Catalytic Capital in Impact Investing

Forms, Features, and Functions

Maoz (Michael) Brown Riya Kadam Katherine Klein







This is a report of the Impact Finance Research Consortium (IFRC), a collaboration among the Wharton School, Harvard Business School, and the University of Chicago Booth School of Business to advance research on impact investing.

Our mission is to improve both knowledge and practice in deploying capital to achieve positive impact in the world.

The authors would like to thank colleagues in the IFRC for their contributions to this project. At Chicago Booth, Robert Gertner, Salma Nassar, and Alissa Bolz provided critical support. At Harvard Business School, Shawn Cole, Rob Zochowski, and Christina Jarymowycz provided valuable assistance. At Wharton, Vit Henisz and Tyler Wry offered much-appreciated input as well. We also thank Blue Haven Initiative and David and Melissa Raso for their generous support of impact investing research at the Wharton ESG Initiative. Finally, the authors would like to thank the Catalytic Capital Consortium for funding this project.







Table of Contents

- 2 Executive summary
- 3 Introduction
- 4 Data and methods
- 6 Forms and uses of catalytic capital
- 10 What catalytic capital funds look like
- 14 Catalytic capital and climate for financial performance
- 16 The challenge of catalytic capital
- 17 The impact of catalytic capital
- 19 Diving deeper into the impact of catalytic capital: Interview findings
- 21 Conclusion
- 22 References







Executive Summary

atalytic capital describes equity investments, loans, and other financial instruments that are designed to stimulate impact and attract third party investment that would likely not be possible otherwise. By accepting disproportionate risk and/or concessionary returns, and by attracting more mainstream investors into high-impact deals, catalytic impact investors can play an important role in tackling the formidable social and environmental challenges the world faces and in building the field of impact investing.

Despite this importance, relatively little is known about how catalytic capital works, how catalytic investors view their role in creating impact, and what distinguishes catalytic capital from the broader impact asset class. We aim to fill that gap in knowledge by presenting a comprehensive analysis of catalytic capital. Drawing on data from the Impact Finance Database and a series of interviews, we offer both a descriptive overview of catalytic capital and an analytical assessment of its distinguishing features.

We begin by reviewing the various forms and purposes of catalytic capital, demonstrating substantial variety in the ways in which investors deploy it. This section also reveals that catalytic capital is not a binary feature of how impact investors work—rather than having just catalytic and non-catalytic impact funds in our sample, we find that many funds blend catalytic and non-catalytic capital.

We then provide an overview of catalytic capital, demonstrating that it is associated with smaller fund size, greater use of debt, more focus on emerging economies, and less support from traditionally returnsfocused limited partners such as insurance companies and pension funds. Following this overview, we explore financial performance goals among catalytic funds, showing that these funds often exhibit less emphasis on market-rate financial performance in ways that go beyond simple return metrics (e.g., internal rate of return). Next, we explore how catalytic impact funds differ from other impact investing funds, highlighting the challenges that catalytic fund managers report they experience in sourcing potential investments, attracting and securing investors, meeting financial targets, and exiting successfully. In the final section, we present findings on the impact of catalytic capital, highlighting the importance of additionality in how catalytic impact investors conceptualize their impact.

Relatively little is known about how catalytic capital works, how catalytic investors view their role in creating impact, and what distinguishes catalytic capital from the broader impact asset class.





Introduction

ractitioners and scholars have increasingly recognized the need for capital across a broad spectrum of risk/return profiles to tackle the enormous challenges that the world faces.¹ Catalytic capital—capital that accepts disproportionate risk and/or concessionary returns to generate positive impact and enable third party investment that would likely not be possible otherwise—has the potential to unlock and accelerate novel and effective solutions to social and environmental problems, giving entrepreneurs increased freedom to develop their business models and attracting co-investors with different risk and return appetites.

Past work has offered preliminary insights on how impact investors use catalytic capital. Much of this research has focused on the catalyzing role of development finance institutions.² One of the central themes in the literature is the use of catalytic capital to fill funding gaps in sectors and geographies that are underserved by mainstream investment channels. Development finance institutions and multilateral organizations have been identified as potential providers of catalytic capital, with their capacity to absorb higher levels of risk and longer payback periods. Scholars have argued that these entities can play a catalyst role by de-risking investments in such sectors and attracting more risk-averse private capital. Examples include the use of guarantees, subordinated debt, equity investments, and first-loss capital to attract and leverage private investment toward social and environmental outcomes.3

Although prior studies offer valuable insights, there has been relatively little investigation of how and why asset managers deploy catalytic capital, whether as agents of development finance institutions specifically or as investors working in partnership with a broader portfolio of limited partners. 4 Asset managers constitute a critical but largely overlooked segment of the catalytic capital supply chain. Tideline's report on the various forms and purposes of catalytic capital offers useful ideas for understanding the nature and possibilities of catalytic capital.⁵ Additionally, the Global Impact Investing Network (GIIN) 2020 impact investor survey provides an overview of how many impact investors deploy catalytic capital and for what purposes. Still, there remains a need for a more detailed understanding of catalytic capital. As FSG Senior Advisor Harvey Koh argues, "knowledge gaps riddle investors' understanding of [catalytic capital]." Moreover, there is widespread acknowledgement in the relevant academic literature that "there is an urgent need for better data and transparency" on issues related to catalytic capital.8 Another stumbling block in research on this topic is confusion over the medley of terms used in this context, including "impact," "additionality," and "blended finance."9

Drawing on novel data from the Impact Finance Database (IFD), this report advances the state of knowledge on catalytic capital. We share insights that not only confirm but also build on the findings of past research, demonstrating how catalytic capital works in practice and spotlighting some particularly interesting features of catalytic capital as an investment strategy, including the challenges it introduces in the investment process, the importance of additionality as a criterion for evaluating its effectiveness, and the nuanced ways in which it is reflected in fund financial performance goals.







