Impact of Early Stage Equity Funds in Latin America

Josh Lerner [†]
James Tighe
Steve Dew
Vladimir Bosiljevac [‡]
Ann Leamon
Sandro Díez-Amigo [§]

With assistance from
Susana Garcia-Robles [§]

[†] Harvard Business School
[‡] Harvard Law School
[§] Multilateral Investment Fund of the Inter-American Development Bank

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BELLA RESEARCH GROUP

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Multilateral Investment Fund
Member of the IDB Group

ABOUT THE MULTILATERAL INVESTMENT FUND

Our Vision

The Multilateral Investment Fund is the innovation lab for the Inter-American Development Bank Group. It conducts high-risk experiments to test new models for engaging and inspiring the private sector to solve economic development problems in Latin America and the Caribbean. The MIF addresses poverty and vulnerability by focusing on emerging businesses and smallholder farmers with the capacity to grow and create economic opportunities.

What we do

The Multilateral Investment Fund (MIF), a member of the Inter-American Development Bank (IDB) Group, is the largest provider of technical assistance for private-sector development in Latin America and the Caribbean. Our core beneficiaries include micro and small businesses, small farms, and poor and vulnerable households.

We design and finance pilot projects to test pioneering approaches to building economic opportunity and decreasing poverty. We evaluate the results and the impact of our projects to identify replicable solutions that can be scaled up by the public and private sectors.

We are committed to sharing the lessons learned from our work so that others can benefit.

Using small projects, we have achieved sustainable transformation in the thinking and behavior of people, policymakers, organizations, and businesses in areas such as microfinance, remittances, venture capital, and training for youth.

April 2016

Who we are

The MIF was created in 1993 by 21 donor countries. Sixty-five percent of the financing we provide is in the form of grants, 25 percent is equity, and 10 percent is loans. We provide the loan and equity alone or in combination with grants—as well as expert advice. With this wide variety of tools and more than 20 years of experience in the field, we have the flexibility required to tailor solutions to the unique challenges in Latin America and the Caribbean.

We have financed more than $2 billion in grants and investments for private sector development projects. In all, we have funded more than 1,800 MIF projects with various partners.

Funds for our activities come from contributions made by our member countries—now totaling 39—in Latin America and the Caribbean, North America, Europe, and Asia.
Where and how we operate.

We work on the ground and in partnership—with local, mostly private partners—to help fund and carry out pilot projects. Altogether, we have worked with more than 2,000 local partners, most of which had never previously worked with a development bank. Our partners contribute both a significant portion of the project costs and on-the-ground resources to implement operations.

We also work with global partners that share our goals, such as corporations, foundations, and other multilateral organizations. They pool their financial and other resources with ours to jointly solve development challenges.

In addition, we invest in private financial institutions, which lend the resources to micro and small businesses, and in the rapidly developing venture capital and impact investment industries in Latin America and the Caribbean. Nearly half our staff works out of IDB Group offices in 26 countries in the region. We monitor each project throughout its active stages, perform a thorough evaluation once it is complete, and share lessons learned. Once each pilot is completed, we provide knowledge and tools for the IDB Group or others to scale it up, or to adapt and replicate it for different communities and sectors.

MULTILATERAL INVESTMENT FUND
1300 New York Avenue, N.W., Washington, D.C. 20577

mifcontact@iadb.org
www.facebook.com/**fominbid**
www.twitter.com/**fominbid**

www.**fomin**.org

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Executive Summary

In April 2015, the Multilateral Investment Fund (MIF), a member of the Inter-American Development Bank (IDB) Group, commissioned the research team to prepare a report on the effectiveness of some recent venture capital (VC) fund investments in Latin America. This report contains the research team's findings.

This report focuses on three funds in which the MIF has invested. Using these funds as case studies, chosen to represent different investment approaches and company stages, the team explores two dimensions of impact: first, the direct impact of fund managers on portfolio companies is considered, and then the indirect impact created by portfolio companies in their communities and the region is examined. In addition to addressing the broader question of impact, the report also profiles two investments from each fund's portfolio. In these "mini-cases," the ways in which the fund managers add value to their companies are presented. In this way the MIF continues to examine its performance and share its lessons with others who seek to reduce poverty and improve the economic vitality of Latin America and other emerging countries.

The report consists of five principal parts: an introduction, followed by three chapters and a conclusion. In particular:

- The introduction provides background information on the private equity and venture capital environment in Latin America, a description of the MIF and its work in the region, and an overview of the project, its methodology, and objectives. In addition, this section examines the most recent academic literature on the importance and effectiveness of VC fund investing as a tool for achieving developmental goals.
- In each of the following chapters, the three funds selected for in-depth research and analysis are profiled in detail: Vox Impact Investing Fund I (Vox Fund I), an impact investment fund headquartered in São Paulo; Progresa, a classic VC fund located in Medellín that focuses on Colombian healthcare and technology companies; and NXTP Labs, a LATAM regional seed fund managed by an investment firm that runs an accelerator modeled on Silicon Valley's Y Combinator (please note that Dr. Josh Lerner has performed advisory work for NXTP).
- The conclusion draws together the key themes in the report.

Background

Since the turn of the millennium, Latin America has experienced remarkable economic growth along with major socio-economic shifts. Between 1999 and 2012, the number of people in the region living on less than $1.90 per day decreased from 71.1 million to 33.7 million,[1] even as the

[1] The World Bank, "Poverty & Equity: Latin America & Caribbean," The World Bank, accessed December 14, 2015, http://povertydata.worldbank.org/poverty/region/LAC.

population grew from 488.0 million to 527.8 million.[2] From 2006 to 2014, regional GDP grew from $2.6 trillion to $4.8 trillion,[3] and an expanding middle class gave rise to strong regional growth in consumption. At the same time, the business environment in many Latin American countries also improved. According to the World Bank Group's Doing Business database, the average time to start a business in the region fell from over 70 days in 2005, to less than 34 days in 2015.[4] The region's average scores (measured as the distance to the frontier of best practice, a scale of 100) improved across a number of categories, including getting credit (improved 8.1 points) and resolving insolvency (improved 14.5 points).[5]

Although Latin America has made great economic strides in recent years, this increasingly dynamic region still struggles with poverty and unequal access to education, job opportunities, and health care for women, indigenous peoples, and base of the economic pyramid (BoP) populations. The region is home to some of the most economically stratified countries in the world as measured by the Gini index (rated on a scale of 100), including Colombia (53.5), Brazil (51.9), and Mexico (48.3).[6] For development finance institutions that focus on the region, such as the Inter-American Development Bank's (IDB) Multilateral Investment Fund (MIF), much work remains to be done.

Studies have shown that supporting small and medium enterprises (SMEs) often pays the greatest developmental dividends for one simple reason: SMEs create the vast majority of jobs in the formal economy, providing, on average, 66% of the jobs worldwide and the greatest share of jobs in low income countries.[7] Yet these companies often have difficulty accessing the credit, insurance, and other financial products necessary for managing risk and funding further growth.[8] A 2013 study by the International Finance Corporation revealed that globally, SMEs faced a financing gap over $2.1 trillion and that bank loans to SMEs represented approximately 13% of

[2] World Bank Data, http://data.worldbank.org/, accessed Dec. 14, 2015.

[3] World Bank Data, http://data.worldbank.org/, accessed Dec. 14, 2015.

