanitation enterprise

DFC's patient capital restructuring terms can help companies maintain good financial standing

investee name has been anonymized in order to maintain confidentiality

PI²'s loan was initially intended to help Sanitation enterprise expand its production facilities by increasing its capacity to upcycle human waste into animal feed.

However, during the COVID-19 pandemic, PI² waived restrictions on the use of the loan proceeds and deferred interest payments to facilitate a close of Sanitation enterprise. In this case, DFC provided strategic flexibility in its loan structure, which ultimately helped the social enterprise manage the impact of the COVID-19 pandemic and maintain its impact-first business model while successfully raising additional private capital.

Case Study: Consumer goods enterprise

DFC can preserve impact even in worst-case write-off scenarios

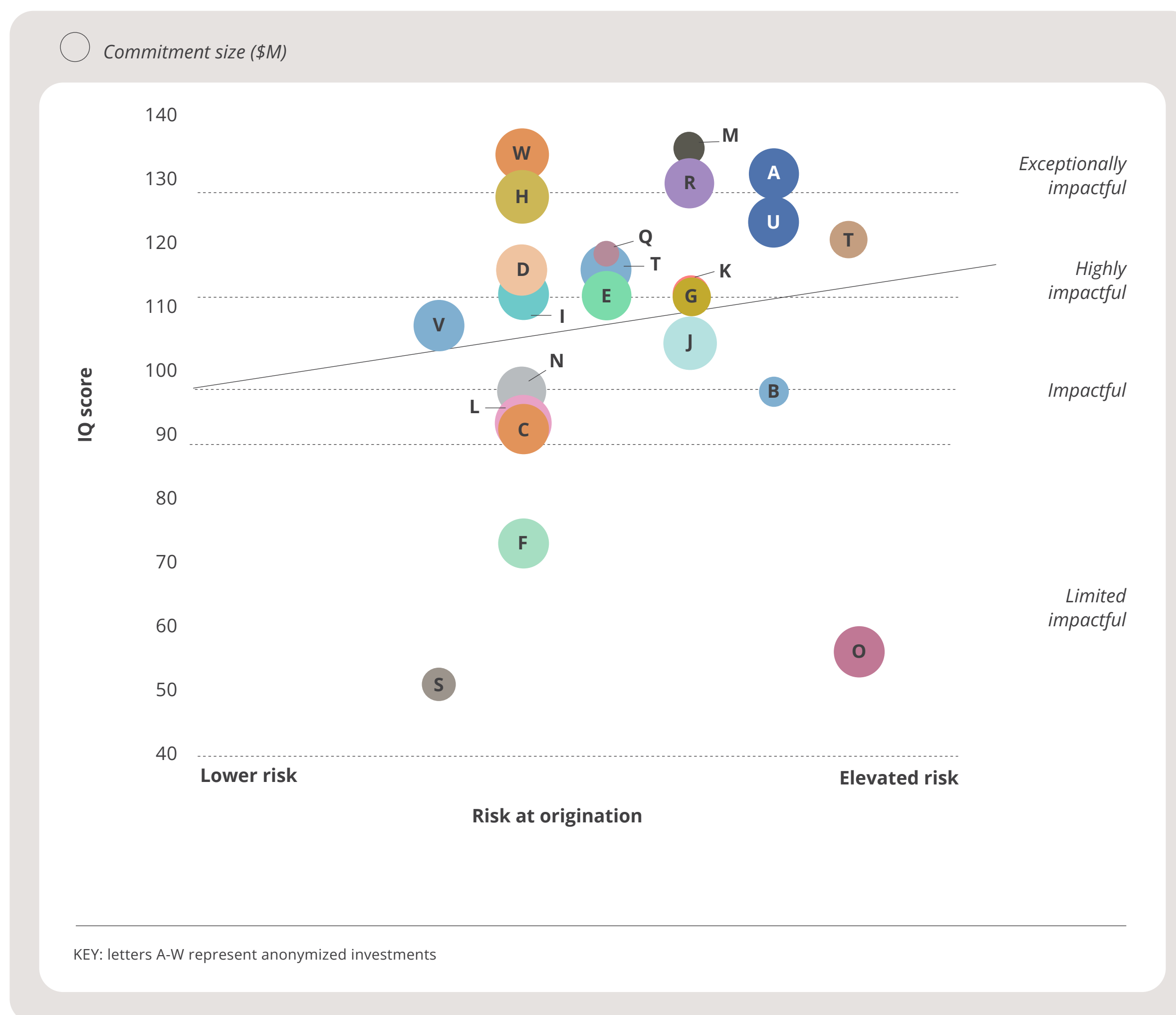
investee name has been anonymized in order to maintain confidentiality

Consumer goods manufacturing enterprise is located in Sub-Saharan Africa for wholesale distribution to US retailers. PI² provided consumer goods enterprise with a $5M loan. Unfortunately, COVID-19 lockdowns across Africa and retail distributor's bankruptcy in the US pushed Consumer goods enterprise into a liquidity crisis.

Rather than enforce liquidation, DFC first decided to restructure the loan to enable Consumer goods enterprise to continue its operations while it attempted to raise additional capital. With the company facing bankruptcy, DFC opted to execute a full write-off that would provide a 6-month severance package to the enterprise employees and allow the company's local entity to receive the company's remaining cash. PI²'s decision to execute an impact-first restructuring and write-off minimized financial harm to Consumer goods enterprise's women employees and helped the company continue operations in Sub-Saharan Africa.

Despite the challenges associated with restructurings, the assessed PI² portfolio has had positive development results overall. Figure 9 below shows that PI² investments operating in an elevated risk environment can achieve strong developmental impact results based on client-reported data, with over half of the evaluated portfolio achieving a 'Highly Impactful' or 'Exceptionally Impactful' IQ score and a positive correlation between higher risk taking at origination and higher impact several years after DFC's loan disbursement.

Figure 9: Impact Quotient score at maturity compared to financial risk at origination



PI² investments intentionally push for greater innovation and operate in riskier environments (e.g., emphasis on LMIC and LICs, early stage etc.) to drive impact, with higher risk at origination corresponding with significantly higher innovation IQ scores in the evaluated sample. PI² investments with a moderately high had an average innovation IQ score below 36, while PI² investments with a more elevated risk had an average innovation IQ score of 55.