Data and Methods

he Impact Finance Research Consortium (IFRC) was formed to advance research on impact investing. Led by academics and research professionals at the Wharton School, Harvard Business School, and Chicago Booth, the IFRC is dedicated to building the evidence base of impact investing, bringing academic rigor and objectivity to the study of this rapidly growing and increasingly critical space.

Together, the members of the IFRC are building the IFD, a comprehensive database on impact investing private equity and venture capital funds that will fuel rigorous research on the role of capital markets in driving social impact. With input from numerous academics and practitioners, we developed a comprehensive and cutting-edge survey to assess the characteristics of impact funds. Topics explored in this survey include financial goals and investment characteristics, due diligence practices, impact measurement, relationships with limited partners, impact reporting, engagement with portfolio companies, the impact of the COVID-19 pandemic, and use of catalytic capital, among other topics. We identified impact investors through a variety of sources, including lists of past impact investor surveys fielded by the GIIN, lists of impact investing firms compiled by PitchBook and Preqin, and member directories of leading impact investing trade associations.

We have fielded this survey while also collecting a variety of documents—financial statements, legal documents, and impact reports—that shed further This report is based on survey data that we have collected from 216 impact investing fund managers across the globe.

light on how impact investing funds perform, structure incentives, enforce accountability, and communicate results. This report is based on survey data that we have collected from 216 impact investing fund managers across the globe. In the catalytic capital portion of the survey, these respondents were presented with the following definition and were then invited to indicate whether, how, and why they deploy catalytic capital:

Catalytic capital refers to debt, equity, or other investments that accept disproportionate risk and/ or concessionary returns compared to conventional investments. The objective of catalytic capital is to generate positive impact and enable third party investment that would likely not be possible with higher return expectations, lower risk tolerance, or less flexible/patient investment terms.

The survey prompted respondents to indicate the percentage of their committed capital that they would designate as catalytic. In total, 197 fund

Catalytic Capital

Refers to debt, equity, or other investments that accept disproportionate risk and/or concessionary returns compared to conventional investments. The objective of catalytic capital is to generate positive impact and enable third party investment that would not be possible with higher return expectations, lower risk tolerance, or less flexible/patient investment terms.







managers responded to this question, 118 of whom (60 percent) reported that at least a small proportion of their committed capital is catalytic. In this report, we use the term "catalytic funds" to refer to these impact investment funds that reported that some or all of their committed capital is catalytic (in contrast to impact investment funds that report that none of their committed capital is catalytic). As noted later in the report, there is a continuum within the category of "catalytic fund" ranging from marginal to high exposure to catalytic capital.

The survey's inclusion of data both on catalytic capital and on a variety of other fund characteristics (as noted above) enables us to carry out the kinds of comparative analyses required to achieve a more precise and holistic understanding of catalytic capital funds vis-à-vis the broader impact investing ecosystem. We note statistically significant associations from these comparative analyses throughout the report.¹⁰

In addition to the IFD survey, we conducted semi-structured interviews with staff from impact investing funds that reported using catalytic capital in the IFD survey. We reached out to 31 of the 118 funds in the IFD sample that reported using catalytic capital, selecting funds that were broadly representative of the catalytic funds in the IFD in terms of the amount of

their committed capital designated as catalytic and the types of catalytic capital identified in their investment strategy (as elaborated in the following section). Of these 31 funds, 21 agreed to an interview, yielding a response rate of 68 percent. Interviewees were all senior-level personnel at their respective funds, with nine holding Managing Director/Partner titles, six holding Founder/CEO titles, four holding Director/Head titles, and the remaining two holding job titles of Senior Advisor and Vice President. Interviews ranged from 33 to 56 minutes, with an average of 43 minutes. All interviewees were assured confidentiality, and all interviews were transcribed and analyzed systematically for important and recurring themes.

We began each interview by asking general questions about the fund's investment approach and impact focus. We then inquired about how each fund makes use of catalytic capital and how the fund manager views catalytic capital as a component of their broader impact strategy. The final portion of the interview focused on the fund manager's views on the role of catalytic capital in impact investing overall. These interviews allowed us to add rich qualitative data to the largely quantitative data drawn from the survey and to clarify a particularly puzzling finding from the survey that we touch on later in this report.





Forms and uses of catalytic capital

ast work has delineated various dimensions of catalytic capital. The most comprehensive delineation is the "five Ps" originally articulated by Debra Schwartz, Managing Director of Impact Investments at the MacArthur Foundation. This framework was subsequently written up and further detailed by Paul Brest and Kelly Born in a widely cited 2013 Stanford Social Innovation Review article. 11 More recently, Tideline applied the five Ps directly to catalytic capital, demonstrating how the extra risk or concession built into catalytic capital can manifest through each of the following:

- Price: Accepting an expected rate of return that is below-market relative to expected risk
- Pledge: Providing credit enhancement via a guarantee
- Position: Providing credit enhancement via a subordinated debt or equity position
- Patience: Accepting a longer or especially uncertain time period before exit
- Purpose: Accepting non-traditional terms to meet the needs of an investee (unconventional or no collateral, self-liquidating structures, smaller investment sizes, higher transaction costs, etc.)

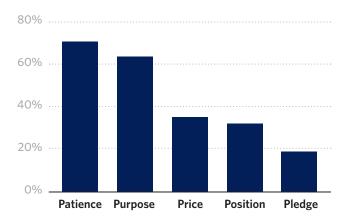
Recognizing the importance of the five Ps in past work on impact investing, we included questions asking about funds' pursuit of the five Ps in the IFD survey, inviting investors who use catalytic capital to specify which of the five Ps apply to their investment strategy. To be clear, we did not apply an objective assessment of whether their fund practices align with each of the five Ps; rather, we invited them to self-report on which of the five Ps are reflected in their impact investment strategies.