[4] The World Bank's Doing Business Database, accessed December 21, 2015.

[5] The averages were calculated using only countries with scores for both 2005 and 2015. (The World Bank's Doing Business Database, accessed December 21, 2015.) The scores reported are the Doing Business "Distance to Frontier" (DTF) scores. This measure shows the distance of each economy to the "frontier," which represents the best performance observed on each of the indicators across all economies in the *Doing Business* sample since 2005, on a scale of 0 to 100. For more detail on the methodology of the Doing Business survey, please see "Doing Business 2015: Regional Profile Latin America and Caribbean," http://www.doingbusiness.org/reports/~/media/GIAWB/Doing%20Business/Documents/Profiles/Regional/DB2015/DB15-Latin-America-and-Caribbean.pdf.

[6] The Gini index measures inequality in the distribution of family income within a country. The lower the score, the more equal the distribution. In 2012, Slovenia had the lowest Gini score (23.7), while Lesotho had the highest (63.2). (See Central Intelligence Agency, "The World Factbook: Country Comparison - Distribution of Family Income - GINI Index," CIA.org, accessed December 14, 2015, https://www.cia.gov/library/publications/the-world-factbook/rankorder/2172rank.html.

[7] IFC, IFC Jobs Study: Assessing Private Sector Contributions to Job Creation and Poverty Reduction: World Bank Group, 2013: pg. 5.

[8] Simone D. McCourtie, "Micro, Small, and Medium Enterprise (MSME) Finance," *The World Bank*, April 5, 2013, http://www.worldbank.org/en/results/2013/04/05/msme-finance-expanding-opportunities-and-creating-jobs.

GDP. This figure was even lower in emerging markets, where SME bank loans were estimated to comprise only 3% of GDP.[9]

A healthy SME sector is important not just for job creation but as a way to create an innovation economy. Innovation is critical to economic growth—as shown by Abramovitz and Solow in separate papers, approximately 85% of growth between 1900 and 1950 came from innovation rather than increased use of inputs (labor and capital).[10] Other research, such as that by Acs and Audretsch, has shown that small companies tend to be more innovative, largely because they cannot compete head-on with established enterprises and, thus, have no other option.[11] Financing via risk capital—most notably venture capital, which combines capital with active advice—is associated with more innovation per dollar (three or four times more than that produced by corporate research and development funding) and more valuable innovations, as measured by the willingness of patent holders to litigate their ownership.[12]

The IDB established the Multilateral Investment Fund (MIF) to respond to the need for funding, among other reasons—specifically, to provide technical assistance and hands-on support—among Latin America's SMEs and start-up companies. The MIF's mission is to reduce poverty by fostering private-sector economic development in Latin America and the Caribbean (LAC). This involves working with financial intermediaries, including the subjects of this report: venture capital (VC) funds that invest in SMEs and start-ups.[13] Since its founding in 1993, the MIF has provided assistance to more than 3,400 recipients in the form of training, loans, grants, and equity financing of up to $10 million per project.[14]

In addition to developmental impact, VC investing creates a host of additional benefits in the broader market. Research on the IFC's SME Ventures program—which is similar in many important respects to the MIF's work in Latin America, but focused on private equity and bigger, more consolidated firms—reveals demonstration effects in frontier and pre-frontier markets stemming from the establishment of a PE fund. The announcement of domestically based IFC-backed PE funds in countries such as Sierra Leone, Liberia, and Nepal inspired other

[9] Peer Stein, Oya Pinar Ardic, and Martin Hommes, *Closing the Credit Gap for Formal and Informal Micro, Small, and Medium Enterprises*, Washington D.C.: International Finance Corporation, 2013.

[10] Robert M. Solow, "Technical Change and the Aggregate Production Function," *The Review of Economics and Statistics* 39, no. 3 (1957): 312-320; and Moses Abramovitz, "Resource and Output Trends in the United States Since 1870," *American Economic Review* 46, no. 2 (1956): 5-23.

[11] Zoltan J. Acs and David B. Audretsch. "Innovation in Large and Small Firms: An Empirical Analysis." *American Economic Review* 78 (1988): 678-690.

[12] Samuel Kortum and Josh Lerner, "Assessing the Contribution of Venture Capital to Innovation," *Rand Journal of Economics* 31, (2000): 674-692.

[13] The MIF defines SMEs as firms with 1-100 employees and up to $5 million in sales or assets at the time of investment.

[14] Inter-American Development Bank, "Micro and Small Enterprises," IADB.org, accessed October 2, 2015. http://www.iadb.org/en/resources-for-businesses/financing-for-micro-and-small-companies-in-latin-america,5787.html.

organizations to announce or actually start fundraising for their own PE funds—even without any exited investments from the new groups.[15]

Since its first investment in Latin America in 1996, the MIF has become a prominent—and pioneering—risk-taker in supporting the entrepreneurial ecosystem in the region. The MIF often serves as an anchor investor in fledgling VC funds and, in some cases, serves on their Investment Committees to help guide investment decisions both to maximize their social impact and to impart best practices to fund managers.[16] In addition to providing capital to seed and VC funds, the MIF closely monitors its own activities in order to identify the most promising solutions and best practices for combatting poverty and supporting the private sector in Latin America. Indeed, the MIF views project learning and knowledge sharing as important aspects of its mission.

Project Description

In early 2015, the research team, in cooperation with the MIF's Market Innovation Lab and its Access to Finance Unit's Early Stage Equity Team, set out to develop detailed studies of three early stage investment funds operating in Latin America in which the MIF had invested. The goal of this report is to provide the MIF's staff, policymakers, and other stakeholders with an assessment of the Early Stage Equity Team's funding activities in the region.

It was decided that the report would focus in depth on three venture capital funds. The three funds selected were:

- **Vox Impact Investing Fund I (Vox Fund I):** Founded in São Paulo, Brazil in early 2009, Vox Capital is a venture capital impact investment management company that focuses on small and medium-sized enterprises (SMEs) serving low-income populations. Vox Fund I is a "double bottom line" fund that seeks to create both beneficial social impacts among the BoP citizens of Brazil and good returns with its early stage investments. Vox Capital began raising a new fund (Vox Fund II) in 2015 with a target of $32 million.

- **Progresa:** Promotora, the investment-banking affiliate of the Colombian conglomerate Grupo Sura, founded Progresa in 2009. Progresa is a classic VC fund—the first such fund native to Colombia—that targets promising start-ups operating in Colombia's burgeoning life sciences and ICT sectors. Progresa's investment team sought companies with scalable business models that could potentially compete in the global marketplace. In 2015, Promotora began raising Progresa's successor, the Early Growth Fund II.

- **NXTP Labs:** Founded in 2011 by four entrepreneurs, NXTP Labs operates Latin America's first regional accelerator and seed fund, with headquarters in Argentina and a presence in Brazil, Chile, Colombia, Mexico, Uruguay, and the United States. While

[15] Josh Lerner, Ann Leamon, Andrew Speen, and Chris Allen. *Evaluation of SME Ventures Final Report Project no. 11-16058*. Washington, D.C.: International Finance Corporation, 2013.

[16] Multilateral Investment Fund Assessing the Impact of MIF's Venture Capital Program in Latin America: Implementation Briefing, Multilateral Investment Fund, June 2012: pg. 4.