The following case study of Energy enterprise illustrates an instance where high developmental impact and large-scale growth was created by a company with an elevated risk profile at origination.

Case Study:
Water enterprise

Energy enterprise is a pioneering solar energy company that designs, distributes, and finances solar home energy solutions to households that lack reliable access to the grid. Energy enterprise's products help reduce household energy costs, improve health and safety, and reduce greenhouse gas emissions from 'dirty' energy sources (e.g., kerosene lamps).

PI² provided a loan to Energy enterprise with high risk due to the company's still relatively unproven business model and nascent off-grid energy products sector.

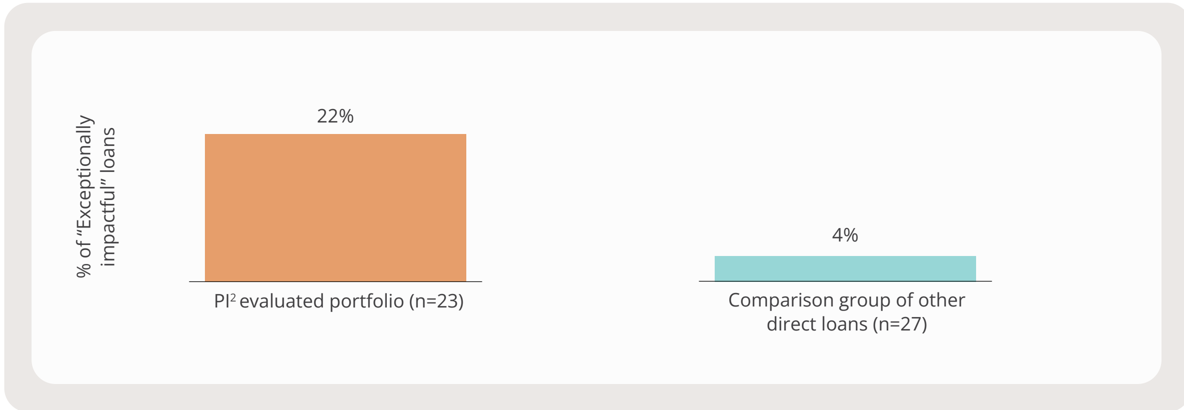
Energy enterprise utilized PI²'s funding to scale operations and has repaid the loan in full. Since DFC's loan, Energy enterprise has raised $700M+ in follow-on funding, including $300M+ in debt funding and significantly expanded operations (reaching 19M units sold by 2022) and its 'Exceptionally Impactful' IQ rating reflects the health and environmental benefits that Energy enterprise's innovative products have provided to communities and the planet, with over 43 billion additional hours of light used, over $6 billion saved on energy expenditure, and over 27 million metric tons of CO_2 avoided.[34]

**investee name has been anonymized in order to maintain confidentiality*

PI²'s willingness to accept financial risk in the pursuit of greater developmental impact is reflected by the high number of investments that receive an 'Exceptionally Impactful' Impact Quotient rating, as seen below in Figure 10.[35] The evaluated PI² portfolio also showed limited impact downside compared to the comparison group, with 13% of the PI² portfolio recording a 'Limited Impact' score or lower, while 33% of the comparison group projects had this score.[36]

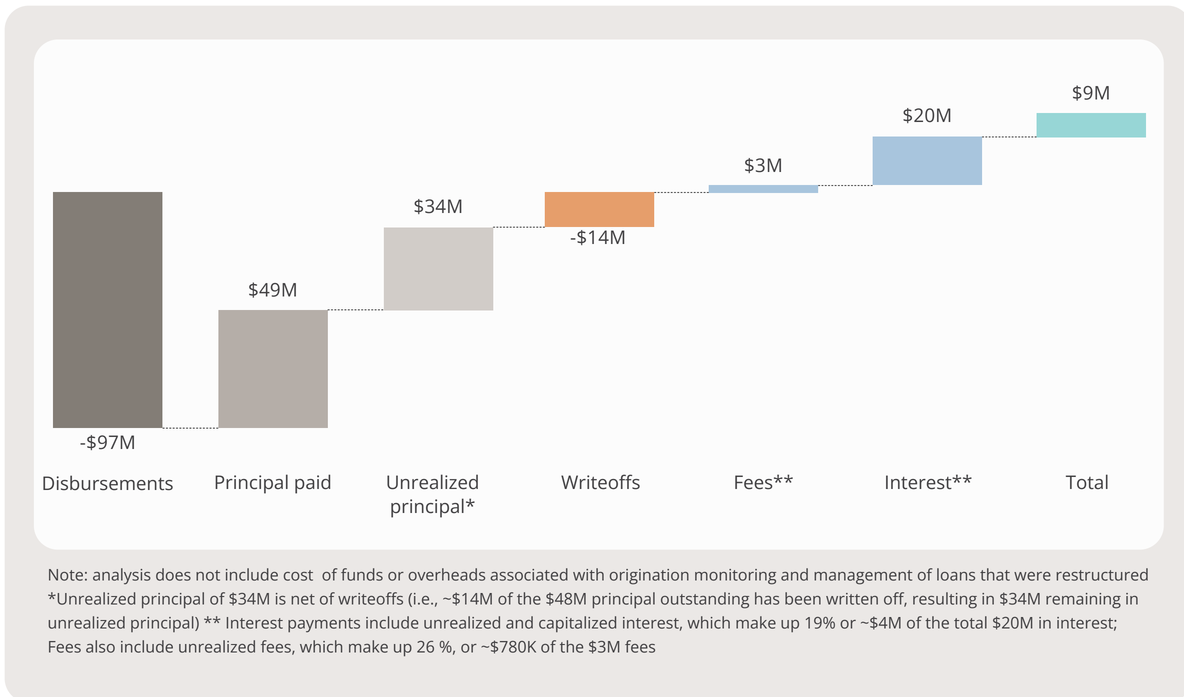
34. BusinessWire (2020)
35. The evaluated PI² 'mature' sample IQ scores are ex-post and the comparison group scores are ex-ante. The difference may be even greater with the comparison group (i.e., a lower percentage of exceptionally impactful investments in the comparisons group) if both IQ scores were ex-post.
36. Projects in the comparison group were evaluated using DFC's previous impact methodology, which scored projects out of 100 total possible points (as opposed to the 150 total possibly points in the IQ methodology). Comparison group scores were multiplied by 1.5 to enable a rough comparison with the sample portfolio.