As shown in Figure 1, "Patience" is the most commonly deployed form of catalytic capital, with 70 percent of catalytic funds indicating that they accept a longer or especially uncertain time period before exit.

(As noted previously, we use the term "catalytic funds" to refer to impact investment funds that report that some or all of their committed capital is catalytic.) At 63 percent, "Purpose"— accepting non-traditional terms to meet the needs of an investee—is a close runner-up. "Price" and "Position"—accepting belowmarket-rate returns and providing credit enhancement via subordinated debt or equity positions, respectively are less common at 35 and 33 percent, respectively. This finding offers some nuance to past findings on catalytic capital in development finance as a typically concessionary finance tool.¹³ Finally, only 17 percent of catalytic capital investors marked "Pledge," or providing credit enhancement via a guarantee, though it is important to note that the IFD sample skews heavily toward investors focused on private equity and venture capital rather than debt. A broader sample of impact investment funds across beyond private equity and venture capital would likely find that credit-based catalytic capital strategies are more prominent.

We also find that funds use catalytic capital for various reasons. The survey invited catalytic investors to specify the purposes for which they deploy catalytic capital, including any of the following:¹⁴

Figure 1. Representation of catalytic capital forms









- Population: To reach more challenging demographics inaccessible to market rate capital
- Place: To reach more challenging geographies inaccessible to market rate capital
- **Innovation:** To promote innovation and de-risk a novel product, service, or financial model
- **Stage:** To support early-stage companies to reach market rate capital
- Business model: To address small transaction sizes, high transaction costs, or other economic issues related to the type of product or service offered
- Mission: To preserve and safeguard the company's commitment to impact (e.g., by tying investments to legal requirements that prevent a business from drifting from its core social/ environmental mission)
- Track record: To help enterprises demonstrate that they can achieve intended impacts and provide the expected financial return
- Blended capital: To attract market-rate-seeking capital from more conventional investors who would not otherwise invest in the intermediaries or companies given their size, return, or risk
- Other

As shown in Figure 2, "Innovation" (59 percent) and "Stage" (54 percent) are leading reasons for using catalytic capital, meaning that catalytic fund managers often prioritize promoting innovation and de-risking a novel product, service, or financial model, as well as supporting early-stage ventures to reach market rate capital. The least frequently cited reason for using catalytic capital is "Business Model"—i.e., addressing small transaction sizes, high transaction costs, or other economic issues related to the type of product or service offered. However, even this reason was cited by 39 percent of catalytic fund managers. In short, all of the reasons for deploying catalytic capital listed above are common among the fund managers in our sample.

In addition to showing the representation of catalytic capital forms and purposes in our sample, we call attention to the high degree of overlap across the five Ps. We find that most (71 percent) catalytic capital investors use at least two of the five Ps. Another way to understand this interrelatedness is by observing correlations across the five Ps. Figure 3 displays a heatmap where a deeper shade of blue reflects a stronger correlation. The figure shows that most of the five Ps are moderately to strongly correlated with each other, with 0.5 being a common threshold for a strong correlation in social science research. A partial

Figure 2. Representation of reasons for deploying catalytic capital

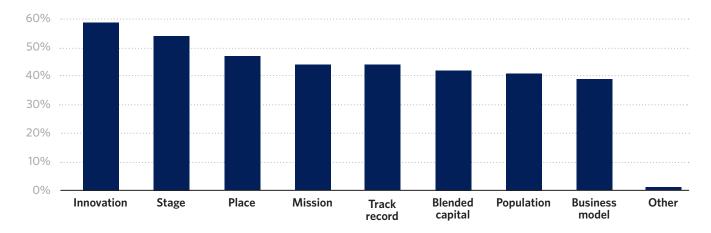






Figure 3. Correlations across forms of catalytic capital

	Price	Pledge	Position	Patience	Purpose
Price	1				
Pledge	.49	1			
Position	.59	.57	1		
Patience	.58	.30	.55	1	
Purpose	.70	.36	.68	.68	1

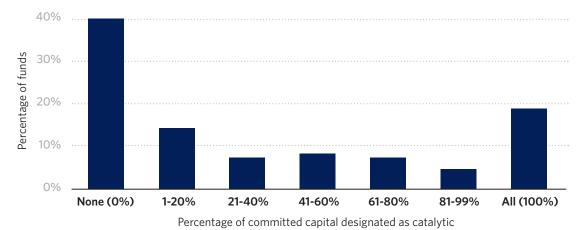
exception is "Pledge," which is the form of catalytic capital that focuses on credit enhancement and, as such, applies most directly to debt-focused investment strategies (the definition for "Position" also references debt, but alongside equity). It appears that "Pledge" stands apart from the other forms because it is the only P that lends itself to debt-focused investors. That caveat aside, the primary takeaway from Figure 3 is that the five Ps are strongly linked to each other.

Based on these data, we conclude that although the five Ps make up a useful framework for understanding catalytic capital, they do not represent a set of distinct

investment strategies in practice. Practically speaking, investors generally draw on multiple forms of catalytic capital as part of a multifaceted strategy to achieve positive impact. Accordingly, rather than categorize our subsequent findings by the five Ps, we use an alternative framing focused on the degree to which fund managers make use of catalytic capital, as described in more detail below.

As shown in Figure 4, we find that catalytic capital is often not an "all or nothing" fund characteristic. In our sample of 197 funds that reported on the percent of their committed capital that they designate as catalytic,

Figure 4. Percentage of fund's committed capital designated as catalytic









60 percent (118 funds) reported that at least some of the capital they invest is catalytic, with 19 percent (37 funds) reporting that they classify all of their committed capital as catalytic capital. That leaves 41 percent of funds that classify one to 99 percent of their capital as catalytic. While past research focused on development finance institutions has sometimes offered a view of catalytic investors as focused solely on catalytic deals, our research findings demonstrate that we need to think about catalytic capital as lying on a continuum.