NXTP, like Y Combinator, the Silicon Valley accelerator that inspired it, seeks to have a company reach the vaunted "unicorn" status ($1 billion valuation), its mission also includes nurturing the entrepreneurial ecosystem in Latin America.

The research team used two principal criteria in selecting the funds for study from the MIF's myriad investments in Latin America. First, the funds had to be headquartered in a Latin American country and have investments in the region. In consultation with the MIF, the research team selected funds headquartered variously in São Paulo, Medellín, and Buenos Aires for inclusion.

Second, the research team sought strategic diversity in terms of the funds' investment goals. Although Vox Fund I, Progresa, and NXTP Labs are all early stage seed/VC investment funds, their missions and investment approaches differ. As a result, they play different roles vis-à-vis their portfolio companies as well as the larger business environments—including the entrepreneurial ecosystems—in which they operate.

Please see Table ES-1, below, for more information on the funds examined in this report.

Table ES-1: Fund Key Dates and Figures

Fund	Vintage	Investment Focus	Capital Raised (millions)	Total Number of Investments	Exits	Multiple of Exited Investments[17]
Vox Fund I	2009[18]	Impact investing in Brazil	$35.5	19[19]	0	N/A
Progresa	2009	Venture capital in Colombia	$21.3	7	2 full exits; 1 partial exit	2.44x
NXTP Labs	2011	Accelerator and seed fund for regional startups	$38.5	164	9	4.74x[20]

[17] Multiple of Invested Capital.
[18] Vox Capital's $3 million "proof of concept" fund, Paradox Holdings, was founded and began investing in 2009. Paradox was rolled into Vox Capital's first flagship fund, Vox Impact Investing Fund I (Vox Fund I), which had its first close in September 2012.
[19] At the time of evaluation in September 2015, Vox Fund I had nine active investments, while its accelerator arm, Vox Labs, had 10.
[20] NXTP invests both capital and services (i.e., mentoring, business training, and access to NXTP's network) in its portfolio companies. Please note that the 4.74x figure represents the returns relative only to the capital invested. It does not consider the value of the acceleration services provided.

Data Collection

To create a comprehensive portrait of each fund, the research team began by collecting two types of data. Quantitative data from organizations such as the Latin American Venture Capital Association (LAVCA), the Emerging Markets Private Equity Association (EMPEA), and country-specific VC organizations were used to establish the general background of each fund and the PEVC ecosystem in which it operates. The research team also referenced quantitative data from reports and memos prepared by the fund managers and by earlier evaluators from the MIF itself. These reports helped to shape our analysis and were crucial in our assessments of the direct and indirect impacts each fund had on its portfolio companies, the larger community, and the overall VC ecosystem.

This material was supplemented and enhanced by direct contact with relevant actors—the MIF staff, the fund managers, limited partners (LPs), and the entrepreneurs they backed. Between April and October 2015, the project team undertook an extensive review of the data and documentation on the three funds and made site visits to each. Interviewees were selected based on their knowledge of the fund, its fundraising history and investment approach, and their familiarity with the provenance and current operations of its portfolio companies. Please see Table ES-2, below, for further detail on the interviews conducted for this project.

Along with studying the funds and fund managers, the research team analyzed a subset of the companies in each fund's portfolio. The Vox companies interviewed for this report consisted of seven Vox Fund I equity investments and two investments from its Vox Labs program. Progresa, having completed two full exits and one partial exit, had five active investments, all of which are examined in this report. In consultation with the MIF, the research team identified 23 of NXTP Labs' 164 investments for evaluation. These companies were spread across the eight different "editions" of the accelerator and thus allowed assessment of companies with different amounts of time to implement their "acceleration."

The research team generally avoided examining exited companies, due to the inevitable difficulty of gaining access to company executives who were no longer interacting directly with fund managers, as well as the fact that memories of such interactions tend to fade with time. The two exceptions are the NXTP investees ComentaTV and Sinimanes, which were included in order to provide a more complete picture of the fund. Finally, the scope of the project was necessarily circumscribed by budgetary constraints, which only covered a limited number of potential interviews.

Table ES-2: Interviews Conducted

Fund	Location	Fund Team Members	Portfolio Company Staff	Investors & Limited Partners	MIF Staff	Total
Vox Fund I	São Paulo	6	9	4	N/A	19
Progresa	Medellín	5	6	2	N/A	13
NXTP Labs	Buenos Aires	9	23	3	N/A	31[21]
Grand Totals		20	38	9	3	66

Analytical Approach

The funds profiled in this report represent three distinct approaches to investing in seed and early stage companies. Vox Fund I is the first social impact investment fund founded and managed by a Brazilian team to focus on the needs of Brazil's BoP population. Progresa is Colombia's first classic, domestic VC fund. NXTP Labs is an investment fund with an accelerator program for Latin American entrepreneurs in a program that is modeled on Silicon Valley's Y Combinator.

To evaluate the effectiveness of the MIF's investment in the three funds, the research team pursued two avenues of inquiry, exploring the micro impact of the funds on i) their investee companies (the funds' direct impacts), and ii) the broader economy (the funds' indirect impacts).

In the chapters that follow, the research team assesses the "effectiveness" of Vox Fund I, Progresa, and NXTP Labs using eight direct and indirect impact criteria in a descriptive manner (i.e., without attempting to use statistical and/or econometric tools to probe the question of attribution) and the data sources and analysis outlined above. The results discussed below can thus be considered indicative, but should not be thought of as conclusive (ideally, a follow-up study in a few years and/or a more targeted impact evaluation that closely examines individual investments by interviewing their suppliers and customers would round out this assessment).

Challenges

Assessing the impact of a policy intervention is always difficult. A number of issues arise, including causal attribution and timing. The outcome of efforts to increase innovation and entrepreneurship occurs over substantial amounts of time and is subject to myriad endogenous and exogenous factors that affect an enterprise's performance. A single investment fund may only have full control over one or two of them. For the purposes of this report, the research team

[21] Please note that at NXTP Labs, one member of the fund team and all three investors were also entrepreneurs with companies that had gone through the accelerator program. For the purposes of the total and grand total figures in Table ES-2, we counted these four interviews only once, despite the fact that the interviewees played dual roles in the organization.

takes the fact of investment as evidence of some causal link between the fund's investment and a company's direct and indirect impacts.

The problem of timing is particularly relevant given the timeframe over which venture capital investments unfold. The 10-year life of a typical VC fund means that these groups are only roughly middle-aged. Moreover, VC investors learn as they go, and performance often improves with subsequent funds.[22] In addition, returns to VC investments follow a J curve, in which funds are invested and returns fall initially, only to have exits generate gains later in a fund's life. Furthermore, the MIF has learned over its history that funds such as Vox Fund I that target BoP populations take more time to mature and often require a longer holding period for their portfolio companies before companies mature and the funds' full impact can be accurately assessed. Funds that pioneer new markets or geographies—as all three do in different ways—also tend to require more time to reach maturity. The impact of a VC investment thus might only come to full fruition over time, so that the timing of the measurement may greatly influence the observed impact. The timing of this evaluation allowed the research team to observe early returns and the work of the funds thus far, but as noted earlier, no final conclusions can be drawn.