Figure 10: Percentage "Exceptionally impactful" investment for PI² and comparison group



Despite the higher risk profile, the PI² portfolio sample reviewed has achieved positive financial returns over the period evaluated. Cumulatively, the overall PI² portfolio has a positive projected net cash flow and a positive IRR. This cumulative portfolio includes more recent PI² investments, with commitment dates up to 2022. The 23 PI² mature investments (net commitment size of ~$98M, with commitment dates up to 2019) evaluated as part of the PI² portfolio sample also has generated positive net cash flow.[37] A total of 19 of the 23 projects generated positive cash flows, with 4 investments generating losses. The largest financial gain was +$2M and the largest loss was -$4.7M. Additional detail on net cash flow contribution is detailed in Figure 11 below.[38]

Figure 11: Summary of cash flows for 23 mature PI² loans evaluated



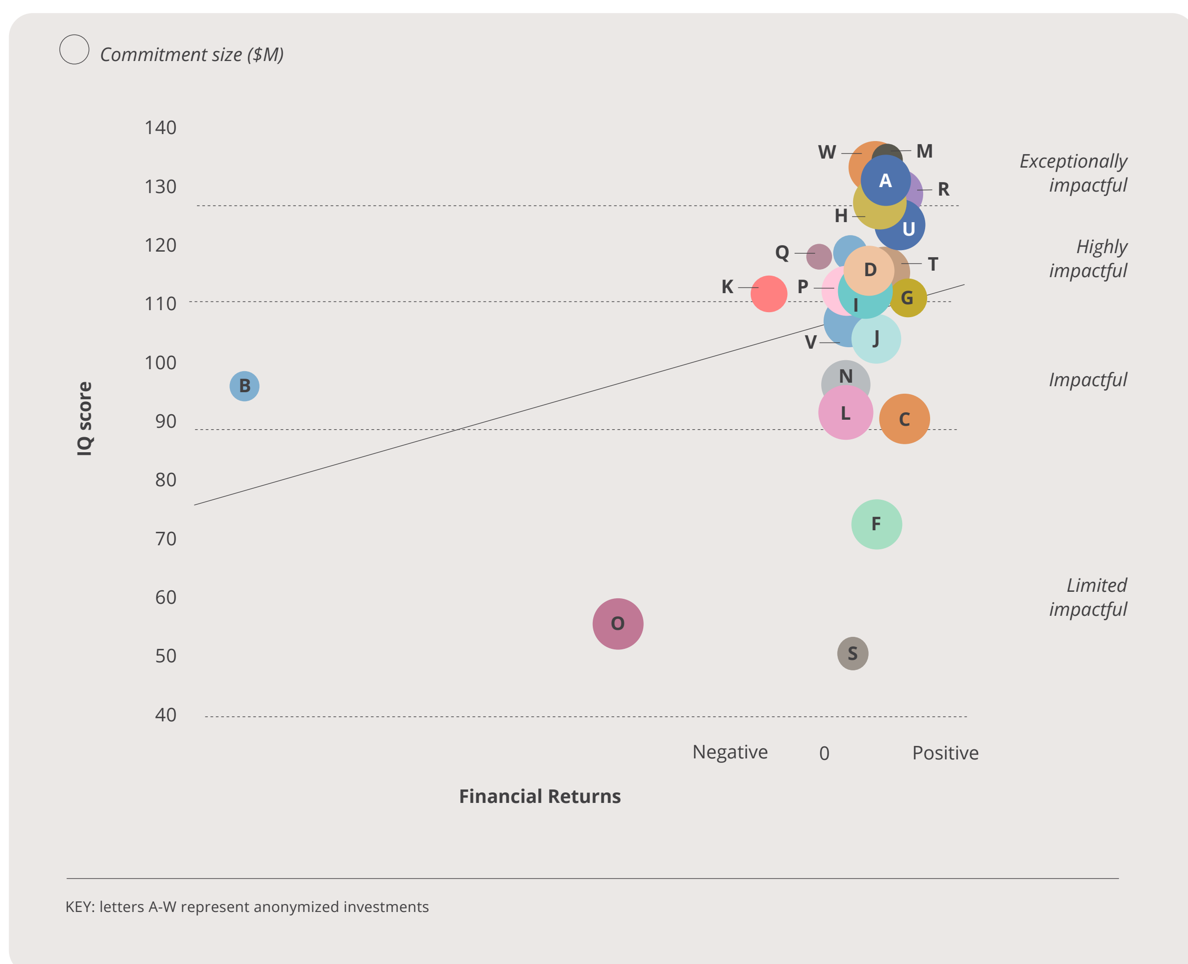
Note: analysis does not include cost of funds or overheads associated with origination monitoring and management of loans that were restructured *Unrealized principal of $34M is net of writeoffs (i.e., ~$14M of the $48M principal outstanding has been written off, resulting in $34M remaining in unrealized principal) ** Interest payments include unrealized and capitalized interest, which make up 19% or ~$4M of the total $20M in interest; Fees also include unrealized fees, which make up 26 %, or ~$780K of the $3M fees

37. A conservative case of measuring financial returns includes reducing projected future cash flows for investments if they have assessed as high risk and have been late on payments (for principal, interest, or fees). This conservative analysis still shows a positive IRR for both the overall portfolio and the PI² mature portfolio. Additional details can be found in the methodology annex of this document.
38. Based on cash flow data as of September 2023. Does not include cost of funds or overheads associated with origination, monitoring and management of investments that were restructured. See methodology section for further detail on net cashflow and IRR calculations.