Given this spectrum, we treat catalytic capital as a sliding scale and report how the use of catalytic capital (from 0 to 100 percent) correlates with other fund

Investors generally draw on multiple forms of catalytic capital as part of a multifaceted strategy to achieve positive impact.

characteristics assessed in the IFD survey.¹⁵ To simplify visual presentations of our findings, we use the following schema in the graphs shared throughout the rest of this report:

Table 1. IFD sample breakdown across catalytic capital spectrum

Group	Description	% of sample (N = 197)	Number of funds
Not catalytic	0% of committed capital is catalytic	40%	79
Marginally catalytic	1-20% of committed capital is catalytic	14%	28
Moderately catalytic	21-80% of committed capital is catalytic	22%	44
Highly catalytic	81-100% of committed capital is catalytic	24%	46



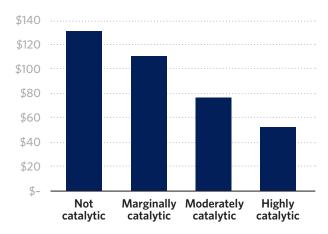


What catalytic capital funds look like

he IFD survey poses a variety of questions regarding general descriptive characteristics of impact investors - their size, limited partners, asset classes, geographic focus, thematic concentrations, etc. We aimed to uncover whether more catalytic funds differ from less catalytic funds in terms of the amounts of their committed capital, the asset classes in which they make investments, the regional concentrations of their investments, the types of stakeholders that provide them capital, the Sustainable Development Goals that they prioritize, and other fund characteristics. Below we report those areas in which statistically significant differences arose. We report findings along with p-values, which indicate the probability that the patterns observed occur by mere chance. A conventional threshold for statistical significance is five percent, or a p-value of 0.05.

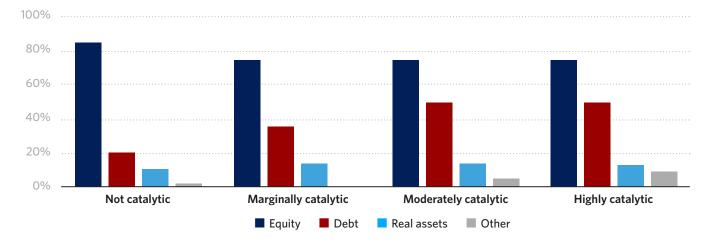
We find that catalytic capital is generally associated with smaller size of operations, with a -0.22 correlation (p < 0.01) between the amount of a fund's committed capital and the percent of that capital designated as catalytic. Figure 5 displays this negative relationship.

Figure 5. Committed capital of funds in millions of U.S. dollars



We also find that catalytic capital shows a statistically significant correlation with debt investing (0.24, p < 0.01), with only 20 percent of non-catalytic fund managers indicating engagement with debt, compared to 50 percent of highly catalytic fund managers. In contrast, the use of catalytic capital is not significantly related to investment in equity or real

Figure 6. Asset class of funds









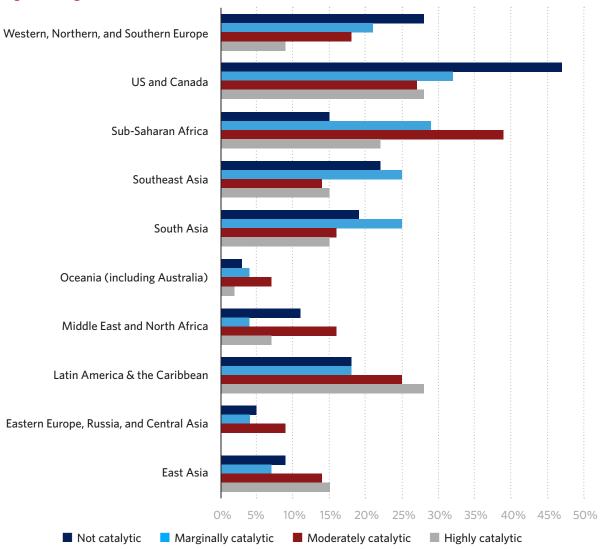
assets. In other words, funds that deploy more catalytic capital are not more or less likely to invest in these asset classes than funds that deploy less catalytic capital.

The IFD survey also allowed respondents to specify the geographies in which funds seek to invest. Funds higher in catalytic capital are less likely to invest in the more developed markets of the U.S. and Canada (-0.17, p < 0.05) and Western, Northern, and Southern Europe (-0.18, p < 0.01). While other patterns are apparent in the bar graph below, the negative associations with investing in these more developed

regions achieve high levels of statistical significance.

To home in on whether catalytic fund managers emphasize emerging markets in their investment strategy, we constructed an indicator for whether fund managers (1) *do not* invest in the US and Canada; Oceania (as this region includes Australia); or Western, Northern, or Southern Europe and (2) *do* invest in any of the following regions: East Asia; Eastern Europe and Central Asia; Latin America and the Caribbean; Middle East and North Africa; South Asia; Southeast Asia; Sub-Saharan Africa. Although this measure is

Figure 7. Regions in which funds seek to invest



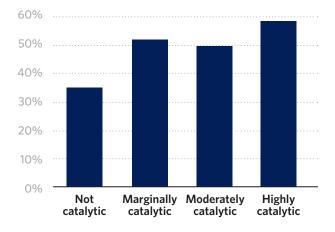




not a perfect reflection of whether a fund emphasizes emerging markets, it does generally capture whether the manager is focused primarily on these regions. Notably, we find a significant correlation between this measure and the degree of catalytic capital used by a fund manager (.17, p < .05), confirming that catalytic fund managers generally prioritize emerging markets in their investment strategy.