Methodology

The research team evaluated the funds using two fundamental criteria: direct impact and indirect impact. The research team further refined each of these overarching criteria into four sub-criteria, as follows:

Direct Impact:

1. Impact of capital: To what extent did the fund managers provide critical financing to promising young companies operating in equity- and/or credit-constrained environments?
2. Networking opportunities: To what extent did the fund managers provide introductions to other businesspeople, domain experts, government officials, etc., and did such introductions help the entrepreneurs grow beyond their current regions?
3. Business training: To what extent did the fund managers directly provide or facilitate business training opportunities, e.g., formal classes in accounting, marketing, mentorships, etc.?
4. Environmental, Social, and Governance (ESG): To what extent did the fund managers provide assistance to their portfolio companies in improving their ESG policies and practices?

Indirect Impact:

[22] Josh Lerner, Ann Leamon, and Felda Hardymon, *Venture Capital, Private Equity, and the Financing of Entrepreneurship*, New York: John Wiley & Sons, Inc., 2012: pg. 355.

1. Ancillary growth & job creation: To what extent did the portfolio company create beneficial economic externalities, e.g., jobs outside the company, growth at peer firms and/or suppliers, etc.?
2. Innovation: To what extent was innovation central to the portfolio company's business plan? Did the company plan to compete on the basis of a new product or process or pioneer a new market?
3. Benefits to base-of-the-pyramid (BoP) populations: To what extent did the portfolio company's activities have specific beneficial impacts on BoP populations in its market, country, or region? Did the portfolio company's business model focus on addressing the needs of BoP or otherwise marginalized people?
4. Effect on the local, national, and/or regional venture capital ecosystem: To what extent did each fund's portfolio—taken as a whole—improve the local, national, and/or regional environment for entrepreneurial and venture capital activities?

The research team rated each fund on a scale of 0 (little to no impact) to 4 (substantial impact) represented by ideograms ("Harvey balls") for improved readability.

Results

The team employed a uniform approach to its direct impact and indirect impact analyses, and a special effort was made to "harmonize" the Harvey balls across the funds. As a result, each fund was analyzed with the same degree of rigor, enabling the reader to make cross-fund comparisons with confidence.

Below, a brief overview of each fund's ratings on the four direct impact and four indirect impact criteria is provided. For an in-depth description and analysis of each fund, please see sections II (Vox Fund I), III (Progresa), and IV (NXTP Labs).

Direct Impacts

Vox Fund I

Examining the direct impact of Vox on its portfolio companies, the research team found that the networking support that the Vox team provided was highly important to its portfolio companies, receiving the highest score for two-thirds of its interviewed portfolio. Vox's rating reflects the nearly unanimous view of its portfolio companies that the fund's large and influential network provided important advantages, particularly in terms of business development and market access. Vox's networking rating may have been especially high because many of its BoP-targeted entrepreneurs had few other options for networking support, or because Vox's founding team was particularly well connected. Vox's business training was also very helpful to its portfolio companies—ranking only behind networking in terms of importance—particularly in terms of supporting management teams as they made important strategic decisions. As an impact investor, Vox Capital also provides ESG training to its companies, and the fund's team has actively developed new methods for helping its portfolio company managers carefully consider and optimize their businesses' social impact. The Vox team is continuing to develop and test strategies to measure and increase its portfolio's social impact, serving as a model and testing ground for other Brazilian impact investors. Finally, the provided capital was important to its portfolio companies, as all of the companies were operating in equity- and/or credit-constrained environments. Indeed, several companies faced serious liquidity issues at the time of Vox's investment, and the committed capital was arguably key to their ongoing operation. In some cases the investees had access to capital through other channels but chose Vox as a superior partner to execute their business plans and achieve rapid growth, resulting in somewhat lower scores.

Progresa

Progresa scored most highly in the committed capital category, reflecting the importance of the invested capital to its portfolio companies, and the scarcity of other sources of risk capital for early stage companies in Colombia. Progresa also scored highly in the networking category, having helped its portfolio companies, for example, secure additional funding for key projects and form relationships with key partners and customers. The Progresa team's network is strengthened by its close relationship with Grupo Sura and Grupo Argos, two large Colombian conglomerates with wide and deep networks across the region. Progresa's business training was also valuable to its portfolio. Progresa encouraged its entrepreneurs to take classes on topics such as financial analysis, strategy, marketing, sales, corporate finance, and basic negotiations. The classes, taught by third-party consultants, were partially funded by the MIF from its technical assistance program and were highly regarded by the portfolio company attendees. Progresa's lowest score was in the ESG category, though it still received a score of three out of four from more than half of the interviewed companies. Progresa assisted its companies with ESG and has invested in several companies with strong ESG results (particularly Ecoflora Cares, as described in Chapter III). Moreover, Progresa's parent, Promotora, has incorporated an express ESG mandate into Progresa's successor fund, the Early Growth Fund II.

NXTP Labs

NXTP Labs' seed investment and accelerator model centers on providing intensive training and networking support to its portfolio companies alongside modest initial investments, with larger follow-on investments in the most promising companies. Accordingly, NXTP scored strongest in the networking and business training categories. Interviewees said that NXTP's founding partners were particularly valuable in this regard, providing invaluable advice and helpful contacts. The partners' prior entrepreneurial experience allowed them to speak with authority when offering guidance to entrepreneurs. NXTP's scores in the committed capital category were somewhat lower, reflecting the small size of its $25,000 initial investments and the smaller number of companies that received more sizable follow-on investments. (It should be noted that the small initial investments are integral to NXTP's model and have allowed it to support 160+ companies in its relatively short history.) These investments, however, were often still important to NXTP's portfolio, due to the early stage of its investee start-ups and the difficulty finding alternate channels of early stage financing in Latin America. Many of NXTP's graduates also received capital from other investors including notable investors such as Bessemer Venture Partners, Kaszek Ventures, Techstars, Cygnus Capital, Krillion Ventures, NEXEQ, Trindade Investimentos, Kima Ventures, South Ventures, Enzyme Venture Capital, and others. Because these investments reflect, in part, the power of NXTP's network rather than the importance of the capital directly provided by NXTP Labs, they are reflected in NXTP's networking score rather than its committed capital score. NXTP received more modest ESG scores, again reflecting the early stage of its typical portfolio companies and the fact that complex corporate social responsibility and/or hiring policies, for example, are inappropriate for early stage companies, which must focus their efforts and resources on rapid growth. NXTP nevertheless supported the work of female entrepreneurs and created other important socially beneficial impacts, as discussed in Chapter IV.

Indirect Impacts

Vox Fund I

Vox's ancillary growth and job creation scores were mixed. Much of this stems from the relatively early development stage of the observed portfolio companies, which thus would not yet have inspired much job growth in suppliers or contractors. Magnamed, a company with substantial operations and a large roster of suppliers, had one of the higher ancillary growth and job creation scores. In terms of innovation, most of Vox's portfolio companies relied to some extent on innovative products or processes, but they did not constitute technical breakthroughs. Indeed, in most cases they made use of technology and/or solutions that had been pioneered in other geographies, e.g., Biva's P2P lending platform. There were two notable exceptions: ProRadis, a provider of medical imaging diagnostics IT solutions; and Avante, a microfinance lender with an innovative tablet-based app. In keeping with Vox Capital's overarching mission as an impact investor, most of Vox's portfolio companies had a substantial focus on BoP populations and the alleviation of poverty, and this is where the fund received some of its highest indirect impact scores. In terms of impact on Brazil's VC ecosystem, all interviewees agreed that Vox, the nation's first home-grown impact investor, has played and continues to play a crucial role.