The evaluated PI² portfolio has a slightly positive projected internal rate of return. A total of 19 of the 23 investments evaluated have a positive financial returns, with four generating a negative returns. The distribution is fairly even with the exception of a few write-offs.

Figure 12, below, shows that IQ scores are positively correlated with financial returns. Energy enterprise provides a notable example of this trend, as the solar lantern company has a 'Exceptionally Impactful' IQ score that reflects the innovation and inclusion the company has created for underserved communities that lacked access to clean energy products. In addition, the company has been able to scale profitably and has successfully repaid its debt obligations.

Figure 12 : Impact Quotient score compared to financial returns for PI² mature portfolio



Achieving PI^2's level of developmental impact and financial returns required managing higher risk through differentiated investment processes and increased engagement from the origination and monitoring teams.

- **Differentiated investment processes:** Potential transactions are first evaluated through a 'pre-screen' rubric used to determine an investment's eligibility for the PI^2 track. Deals approved for the PI^2 track subsequently undergo a full screening via a tailored memo that includes sections outlining the company's impact thesis and DFC's potential additionality. After proceeding through DFC's standard due diligence process, PI^2 deals complete a streamlined credit review process whereby the credit team provides input instead of approval, making the Vice President of the Office of Development Credit the single approver. (Note that this process reflects DFC's organizational structure prior to its 2024 realignment.) To reflect the additional risks inherent in many of PI^2's small-scale, early-stage deals, PI^2's policies and procedures include an optional risk downgrade for all projects.

- **Increased engagement from origination and monitoring teams:** Many companies require significant support to navigate the investment process. In scenarios where DFC's loan or guaranty is the first time a company is accessing capital from an institutional investor, origination officers may need to devote extra time to structuring and explaining the deal. In scenarios where borrowers are facing challenges with repayments, monitoring officers may spend just as much time restructuring a PI^2 deal as they would restructuring a much larger investment. These high-touch relationships help boost communication between DFC and PI^2 borrowers, indirectly decreasing risk, but also represent a significant investment of time and resources.

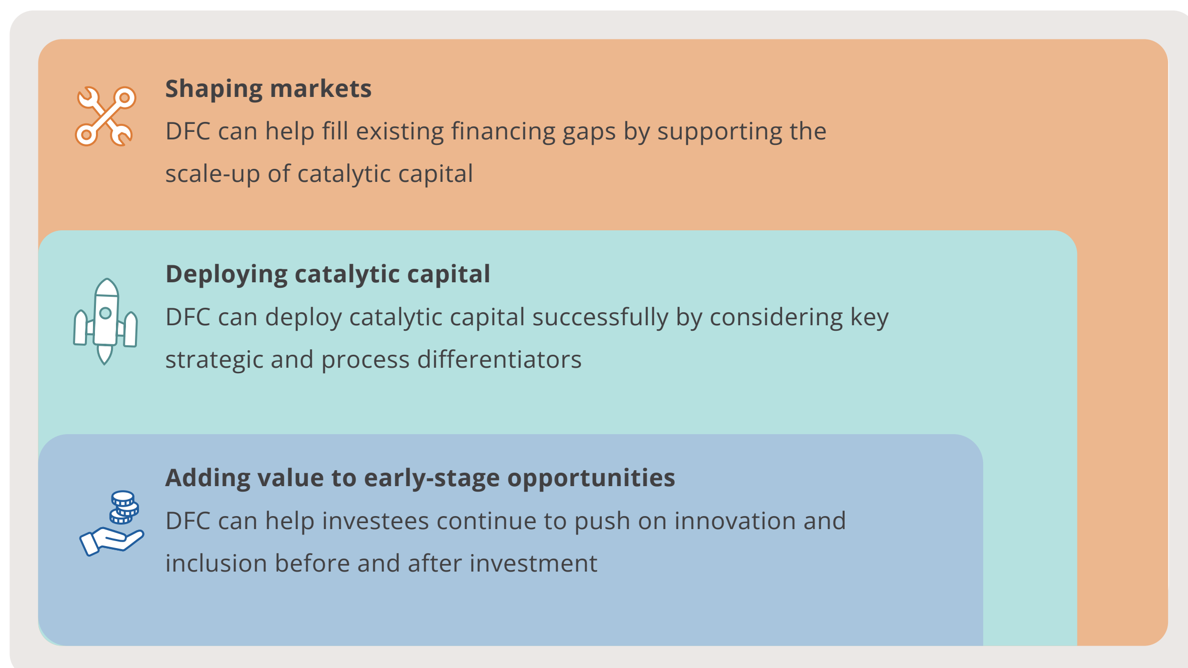
The evaluation shows that PI^2 has successfully constructed a portfolio that achieves development impact and additionality alongside financial returns while managing high financial risk through differentiated investment origination and monitoring processes. Going forward, DFC can continue to build on PI^2's successes as it hones its own catalytic capital strategy and provides insights for other development finance institutions who are new to the space.