This geographic dimension of catalytic capital is important because greater use of catalytic capital is significantly associated with the likelihood of a fund having a place-based investment strategy. The IFD survey allowed respondents to indicate the importance they put on place-based impact investing—that is, the practice of investing in high-poverty areas to stimulate

Figure 8. Percentage of funds focused on emerging markets



Greater use of catalytic capital is significantly associated with the likelihood of a fund having a place-based investment strategy.

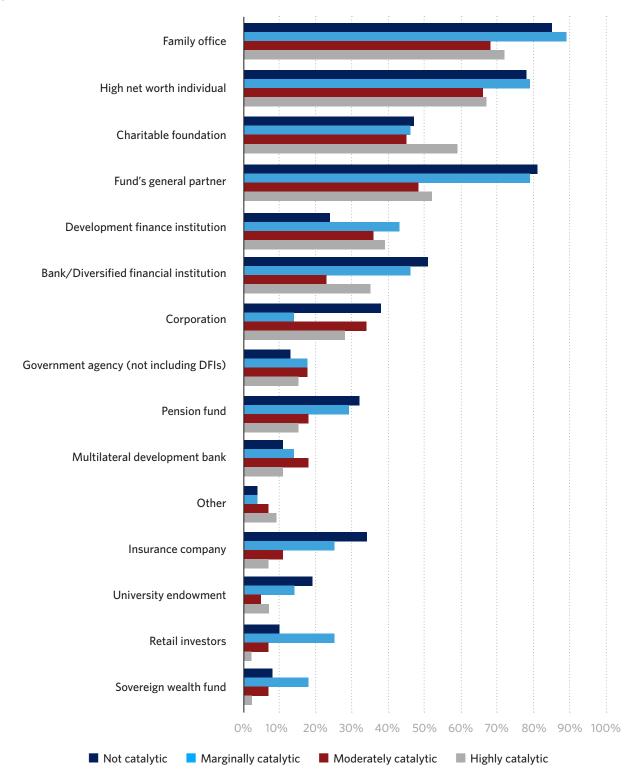
economic development in these regions. There is a small but statistically significant positive correlation between the degree of catalytic capital in funds and their emphasis on place-based impact (0.16, p < 0.05).

The IFD survey also collected data on the sources of a fund's capital. In this section we focus specifically on how the representation of different types of limited partners among fund managers varies across the catalytic spectrum. As seen in Figure 9, family offices and high net worth individuals are the two most cited sources of capital for impact investors across the catalytic spectrum. In contrast, institutions that face strong pressure to prioritize less risky and more lucrative investments university endowments, pension funds, and insurance companies—not only show limited involvement in impact investing overall but also show less involvement with more catalytic funds (-0.16 for university endowments, with p < 0.05; -0.17 for pension funds, with p < 0.05; -0.28 for insurance companies, with p < 0.01). In other words, the more catalytic a fund is, the less likely it is to have university endowments, pension funds, and insurance companies among its limited partners.





Figure 9. Investors into funds







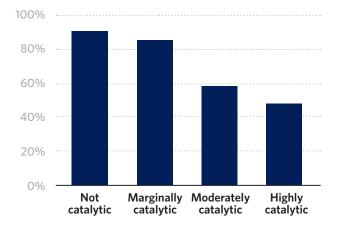


Catalytic capital and climate for financial performance

lthough catalytic capital can fall along a continuum of return expectations, one of its defining characteristics is accepting an expected rate of return that is below-market relative to expected risk. As shown in Figure 1, 35 percent of catalytic fund managers adhere to this form of catalytic capital – i.e., the "Price" of the five Ps. Indeed, as displayed in Figure 10, use of catalytic capital is negatively associated with the likelihood of targeting market-rate returns (-0.42, p < 0.01). We can also view this pattern in the negative correlation between the extent to which a fund manager uses catalytic capital and their targeted internal rate of return (IRR) reported in the IFD survey (-0.27, p < 0.01), as shown in Figure 11.

The financial concession often built into catalytic models of investing can show up in more than simple return metrics. Funds may organize their incentives and operations in various ways that reflect lowered financial return expectations, though past literature on catalytic capital has not deeply probed this more nuanced rendering of financial return expectations. Thus, to understand how financial concession works for catalytic

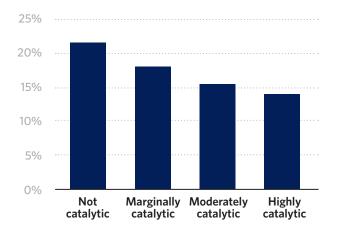
Figure 10. Percentage of investors targeting market-rate returns



capital investors, we need to look beyond measures such as internal rate of return. To examine this more holistic dimension of how fund managers prioritize financial performance, we developed a scale measuring "fund climate for financial performance," which reflects the extent to which a fund's leading partners and executives expect, reward, and support employees in their efforts to make the fund achieve strong financial returns. Survey items comprising this scale allow respondents to indicate how much they agree or disagree with the following statements, with response options ranging from "strongly disagree" (1) to "strongly agree" (5):

- Employees who work on this fund are extremely well trained in how to assess the financial performance of potential and actual portfolio companies or projects
- The fund's partners emphasize how important it is that this fund achieve strong financial returns
- The more employees contribute to the fund's financial performance, the more likely they are to be rewarded with bonuses or promotions

Figure 11. Average targeted internal rate of return (IRR)





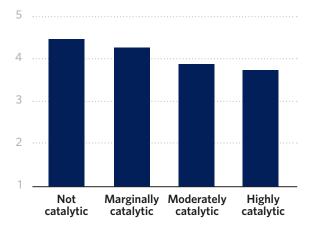




- To earn the trust and respect of the senior managers who work on this fund, it helps to have strong expertise and experience related to finance
- The fund's marketing materials to potential investors emphasize the fund's dedication to achieving strong financial returns
- Carried interest is linked to the financial returns the fund's investments generate

As shown in Figure 12, we find that use of catalytic capital is associated with lower climate for financial performance within a fund (-0.41, p < 0.01). That is, the more catalytic a fund is, the less likely its leaders are to push associates and other employees who work on the fund to prioritize financial return. Importantly, this negative association holds even when focusing exclusively on catalytic funds targeting market-rate returns (-0.20, p < 0.05). Although the difference is small for this subset (4.42 out of 5 for not catalytic and 4.14 out of 5 for highly catalytic), it is statistically

Figure 12. Average climate for financial performance



significant and demonstrates that the concessionary nature of catalytic capital manifests among marketrate-seeking catalytic funds as well as among belowmarket-rate catalytic funds.