Progresa

Progresa's portfolio companies earned scores ranging from 2 to 4 in terms of ancillary growth and job creation. Ecoflora, with its labor-intensive supply chain that reaches into some of the poorest areas of Colombia, earned the highest score of 4, while Brainz, a mobile gaming company with a few large outside suppliers, received a score of 2. Innovation—from smart metering technology to a potentially revolutionary new food colorant—was an important aspect of each portfolio company's business, and Progresa's high average innovation score reflects this. The developer of the new food colorant, Ecoflora, received the highest score, while companies with technology that had been developed and in use in other geographies received the lower scores. Progresa's portfolio companies sit at both ends of the score range in terms of their beneficial effect on BoP populations. Two companies, Ecoflora and Ubiquo, a provider of telemedicine solutions that enable patients in remote locations to consult with specialists in large urban centers, received scores of 4. Finally, as the first homegrown Colombian VC fund to achieve successful exits, Progresa's effect on Colombia's VC ecosystem has been profound. Through its two full exits and one partial divestiture, Progresa proves that the larger Colombian entrepreneurial and VC ecosystem could function across the investment cycle of fundraising, investing, and exiting.

NXTP Labs

In terms of ancillary growth and job creation, the research team found great variety across NXTP's portfolio. Some companies seemed to have a sizable indirect impact and spurred great economic activity in the region, while others did not appear to have a noticeable impact. The latter occurs, for instance, when portfolio companies serve large corporate clients. While the services that these portfolio companies provide are useful to their clients, it is unlikely that those clients generated substantially more revenue or created more jobs as a result. Other portfolio companies, however, such as the household services firm Zolvers and the credit card payment analytics company IncreaseCard, had greater impact in terms of indirect job creation and ancillary growth, respectively. NXTP's portfolio companies also varied greatly in terms of innovation. iBillionaire, a financial products company, and Satellogic, a provider of Earth surface imagery data, are among the portfolio's most innovative companies. Both companies create scalable products meant to compete in the global marketplace. Such companies are important in Latin America, not only for the direct and indirect economic growth they spur in the region, but also as role models— examples of the region's success in conceiving and operating global companies. This demonstration effect in part motivated the MIF's decision to invest in NXTP. In terms of indirect impact on BoP populations, NXTP's team believes that successful companies should align the interests of their businesses with the interests of society at large, but the firm does not specifically target companies that serve the BoP. Thus, the research team did not analyze NXTP's indirect impact on the BoP as a separate criterion. Nevertheless, some companies in NXTP's portfolio, such as Zolvers, have BoP impacts, and they are discussed in more detail in Chapter IV.

Conclusions

Based on the analysis of Vox Fund I, Progresa, and NXTP Labs, profiled in greater detail below, the MIF's fund investments have been effective, both in terms of their direct and indirect impacts. Most notably, the MIF's funding and engagement markedly improved the VC ecosystems in which the funds operated. Other areas in which the funds had substantial beneficial impact include offering networking opportunities and business training to the companies, as well as providing risk capital in equity- and credit-constrained environments. Moreover, the areas where the funds did not perform as strongly are often the results of clear choices made by the fund managers to focus on other aspects – for instance, NXTP Labs provided small initial investments (resulting in lower scores, on average, in the committed capital category) in order to reach a very large number of early-stage companies.

Not only have these funds provided capital to companies that are creating jobs, increasing business competency, and modeling entrepreneurial success, they have also created positive externalities in their greater communities. Each is playing an important role in creating and strengthening an entrepreneurial ecosystem capable of producing thriving companies. Indeed, each of the funds, in its own way, represents an important milestone in the development of that ecosystem and is evidence that “small projects,” in the words of Nancy Lee, the MIF’s former General Manager, “can have big impact.”[23] It is clear that the MIF has supported funds that are expanding the local VC ecosystem and creating role-model companies that demonstrate the opportunities available through entrepreneurship.

[23] Multilateral Investment Fund, *Development Effectiveness Report 2014*, Washington, D.C.: Multilateral Investment Fund, 2014: vi.

I. Introduction

In April 2015, the Multilateral Investment Fund (MIF), a member of the Inter-American Development Bank (IDB) Group, commissioned a study of the effectiveness of its recent venture capital (VC) fund investments in Latin America. This report contains the findings of the research team's exploration of this topic.

The report focuses on three funds chosen to represent different investment approaches, company stages, and geographic targets. Along with discussing the overall background of the funds, their progress to date, and the role the MIF played in their development, two portfolio companies from each fund are profiled in further detail. In these "mini-cases," the research team presents the ways in which the fund managers chose and added value to their companies. With these specific examples of both fund managers and portfolio companies, the MIF continues its efforts to examine its performance and share its own approaches with others who seek to reduce poverty and improve the economic vitality in Latin America and the Caribbean.

The report consists of four principal parts: an introduction, followed by three chapters and a conclusion. The introduction begins with background information on the private equity and venture capital environment in Latin America, followed by a description of the MIF and its work in the region. It continues with an overview of the project, its methodology, and objectives. Finally, the most recent academic literature on the importance and effectiveness of VC fund investing as a tool for achieving developmental goals is examined.

In each of the following chapters, the three funds selected for in-depth research and analysis are profiled in further detail: Vox Fund I, an impact investment fund headquartered in São Paulo; Progresa, a classic VC fund located in Medellín that focuses on Colombian healthcare and technology companies; and NXTP Labs, a regional seed investment fund and accelerator modeled on Silicon Valley's Y Combinator.

In a separate document, a set of recommendations is provided for the MIF as it contemplates future private equity and venture capital (PEVC) investments in Latin America.

Private Equity and Venture Capital Investing in Latin America

To set the stage for the individual case studies that follow, a concise overview of the PEVC industry in Latin America is provided.

For clarity, the following conventions are used throughout the report:

- "Venture capital" or "VC" refers to early stage investments, usually minority investments in companies that are just starting up or are not yet breaking even.
- "Private equity" refers to later stage investments. In the context of this study, these are usually growth equity investments, where the company is operational and often generating profits but needs additional funding to pursue strategies too risky for banks to support.

- "Private equity and venture capital" or "PEVC" refers to the entire industry, from early stage to later stage investing.
- "Fund" is a pool of capital raised from limited partners (LPs) and invested in portfolio companies. Funds typically have a 10-year life after which the investments should be liquidated and the capital and gains returned to the LPs.
- "VC firm" or "firm" is the firm that raised the fund that is being invested in the company.
- "Portfolio company" or "company" refers to the company in which the VC firm invested.
- "Latin America/LatAm" and "Latin American and the Caribbean (LAC)" are used in specific ways. Latin America/LatAm refers to the geographic regions of Central and South America, and Mexico (excluding the Caribbean). LAC refers to the broader area of Latin America and the Caribbean, which is the purview of the MIF.