III. Recommendations

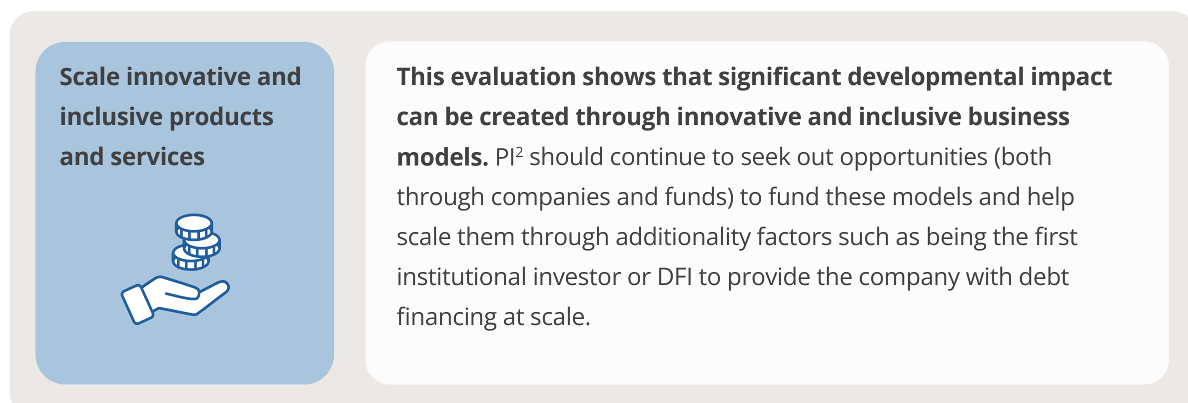
LOOKING FORWARD: STRATEGY RECOMMENDATIONS

In the nearly 10 years since the launch of the PI², the portfolio has created a proof point that demonstrates how development finance institutions can invest in growth-stage opportunities through a tailored approach that intentionally balances risk and developmental impact. Going forward, DFC can build on insights from the PI² evaluation to add value to early-stage companies, deploy capital at scale, and shape the catalytic ecosystem by sharing strategies and insights with peer development finance institutions. Figure 13 summarizes the three levels by which DFC can leverage learnings from the PI² mature portfolio evaluation to better support and improve the catalytic capital ecosystem.

Figure 13: Framework for supporting and improving the catalytic capital ecosystem

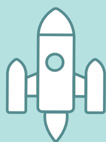
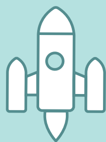


The PI² evaluation has provided a proof point on the strategy of creating impact through innovative and inclusive business models. The table below summarizes two routes to adding value that DFC should continue moving forward.

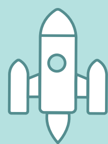


Increase internal resources to manage support to borrowers	**Supporting the elevated risks of the PI² portfolio required a high amount of effort from multiple DFC teams.** To ensure that investees are set up for success, DFC should continue to allocate internal resources to program management, origination, monitoring, and investments in reporting systems/IT. Additionally, working with investees to provide tailored post-investment support (e.g., technical support and capacity building) throughout the loan lifecycle will help align expectations between DFC and first-time borrowers.

This evaluation also identified key institutional practices and strategies PI² uses to identify investible opportunities and support investments throughout the deal lifecycle. By continuing to refine the approaches in the table below, DFC can more effectively deploy catalytic capital in the future.

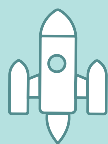
Provide patient and flexible capital at scale 	**Long tenors and grace periods provide early-stage, thinly capitalized companies with sufficient runway to achieve financial sustainability.** Going forward, DFC should continue to provide affordable funding that is flexible enough to meet the unique needs of each investee as it expands its portfolio across sectors. This type of patient and flexible capital can be key to a company's sustainability and growth, as demonstrated in the case of Consumer goods enterprise, where PI²'s long tenor allowed the company to refinance multiple expensive, short-term loans, saving time and decreasing administrative burden.
Utilize new or innovative financial instruments at scale 	**Innovative financial instruments help de-risk early-stage investments and enable new types of transactions.** In the case of Fintech enterprise, for example, PI² used a local currency guaranty—the first of its kind for DFC—to manage foreign exchange risk. In the Health enterprise deal, PI² acted as the anchor investor for what was, at the time, among the world's largest development impact bonds. Going forward, DFC should continue to pilot financing innovations that expand the realm of PI²'s investible opportunities and consider increasing the size of PI² investments to up to $20M to capture a wider range of catalytic opportunities.

Partner with local intermediaries



Investing through local intermediaries will enable DFC to reach marginalized populations and, in the case of funds, provide an efficient use of DFC resources and decrease DFC's exposure to any individual company. There are some successful examples of this strategy in the PI^2 portfolio including Financing enterprise, an investment fund that provides financing to small and medium-sized enterprises, and Housing enterprise, a lender that provides mortgages to women in India. Going forward, DFC should expand its co-investments and partnerships with local intermediaries as a lower-risk way to support small and medium enterprises that are too small for direct investment.

Continue to take a pioneering role in identifying impactful models in catalytic capital



Some of PI^2's most impactful investments, including the Health enterprise, Energy enterprise, and Financing enterprise, offered uncommon products or services that were delivered through unproven business models. Going forward, PI^2 can be utilized as an 'R&D center' that identifies projects that successfully create developmental impact through innovative and inclusive models that can be scaled. PI^2's emphasis on underserved markets and early-stage projects can serve as an incubator for later-stage DFC and proof points for the rest of the market on what types of catalytic support and impact models can achieve scale.

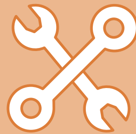
Looking forward, DFC can build on the momentum from the PI^2 portfolio and the learnings above to play a larger market-shaping role in the catalytic capital ecosystem. The table below summarizes two ways DFC can leverage learnings from the PI^2 success to further influence and shape the field.

Take advantage of DFC's unique characteristics to strategically grow its catalytic portfolio

DFC is uniquely positioned to build or scale catalytic portfolios that deliver significant developmental impact alongside positive financial returns through strategic risk-taking. External benchmarks, including British International Investments' decision to allocate 10-15%[39] of net asset value to its Catalyst Portfolio, suggest greater opportunity for DFC to expand its risk allocation, as PI^2 is currently limited to 1.5% of DFC's total portfolio. Internally, DFC possesses a unique set of characteristics that enable it to take on increased risk, pursue impactful initiatives, and play a more prominent role in the financing landscape. Additionally, DFC's ability to offer political risk insurance covering up to $1 billion in potential losses can help crowd in commercial investors interested in exploring impactful growth opportunities.

39. British International Investment, **"Investment Policy for the period from 1 January 2022 to 31 December 2026"**, April 2022.