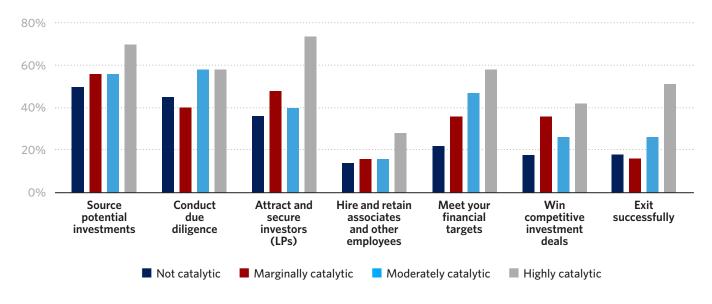


The challenge of catalytic capital

substantial literature has shown that investing in less economically developed regions invites a variety of market frictions posed by political instability, limited regulatory capacity, and other factors. 16 By working in developing markets, catalytic investors take on transaction costs that often deter others. The IFD survey allowed impact investors to report on how their work compares to traditional (i.e., non-impact) investing when it comes to the following activities: sourcing potential investments, conducting due diligence, attracting and securing investors (e.g., limited partners), hiring and retaining associates and other employees, meeting financial targets, winning competitive investment deals, and exiting successfully. Respondents could indicate that impact investing makes the activity much harder, somewhat harder, about the same, somewhat easier, or much easier.

We find that the more catalytic a fund is, the more likely the fund is to report that impact investing is harder than traditional investing with respect to sourcing potential investments (r = 0.14, p < 0.05) attracting and securing investors (0.24, p < 0.01), meeting financial targets (0.25, p < 0.01), and exiting successfully (0.22, p < 0.01). For ease of visual interpretation, Figure 13 displays only the percentages of respondents marking that impact investing makes a given activity somewhat or much harder. Notably, when it comes to conducting due diligence, hiring and retaining associates and other employees, and winning competitive investment deals, our data indicate that catalytic impact investing is not significantly harder than non-catalytic impact investing.

Figure 13. Percentage of funds indicating impact investing is harder than traditional investing









The impact of catalytic capital

that, on average, catalytic capital fund managers place lower priority on market-rate financial returns and experience greater challenges throughout the investment process than their non-catalytic peers do. Do catalytic capital fund managers place stronger priority on creating a positive impact through their investments? And are they more rigorous in their impact assessments? No single self-report survey, including ours, can measure how great a fund's overall impact is across its portfolio, but we can and did set out to measure funds' climate for impact and their impact measurement practices.

As with our scale measuring fund climate for financial performance introduced earlier in this report, we devised a measure of "fund climate for impact," which captures the extent to which a fund's leading partners and executives expect, reward, and support employees in their efforts to make the fund achieve strong positive social and/or environmental impact. As shown below, the statements comprising this scale mirror those included in the financial climate scale, except that they focus on impact rather than financial performance:

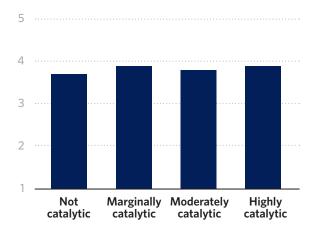
- Employees who work on this fund are extremely well trained in how to assess the social and/or environmental impact of potential and actual portfolio companies or projects
- The fund's partners emphasize how important it is that this fund achieve strong social and/or environmental impact
- The more employees contribute to the fund's social and/or environmental impact, the more likely they are to be rewarded with bonuses or promotions
- To earn the trust and respect of the senior managers who work on this fund, it helps to have strong expertise and experience related to social and/or environmental impact

- The fund's marketing materials to potential investors emphasize the fund's dedication to achieving strong social and/or environmental impact
- Carried interest is linked to the impact returns the fund's investments generate

Again, survey respondents indicated the extent of their agreement with these statements on a five-point scale ranging from "strongly disagree" (1) to "strongly agree" (5). We average the scores across these items to create an overall measure of a fund's climate for impact. Comparing these scores across the catalytic capital spectrum, we find no significant association between climate for impact and use of catalytic capital.¹⁷

Along similar lines, we also find that a fund's deployment of catalytic capital is not significantly related to responses to survey items measuring a fund's focus on impact during investment due diligence, its impact measurement practices, and the impact performance of its investees. The survey items relating to due diligence pose the statements listed below, with Likert scales featuring response options that include "Very rarely or never," "Rarely," "Sometimes," "Often," and "Very often or always":

Figure 14. Average climate for impact









Before making an investment into a given company or project, how often do partners or associates working on the fund do each of the following?

- Visit the company to observe its social or environmental impact directly
- Consult with experts or consultants on the company's projected impact
- Review impact data collected directly from the company's customers or beneficiaries
- Require the company to complete a formal impact assessment (such as the B Impact Assessment) and share the results
- Complete an impact quantification process that converts the company's projects impact into a numerical score or dollar figure, such that you are able to evaluate whether one investment scores higher on expected impact than another
- Read academic literature or summaries of academic research relevant to the company's impact strategy and likely outcomes

As noted above, greater use of catalytic capital was not associated with more frequent engagement with any of these activities. Moreover, we found that greater use of catalytic capital was not significantly associated with any of the following activities following investment:

- Asking the investee for quantitative data documenting its impact (e.g., counts of customers served, reading scores raised, pollution reduced)
- Asking the investee for information on risk factors that could limit the company's positive impact or create negative impact

We found no statistically significant association between use of catalytic capital and the percentage of investees who have met or exceeded the fund's impact goals.