An Introduction to PEVC in Latin America[24]

The origins of the PEVC industry in Latin America date to the late 1980s and early 1990s. As the standard of living improved across the region and the governments of Brazil, Chile, and other nations instituted a host of reforms—including de-politicizing central banks, modernizing tax codes, and privatizing state-owned entities—family offices began courting (and leveraging) third-party capital to take advantage of emerging opportunities. These offices soon evolved into full-fledged PE firms, with Buenos Aires-based Exxel Group and Brazil's GP Investimentos, founded in 1991 and 1993, respectively, among the first to emerge.[25] By 1996, the industry had received global attention as U.S.-based Advent International raised its $187 million Latin American I Fund and made its first investment.[26]

Latin American-focused research soon followed, and in 2006, the Latin American Venture Capital Association (LAVCA)—sponsored in part by the MIF—began publishing its Annual Scorecard on the region's PEVC environment. LAVCA assigned an overall score of 1-100 to each country based on 12 indicators that included the strength of its judicial system, perceived corruption, and protection of minority and intellectual property rights. The average overall score among countries covered by both the original 2006 scorecard and the 2015-16 edition increased by more than 7 points over that period.[27]

[24] This section borrows extensively from Lerner, Josh, Ann Leamon, James Tighe, and Susana Garcia-Robles, "Adding Value through Venture Capital in Latin America and the Caribbean," *Harvard Business School Working Paper 15-024,* October 13, 2014; And Josh Lerner, Ann Leamon, and Susana García-Robles, *Best Practices in Creating a Venture Capital Ecosystem*, Washington, D.C., Multilateral Investment Fund, December 2012.
[25] Federico Schiffrin, *Private Equity Investing in Latin America: Past and Present*, (Geneva: Unigestion, January 2013).
[26] Preqin data and analysis.
[27] LAVCA, *2015-2016 LAVCA Scorecard: The Private Equity and Venture Capital Environment in Latin America*, New York: LAVCA, 2015, http://lavca.org/wp-content/uploads/2015/07/Scorecard-2015-16-hirez.pdf.

Despite the economic turmoil of the 2000s, Latin American PEVC has shown signs of improvement in recent years; 2014 saw record fundraising, with nearly $10.4 billion committed to LatAm-focused PEVC vehicles. The industry still has much room to grow, particularly in the early stage investment space. In a 2015 survey of 113 LPs, Coller Capital and LAVCA found that 95% of Latin American LPs planned to increase their exposure to the region's private equity in the coming year, compared with 61% of Latin American LPs that reported the same in 2014.[28] Moreover, 42% of Latin American LPs planned to speed up commitments to PEVC funds focused on their own national markets, an indication of the rapid maturation of the Latin American PEVC ecosystem.[29] LPs responding to the survey ranked Latin America ex-Brazil as the most attractive emerging market for investment for the second year in a row. Brazil ranked sixth.[30]

Such findings, however, should be viewed skeptically. The Coller Capital-LAVCA survey and similar studies combine later-stage private equity and early-stage VC investment activity and their results tend to mask the relative weakness of early-stage investment in Latin America. According to data and analysis from Preqin, "Q1 2015 witnessed the lowest recorded figures in terms of number of venture capital deals and aggregate value since Q1 2009." The report cited depreciation in Latin American currencies and declines in the commodities markets for the weakness.[31]

Taking a broader view, the PEVC climate in Latin America has improved dramatically since the early 1990s, as can be seen in the changing nature of investor concerns. At that time, the region was known for the political instability of such nations as El Salvador, Guatemala, and Colombia. In a 2015 survey of limited partners conducted by the Emerging Markets Private Equity Association (EMPEA), however, 41% of prospective PEVC investors were concerned about currency risk, while 36% cited concerns about political risk.[32] In the same survey, 38% of respondents cited the limited number of established fund managers in the region as a significant deterrent to investing.[33]

Yet there was room for improvement. Despite the reforms initiated in the 1980s and 1990s and the rapid growth of the PEVC industry in the decades since, overly complex business regulations, uncertainty surrounding contract enforcement, and high levels of perceived corruption remained persistent problems in 2015. In addition, some observers decried what they viewed as the region's cultural aversion to risk and an unfamiliarity with—or even hostility to—

[28] Coller Capital and LAVCA, *Latin American Private Equity Survey*, Washington, D.C.: LAVCA, September 2015. http://lavca.org/wp-content/uploads/2015/09/Coller-Capital-LAVCA-Latin-America-Survey-2015-English.pdf: 3.

[29] Coller Capital and LAVCA, *Latin American Private Equity Survey*, Washington, D.C.: LAVCA, September 2015. http://lavca.org/wp-content/uploads/2015/09/Coller-Capital-LAVCA-Latin-America-Survey-2015-English.pdf: 3.

[30] EMPEA, *2015 Global Limited Partners Survey*, Washington, D.C.: EMPEA, 2015: 8.

[31] Emily Forbes, "Decline of Venture Capital Delas in Latin America – April 2015," Preqin, https://www.preqin.com/blog/0/11238/venture-capital-latin-america, accessed Feb. 29, 2016.

[32] EMPEA, *2015 Global Limited Partners Survey*, Washington, D.C.: EMPEA, 2015: 10. Note that respondents to the survey could select more than one area of concern, thus some respondents may have selected both currency and political risk as areas of concern.

[33] EMPEA, *2015 Global Limited Partners Survey*, Washington, D.C.: EMPEA, 2015: 10.

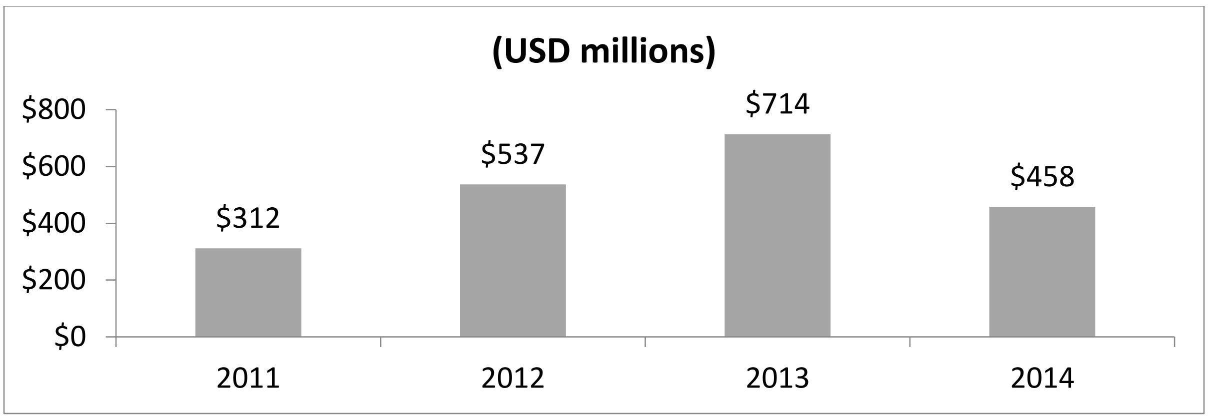
PEVC business concepts. Nonetheless, the industry, with the help of the MIF, has made important strides.

The recent trends in Latin America's PEVC industry are briefly discussed below, organized according to the PEVC cycle: fundraising, investment, and exits.