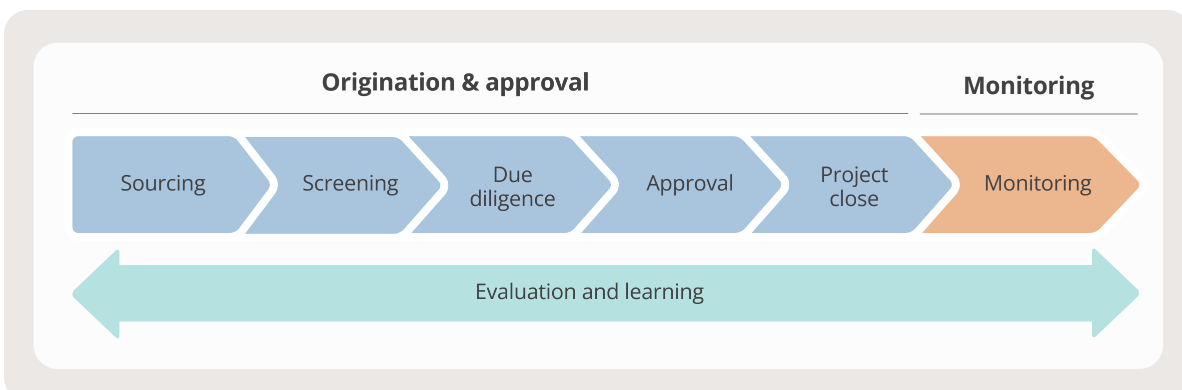
Develop a purposeful learning agenda to extract useful insights that inform strategy and influence the field



A purposeful learning agenda that uses strong data collection and dedicated research support will help DFIs like DFC extract useful insights that inform strategy and influence the field. As DFC expands its catalytic capital offering, it should continue to generate the types of learnings surfaced in this evaluation by embedding a learning agenda within each investment (e.g., key lessons on financial structuring / patient capital needs, challenges of the investee in realizing the business model and impact potential etc. that are applicable to future investments). By proactively planning to generate and disseminate learnings, DFC can encourage other DFIs and impact investors to join them in filling the financing gap facing early-stage, innovative businesses in low- and lower-middle-income countries. Through this ecosystem-wide view of impact investing, DFC can help the sector evaluate what works and develop industry-wide standards for effective catalytic capital, magnifying the impact of the PI² portfolio and creating lasting, positive changes within the sector.

INCREASING EFFECTIVENESS: PROCESS RECOMMENDATIONS

This evaluation surfaced several process recommendations, outlined below, that can further enhance PI²'s ability to effectively serve its target markets as DFC builds its support for the broader catalytic capital ecosystem. These recommendations are grouped according to the two major phases of the deal cycle: 'Origination and approval' and 'Monitoring', with an 'Evaluation and Learning' component that spans the full investment lifecycle.



Process recommendations on Origination and Approval

Incorporate additionality factors into screening

Factoring additionality into investment decisions at origination will help identify opportunities for PI² to add value at the investor level. Assessing additionality also helps identify which project risks could be mitigated through investor-level support, which helps create value as a catalytic lender.

Continue to track the proportion of the PI² portfolio allocated to direct vs. indirect investments

Tracking portfolio data to show allocations of direct and indirect investments will help build portfolio intentionality and balance. Direct investments can generate first-hand learnings and while investing through intermediaries can allow DFC to efficiently fund multiple organizations indirectly.

Process recommendations on Monitoring

Conduct ex-post Impact Quotient re-scores within a consistent timeframe

Conducting ex-post evaluations shortly after final repayment or write-off will help assess how well the project performed against ex-ante impact projections. Timely ex-post evaluations (e.g., evaluations with ~3-6 months of closing) will also surface learnings that can inform DFC's screening or monitoring process for future investments.[40]

Systematize the data collection and calculations underpinning IRR analysis

Creating a standardized methodology for projecting cash flows and analyzing net cash returns will help enable consistent and timely assessments of financial returns. Aligning on a consistent methodology to calculate IRR, for example, will speed up data collection and reporting while enabling DFC to assess PI²'s commercial performance over time.

Create a dedicated group of Origination and Monitoring Officers to manage PI² deals end-to-end

Assigning a dedicated group of Origination and Monitoring Officers to the PI² portfolio will help ensure staff have sufficient bandwidth to provide the increased level of support required by early-stage investments. This dedicated group would: 1) increase visibility into the workload associated with PI², 2) increase officers' familiarity with PI² criteria, impact theses, structuring, etc., and 3) enable officers to dedicate more time to investee relationships (e.g., participating in investor calls to keep up to date on financial and impact risks).

40. This recommendation is focused on revisiting Impact Quotient scores to address the current lack of ex-post impact data. Since DFC already collects ongoing information about an investments' risk rating and financial returns, we assume DFC can easily undertake ex-post evaluations across those two dimensions.

Streamline internal processes for data collection and verification

Refining how PI² collects and manages data across developmental impact, financial risk, and financial returns will help provide efficient data inputs into a comprehensive review of investment performance. Investments in data software can also simplify data monitoring and reporting processes within and across departments.

Process recommendations on Evaluation and Learning

Recommendations to measure PI²'s effectiveness in balancing developmental impact, financial risk, and financial returns

Continue collaborating internally across different areas of expertise

Building on PI² efforts to collaborate across sectors and functional teams will help build expertise and promote the type of interdisciplinary knowledge required for catalytic transactions. DFC should continue collecting input from multiple internal stakeholders via the program's Working Group to build a shared understanding of the risk and goals of the program and facilitate regular updates on PI²'s performance.

Set portfolio-level impact targets

Setting goals for the percentage of investments that achieve a 'Highly Impactful' or 'Exceptionally Impactful' ex-post IQ score will help DFC assess PI²'s performance at the portfolio level. This macro view helps frame the proportion of PI² investments that achieve success in the portfolio's elevated risk environment and provides a threshold for portfolio success, as developmental impact and financial returns vary significantly across individual investments.

Clarify PI²'s process for developing external benchmarks

Establishing guidelines for the composition of future PI² comparison groups can help streamline the benchmarking process. While no two comparison groups will have the consistency of true control groups, a set of guidelines or regularly reviewed criteria will help mitigate the 'statistical noise' created by variations across comparison groups.