- Asking the investee for a report from an independent third party analyzing or auditing the investee's impact
- Reviewing impact data collected directly from the investee's customers or beneficiaries (e.g., lean data)

Finally, we found no statistically significant association between use of catalytic capital and the percentage of investees reported to have met or exceeded the fund's impact goals.

At first glance, these are puzzling findings. Our expectation before conducting analysis of the survey data was that the sacrifices of catalytic capital should go hand in hand with greater commitment to impact as an investment priority, even as measured by indirect proxies such as climate for impact, impact measurement practices, and the percentage of investments meeting impact expectations. To gain additional insights regarding the goals and practices of catalytic impact investors, we conducted a series of interviews. We describe our findings from these interviews in the following section.





Diving deeper into the impact of catalytic capital: Interview findings

o complement our survey findings, we interviewed senior staff at 21 impact investing funds representing the full range of the catalytic capital spectrum. Our goal in conducting these interviews was to learn more about how catalytic fund managers conceptualize impact and also to invite their opinions on the non-significant correlations noted in the previous section. Put simply, we explained these findings to our interviewees and asked them to share their thoughts on why we did not see a significant relationship between funds' deployment of catalytic capital and their climate for impact and impact measurement practices.

Some interviewees were puzzled at first by the non-significant correlations described in the previous section, expecting (as we originally did) that catalytic capital fund managers would be particularly attentive to impact. Through conversation, however, our interviewees tended to converge on the same explanation: Catalytic fund managers generally conceptualize impact in terms of additionality rather than the specific impact norms and measurement practices we assessed in our survey. It is important to note that there are multiple definitions of additionality in academic and practitioner literature. For the purposes of this report, we adopt the definition offered by Paul Brest and Kelly Born in 2013:

Under our criterion of additionality, the investment must increase the quantity or quality of the social or environmental outcome beyond what would otherwise have occurred—where the counterfactual is that ordinary, socially neutral investors would have provided the same capital in any event.²⁰

In other words, an impact investment is additional if it creates or facilitates a positive social or environmental impact that a traditional, non-impact investor would not create or facilitate. As one interviewee explained,

Catalytic fund managers generally conceptualize impact in terms of additionality.

"additionality is a key point. I think the biggest issue is the additionality of capital that goes into these investments." Another term for this property of impact investments is "contribution," one of the five dimensions of impact developed initially by the Impact Management Project and now promoted by Impact Frontiers. Contribution describes "whether an enterprise's and/or investor's efforts resulted in outcomes that were likely better than what would have occurred otherwise."21 In other words, an impact investment has high contribution or additionality when it achieves significant impact in a way that is unlikely to be achieved by more conventional deal terms (e.g., the impact investment offers patient or concessionary deal terms conducive to fostering impact). This counterfactual consideration helps to ensure that impact investors spur impact above and beyond what is normally created through more mainstream market forces, and this criterion is especially important to catalytic impact investors. Many but not all of our interviewees used the terms "additionality" or "contribution," but all invoked these concepts by emphasizing that, as one interviewee put it, "catalytic capital is willing to go where no one else is going." This view reflects an understanding of catalytic capital as "play[ing] a critical role in ensuring that impact investing pushes farther, harder, and faster to reach the full range of solutions that can build a more equitable and sustainable future."22







There was clear consensus on the point that catalytic investors more often take the lead in establishing deals that would not exist were it not for their role.

Several of our interviewees noted that non-catalytic impact investors do not place as much priority on additionality. For example, one interviewee noted that "we still don't have a ton of competition in [developing country redacted] for early-stage deals. A lot of our entrepreneurs come to us when they've been rebuffed by others." Another suggested that it is easy to become disillusioned with much of what carries the label of impact investing, lamenting that "the longer you're in the sustainable investment space, the more skeptical or cynical you become, and I think that naturally you will gravitate towards catalytic capital."

To be sure, our interviewees acknowledged the important work that non-catalytic impact investors do, but there was clear consensus on the point that catalytic investors more often take the lead in establishing deals that would not exist were it not for their role, while non-catalytic impact investors often invest in deals that non-impact investors find attractive, resulting in less additionality. This pattern does not necessarily mean that non-catalytic impact investors pursue or achieve less impact than their catalytic counterparts do, but it does indicate that catalytic impact investors pursue a different form of impact that is more likely to require distinct risk/return profiles conducive to supporting early-stage, less resourced, and/or unproven enterprises. As one interviewee explained, "Traditional investors or other impact vehicles want to see a track record. I think catalytic capital has a role in supporting new models and supporting new actors, new fund managers and those that don't look or sound like the traditional investment."

Several interviewees remarked further that catalytic capital fulfills an important "research and development" function by educating other fund managers, social

entrepreneurs, and institutions about impact investing and encouraging them to invest in spaces to which they are not accustomed. One interviewee who works in Africa explained that one of his major priorities is "to get investors that find Africa scary to invest in the continent." This investor achieves this objective by playing a translation and matchmaking role between investors new to the continent and the African Development Bank. Another explained that the goal of their catalytic fund has been not only to achieve the direct impact outlined in the fund's impact thesis but also to achieve the higher-level objective of "bringing impact investing to my country." In short, catalytic investors conceptualize additionality not only in terms of capitalizing deals that others would not consider or crowding other investors into such deals but also in terms of building the field of impact investing. One interviewee summarized this view as follows:

Being a catalytic investors means being more of a leader than a follower. It is easier or simpler to follow with passive impact, but to be catalytic, I think you need to be more. You need to be willing to play a lead role more often.