Fundraising

Turning specifically to VC, the region's funds raised $458 million in capital in 2014, down from $714 million in 2013. The drop-off in fundraising may be due to the fact that many VC firms that raised money during the banner years of 2012 and 2013 were focused on deploying that capital in 2014. Nevertheless, PEVC in Latin America may be facing some headwinds, especially given the slowing of economic activity in China, an important consumer of raw materials from the region, and the weakness of traditional powerhouse Brazil.[34] Please see Figure I-1, below, for fundraising data from 2011-2014.

Figure I-1: VC Fundraising in Latin America 2011-2014[35]



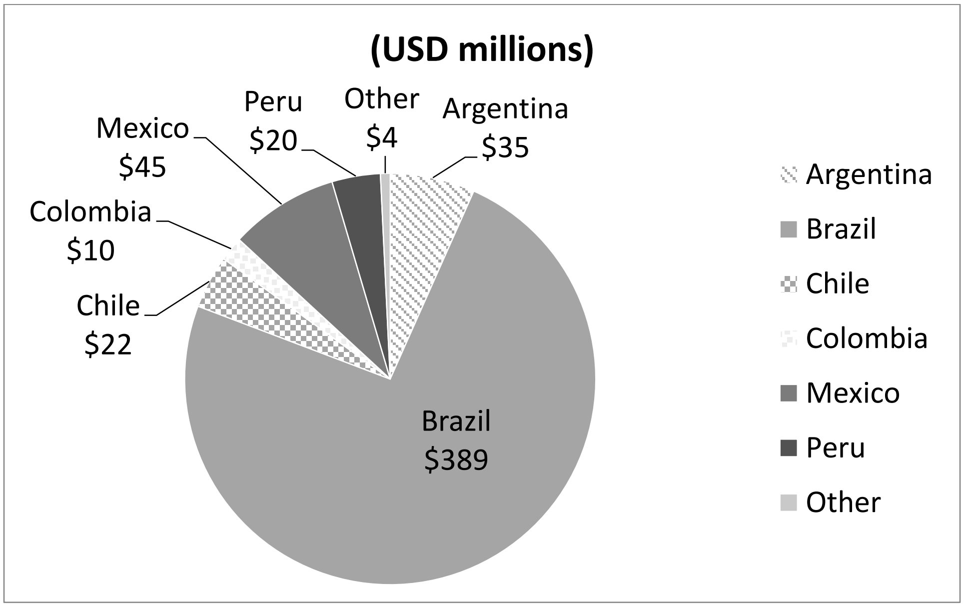
Investments

In 2014, the last full year for which data were available, VC funds invested a record $526 million through 186 deals, with 50% of the deals and 75% of the total capital invested in Brazil. Mexico and Argentina followed, with $45 million invested across 31 deals, and $35 million invested in 26 deals, respectively. The number of deals and total amount of capital deployed by VC firms

[34] The World Bank estimates that the total value of Chinese imports from Latin America fell from USD $87.8 billion in 2013 to USD $85.6 billion in 2014. (The World Bank, "China Product Import: Latin America & Caribbean 2010-2014," The World Bank, accessed November 17, 2015. http://wits.worldbank.org/CountryProfile/en/Country/CHN/StartYear/2010/EndYear/2014/TradeFlow/Import/Indicator/MPRT-TRD-VL/Partner/LCN/Product/All-Groups.) Data from China's National Bureau of Statistics indicates that worldwide imports were down 13.8% in August 2015 on a year-over-year basis. (For information on the Brazilian economic slowdown, see Winni Zhou and Pete Sweeney, "China's August Import Slump Raises Fears of Sharper Slowdown," *Reuters*, September 8, 2015, http://uk.reuters.com/article/uk-china-economy-trade-idUKKCN0R808D20150908.)
[35] LAVCA, 2015 LAVCA Industry Data & Analysis: LAVCA, 2015.

has steadily risen since 2010, when a total of $63 million was invested throughout the region.[36] Please see Figure I-2 below, for 2014 VC investments by country.

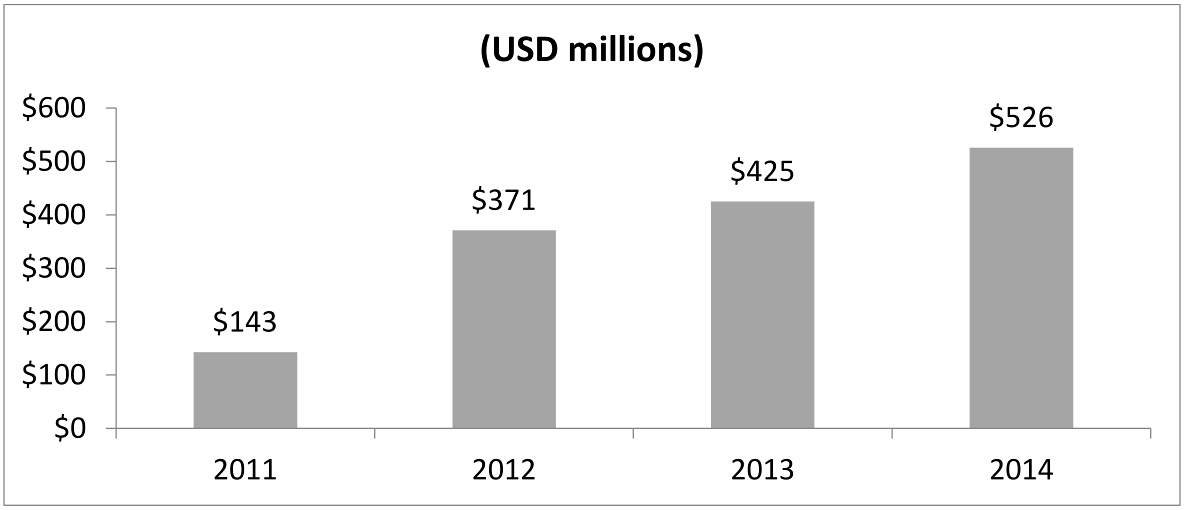
Figure I-2: VC Investments in Latin America by Country 2014[37]



Since the 2008-2009 Global Financial Crisis, VC investment in Latin America had risen steadily through 2014.[38] Please see Figure I-3, below, for investment data from 2011-2014.

[36] LAVCA, 2015 LAVCA Industry Data & Analysis: LAVCA, 2015.
[37] LAVCA, 2015 LAVCA Industry Data & Analysis: LAVCA, 2015.
[38] LAVCA, 2015 LAVCA Industry Data & Analysis: LAVCA, 2015.