Process recommendations on Evaluation and Learning

Recommendations on how IQ evaluation process can better assess PI²'s impact thesis

Refine and systemize measures of additionality	**Incorporating the measures of additionality included in this report into DFC's standard data collection can help capture the full breadth of PI²'s catalytic contributions.** Consistently evaluating additionality alongside other measures of developmental will ensure DFC's investor-level contributions are tracked over time.
Ensure investees comply with DFC's data reporting requirements	**Receiving consistent, timely, and high-quality data from investees can help DFC more accurately evaluate early-stage investments whose IQ indicators focus on the causality or depth of impact.** Indicators like 'Benefits to People and Communities', for example, cannot be effectively scored without consistent longitudinal data, which is dependent on the investee to provide.

Conducting ex-post assessments on the PI² portfolio

Recommendations to measure PI²'s effectiveness in balancing developmental impact, financial risk, and financial returns

Evaluate financial risk and returns alongside developmental impact	**Including financial risk and financial returns analyses alongside ex-post IQ scores can help present a more holistic view of PI²'s performance.** Evaluating an investment through all three themes ex-post will create a comprehensive perspective on performance and avoid siloed analysis and takeaways.
Assess each projects' likelihood of sustained impact	**Adding a new indicator that measures the 'likelihood of sustained impact' can help predict an investment's long-term effects.** While an ex-post IQ score reflects PI²'s developmental impact, assessing the project's trajectory after DFC's involvement gives a longer-term perspective on its impact potential.
Track the percentage of PI² loans graduating to DFC's standard portfolio	**Understanding how often PI² loans graduated to DFC's standard portfolio can provide another measure of PI²'s long-term catalytic effects.** As with the 'likelihood of sustained impact' measure, this creates another window into an investment's long-term impact potential once it leaves the PI² portfolio.

Annex - Methodology

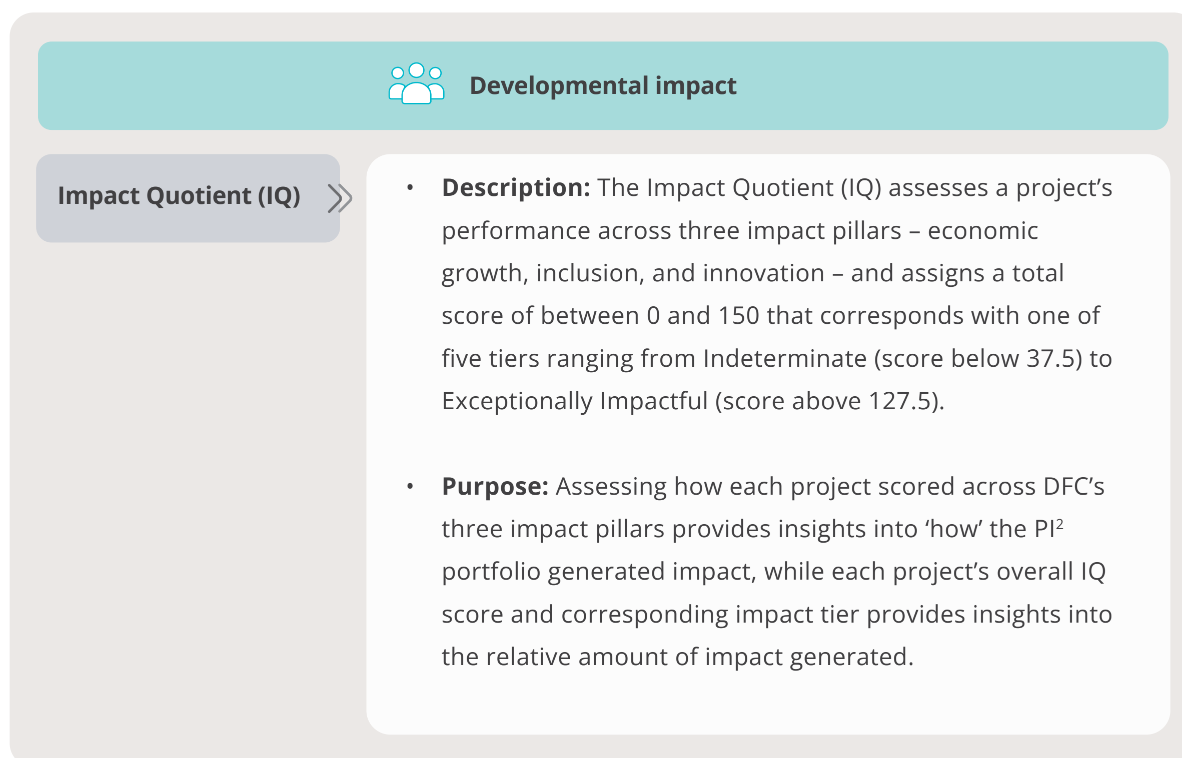
EXTERNAL REPORT

Between July and October 2023, Dalberg Advisors reviewed 23 'mature' loans and guaranties from the Portfolio for Impact and Innovation (PI^2) to assess their performance across three dimensions: Developmental impact, financial risk, and financial return. These projects are among the first investments originated in the PI^2 portfolio and ranged in size from $1.6M to $5M, the maximum amount permitted under PI^2 guidelines prior to 2020. Over 90% of projects took place in low- or lower-middle income countries.[41]

Dalberg's evaluation of these 23 loans and guaranties drew on multiple sources of information provided by DFC, including interviews with Origination and Monitoring Officers, document reviews,[42] financial data, independent research, and expert interviews with Drew von Glahn, Executive Director of Frontier Finance, and Mike McCreless, Executive Director of Impact Frontiers.

In addition, DFC's steering committee for this project (Elizabeth Boggs Davidsen, Lori Leonard, Matthew Guttentag, Rachel Bass, Dia Martin, Richard Greenberg, Ricardo Salinas, Olivia Thompson, Laura Andersen, Joseph Myers, Yvonne Durazzo, Denise Leung, Amy Macharg, Kenneth Fried, and Megan Buckley) provided guidance and feedback throughout the course of this evaluation and report.

The following breakdown provides an overview of how Dalberg conducted its analyses across the three major dimensions of impact, risk, and returns.



41. The World Bank country income group classifications places low-income countries as having $1,135 USD or less of GNI per capita, while lower-middle income countries have a GNI per capita between $1,136 and $4,465 USD. Two projects in the sample group took place in upper-middle income countries where the GNI per capita is between $4,466 and $13,845 per capita.
42. Documentation provided by DFC included business plans, credit memos, development impact projections, loan agreements, Form 008s, and special asset reports, among others.