Our interview findings are helpful in explaining the non-significant correlation we observed between our measure of funds' climate for impact and their deployment of catalytic capital. To illustrate, take the following statement included in the climate for fund impact scale: "The fund's partners emphasize how important it is that this fund achieve strong social or environmental impact." A non-catalytic investor who does not place as much emphasis on additionality may be inclined to strongly agree with this statement, reflecting on their fund's pursuit of impact at scale or in relatively low-risk environments. A more catalytic investor might also strongly agree with this statement, reflecting on their fund's prioritization of impact in higher-risk environments where other investors are less likely to operate.

In short, investors draw on their own implicit or explicit standards for impact when evaluating their prioritization, measurement, and achievement of impact – standards that may help to explain our survey findings.





Conclusion

atalytic impact capital is often characterized as an all-or-nothing investment approach. ²³ Our findings challenge this depiction. We have found that many funds treat catalytic capital as one component of a broader investment strategy. While some funds devote 100 percent of their capital to catalytic deals, many carve out a smaller percentage for such investments.

This variable aspect of catalytic capital presents an opportunity for field-building. Thought leaders and practitioners interested in growing the practice of catalytic investing can encourage and role-model this blended approach to investing, simultaneously acknowledging the tradeoffs involved in catalytic capital (i.e., greater difficulty and potentially lower returns) and showcasing the opportunities for unique impact (i.e., impact that meets the criterion of additionality). In this way, non-catalytic impact investors can be encouraged to experiment with catalytic approaches, pursuing more catalytic deals along with less catalytic deals.

Field-builders interested in promoting catalytic capital should emphasize the importance of additionality, or contribution, in their communications, programming, and funding, as it distinguishes catalytic capital from other forms of impact investing. By focusing on additionality, field-builders can demonstrate the unique value that catalytic capital brings to the impact investing landscape, especially in terms of unlocking deals that

may otherwise be overlooked or considered too risky by other investors. Related to this point, there remains a need for more and better research on how and when investors achieve true additionality.²⁴

Field-builders should also recognize the "research and development" role that catalytic capital plays in the impact investing ecosystem. Catalytic investors are often at the forefront of innovation and exploration of new investment models, as well as fostering collaborations between stakeholders. Field-builders should highlight this function and encourage the sharing of lessons learned and best practices among impact investors.

Lastly, we need to pay more attention to the subtly but importantly different ways in which more versus less catalytic impact investors conceptualize the impact of their investments. Among impact investing funds whose investments are predominantly or exclusively catalytic, additionality (or contribution) is a key goal. Among impact investors that make fewer or no catalytic investments, additionality is less important. By understanding these varying perspectives, field-builders can better facilitate dialogue and collaboration between different types of impact investors, ultimately leading to a more robust and effective impact investing ecosystem.

We hope that this report has provided useful insight on this important topic and that the findings presented here will inform and accelerate the evolution of impact investing in years to come.







References

- 1 https://www.bridgespan.org/insights/investing-that-puts-impact-first
- 2 https://www.oecd.org/dac/evaluating-financial-and-development-additionality-in-blended-finance-operations-a13bf17d-en.htm
- 3 https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/bf/bf-resources/202011-bf-discussion-paper
- 4 https://www3.weforum.org/docs/WEF_Blended_Finance_A_Primer_Development_Finance_Philanthropic_Funders.pdf
- 5 https://tideline.com/wp-content/uploads/2020/11/Tideline_Catalytic-Capital_Unlocking-More-Investment-and-Impact_ March-2019.pdf
- 6 https://thegiin.org/research/publication/impinv-survey-2020/
- 7 https://ssir.org/articles/entry/what_investors_need_to_know_to_embrace_catalytic_capital
- 8 https://cdn.odi.org/media/documents/12666.pdf
- 9 https://www.oecd-ilibrary.org/development/evaluating-financial-and-development-additionality-in-blended-finance-operations_a13bf17d-en
- 10 For simplicity, we report correlations throughout the report, but we conducted additional statistical analyses to ensure that our findings are robust.
- 11 https://www.ssir.org/up_for_debate/article/impact_investing
- 12 Brest and Born suggest a sixth P for perspicacity: Discerning opportunities that ordinary investors do not see.
- 13 https://www.ifc.org/wps/wcm/connect/publications_ext_content/ifc_external_publication_site/publications_listing_page/using+blended+concessional+finance+to+invest+in+challenging+markets
- 14 We thank John Balbach at the MacArthur Foundation for his valuable input on developing this framework of reasons for deploying catalytic capital.
- We assess the relationships between this scale and other fund characteristics by using the midpoints of each range shown in Figure 4. In other words, we run statistical analyses on the assumption that a fund choosing "1-20%" designates 10.5 percent of its committed capital as catalytic capital.
- 16 https://www.worldbank.org/en/topic/investment-climate
- We find a very slight upward trend ranging from 3.72 for non-catalytic funds to 3.91 for highly catalytic funds, but the pattern is not statistically significant at the conventional .05 threshold.
- 18 We plan to carry out more complex statistical analyses of the data to explore these findings in more detail.
- 19 https://www.oecd.org/dac/evaluating-financial-and-development-additionality-in-blended-finance-operations-a13bf17d-en.htm
- 20 https://ssir.org/up_for_debate/article/impact_investing
- 21 https://impactfrontiers.org/norms/five-dimensions-of-impact/
- 22 https://newventurefund.org/wp-content/uploads/2022/05/Advancing-Practice-in-Catalytic-Capital_The-Seeding-Role_ Executive-Summary.pdf
- 23 https://www.cgdev.org/sites/default/files/elusive-quest-additionality.pdf
- 24 https://www.cgdev.org/sites/default/files/elusive-quest-additionality.pdf