Developmental impact

Impact Quotient (IQ)

- **Process:** Dalberg utilized DFC's Impact Quotient guidance document to assign ex-post impact scores to each of the 23 deals in the sample group. IQ scores developed during this evaluation were based on desk review of investee-provided impact metrics and information. A few key notes on methodology:
  - » Dalberg selected impact indicators and supporting metrics that reflected the project's ex-ante objectives. For example, a company that reported an ex-ante intention to expand local employment would receive an ex-post score on job creation.
  - » Dalberg issued a 7.5 point deduction to projects whose ex-post impact scores were unlikely to be sustained reflecting the risk that anticipated development impacts will not be achieved during the DFC loan tenure. For example, a company that recently was affected by financial distress and business continuity challenges would receive a 7.5-point deductions based on potential risks of impact sustainability.

Additionality

- **Description:** Additionality factors assess DFC's investor-level impact. Per the Multilateral Development Banks' Harmonized Framework for Additionality in Private Sector Operations, additionality captures whether and how an investor "make(s) a contribution beyond what is available in the market".[43]
- **Purpose:** Assessing which additionality factor(s) are present for each project provides insights into how DFC adds value at the investor level beyond the dollar amount of its commitment.
- **Process:** Dalberg collaborated with the PI² team to shortlist financial additionality factors (e.g., catalyzing capital at origination, offering favorable terms, etc.) and non-financial additionality factors (e.g., technical assistance, market signaling, etc.).

43. IFC, **"Multilateral Development Banks' Harmonized Framework for Additionality in Private Sector Operations",** September 2018.

Financial risk

Risk assessment

- **Description:** Risk is captured by evaluating qualitative and quantitative risk factors facing a DFC investment, through risk scoring models based on different portfolio segments. This evaluation included a review of a project's risk assessment at origination as well as its current risk assessment (if live) or final risk assessment (if closed).
- **Purpose:** Analyzing how a project's risk evolved over time provides insight into how accurately DFC can gauge risk at origination, how project risks evolve over time, and the relationship between risk, impact, and financial returns.
- **Process:** Dalberg used the risk assessment provided by DFC, current as of March 2023.

Subsidy levels

- **Description:** Subsidy levels reflect the projected amount of net expected return or loss for a given project based on the total commitment amount and the project's risk rating. Subsidies are presented as both a percentage of net committed capital and as an absolute dollar value. This evaluation included a review of a project's subsidy level at origination as well as its current subsidy level (if live) or final subsidy level (if closed).
- **Purpose:** Analyzing how a project's subsidy level evolved over time provides insight into a monetary metric of how project risks evolve over time.
- **Process:** Dalberg used the subsidy data provided by DFC, current as of March 2023.

Financial returns

Internal rate of return (IRR)

- **Description:** The internal rate of return (IRR) calculates the annual rate of growth an investment is expected to generate by identifying the discount rate that yields a net present value of zero.

- **Purpose:** Evaluating IRR provides insight into the financial performance of the PI² portfolio. IRR is calculated for the mature PI² portfolio (23 investments) and the overall PI² portfolio (55 investments included in the dataset, which did not include equity investments and other investments that did not have available data). A few key notes on methodology:

  » Cash flow data is current as of September 2023.

  » Dalberg calculated IRR through the projected net cash flows of the portfolio by assessing cash inflows (repaid principal, interest, fees, and the unpaid balance of each project) and cash outflows (disbursements and writeoffs).

  » For simplicity on the cash inflow calculation, unpaid balances (i.e., potential future cash flows) are assumed to be repaid in full by the end of 2023.

  » If the investment has actualized writeoffs and is still open, the remaining unpaid balance is reduced by (1-Loss Given Default). The 'Conservative' case expands this future cash flow reduction - if the investment has a high risk assessment and is late on any payments (principal, interest, or fees), the unpaid balance is reduced by (1-Loss Given Default)

  » If the investment is charged off and closed, the unpaid balance is set to zero (i.e., future cash flows are assumed to be 'lost').

In addition to the 23 'mature' PI² sample deals, this project also evaluated a comparison group of 27 commitments that were generated by DFC's Office of Development Credit team. To ensure comparison group deals were close in size to PI² commitments, projects in the comparison group were capped at $30M or less in the case of direct investments and $20M or less in the case of funds. Equity funds were excluded from the comparison group as well, as these investments use a different risk rating methodology vs. the rest of the DFC portfolio. The intention of the comparison group is to benchmark PI²'s performance against an 'overall DFC portfolio'; however, PI²'s unique thesis means this comparison group should not be treated as a control group.

Dalberg's evaluation of the sample group drew on data provided by DFC, including information on past impact ratings, credit risk, subsidy levels, and financial data. Dalberg did not conduct any interviews with Origination or Monitoring Officers or review transaction documents (e.g., credit memos, special asset reports, etc.) for projects in the comparison group. Below is an explanation of where the methodology used to evaluate the comparison group diverged from the methodology outlined above.

Developmental impact

Impact Quotient (IQ)

Projects in the comparison group received ex-ante impact scores using a DFC impact scoring methodology that scored projects between 1-100 (vs. the new Impact Quotient methodology, which scores projects between 1-150). To translate the comparison group's ex-ante scores into IQ scores, Dalberg multiplied the ex-ante scores by 1.5 to reach a 150-point scale. For example, a comparison group project that scored 75 under the old methodology would be indexed to 112.5, or "Highly Impactful", under the IQ scoring system.

While this indexing method allows for a very rough approximate comparison between the comparison group and the PI² sample portfolio, it is important to note that the previous impact scoring method was less flexible than the IQ scoring method, meaning the index calculation does not result in a true "like-for-like" comparison.[44] The comparison group's indexed IQ scores are also based on ex-ante projections that may skew higher than the PI² sample portfolio's ex-post evaluations.

44. The previous impact scoring methodology scored all potential investments against a standardized matrix, while the IQ methodology selects the most appropriate indicators from a pre-approved library.