Figure I-3: VC Investments in Latin America 2011-2014[39]



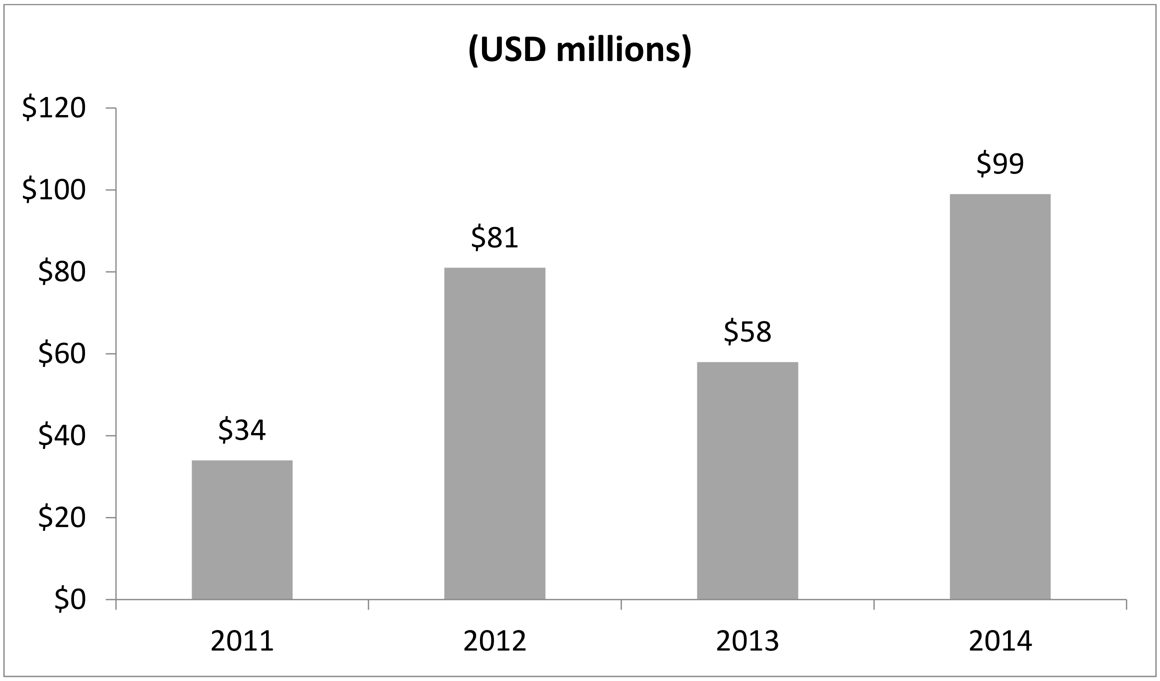
Exits

Exits—always difficult even in developed markets—pose significant challenges in Latin America. In 2014, Latin American VC funds realized $99 million in exits.[40] Most exits occur via strategic sale, often to larger competitors. In addition, Latin American companies with private equity backing have exited via IPO, as seen in Argentine software company Globant's listing on the New York Stock Exchange in July 2014.[41] A major challenge for the funds examined in this report is to realize profitable exits from their portfolio companies.

It is important to note that IPOs are infrequent even among top VC firms in developed markets with well-developed public exchanges. Yet, Latin America's lack of a reliable IPO exit route has created a tendency among some entrepreneurs to accept early offers that undervalue their companies. The fund managers interviewed for this report noted that they often struggled to encourage their most promising entrepreneurs to continue growing their companies rather than accepting early, low-priced acquisition offers. Please see Figure I-4, below, for exit data from 2011-2014.

[39] LAVCA, 2015 LAVCA Industry Data & Analysis: LAVCA, 2015. LAVCA data published during the review process estimated total Latin American VC investment in 2015 at $594 million, continuing the industry's upward trajectory. (LAVCA 2016 Industry Data & Analysis).
[40] 2015 LAVCA Industry Data.
[41] Shane Romig, "Argentina's Globant Shares Jump After NYSE IPO," *The Wall Street Journal*, July 18, 2014, http://www.wsj.com/articles/argentinas-globant-shares-jump-after-nyse-ipo-1405717580.

Figure I-4: VC Exits in Latin America 2011-2014[42]



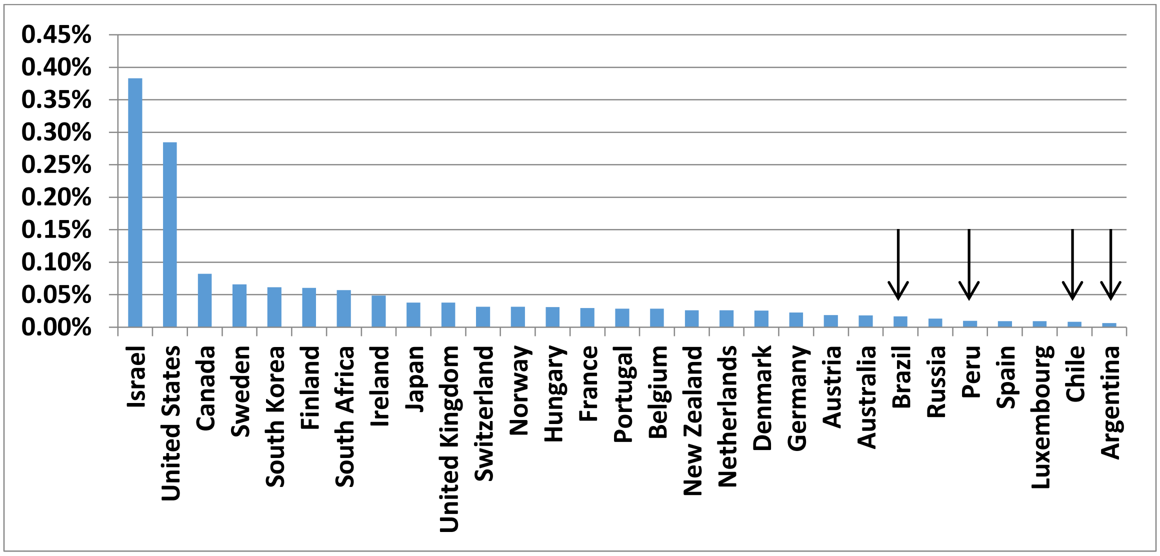
Room for Growth

PEVC in Latin America has come a long way from the early 1990s. Not only have LPs expressed a keen interest in continued investment in the region, but the number of fund managers active in the region has risen steadily to at least 250, according to the 2015 LAVCA data.[43] In comparison to established PEVC ecosystems, however, Latin America still has room to grow. For instance, according to the National Venture Capital Association, a U.S.-based industry research organization, there were 803 VC firms managing 1,206 VC funds operating in the U.S. in 2014.[44] The Private Equity Growth Capital Council estimated that there were 3,300 private equity firms operating in the U.S. as of August 2014.[45]

As the most recent full-year data from EMPEA show, Latin American countries, even regional powerhouse Brazil, lag many of their peers in the developed world in terms of the proportion of VC investment relative to the Gross Domestic Product (GDP), as shown in Figure I-5, below. Expanding the proportion of VC to GDP is part of the MIF's mission, as it will be discussed in the following section.

[42] LAVCA, 2015 LAVCA Industry Data & Analysis: LAVCA, 2015.
[43] 2015 LAVCA industry data. This number includes global and domestic funds active in the region.
[44] National Venture Capital Association, *Yearbook 2015*, p. 9.
[45] Private Equity Growth Capital Council, *PE by the Numbers*, available at http://www.pegcc.org/private-equity-at-work/education/pe-by-the-numbers/, accessed Feb. 29, 2016.

Figure I-5: Venture Capital Investment as a Percentage of GDP 2014[46]



History of the MIF

The Multilateral Investment Fund (MIF) was established in 1993 within the Inter-American Development Bank (IDB) Group, which had itself been founded by the Organization of American States as part of a 1959 treaty agreement.[47] The MIF's mission is to reduce poverty by fostering private-sector economic development in Latin America and the Caribbean (LAC). This includes providing funding and technical assistance to financial intermediaries (including governments and venture capital funds), as well as directly to private-sector micro-entities and small- and medium-sized enterprises (SMEs).[48] The MIF provides assistance in the form of loans, grants, and equity financing of up to $10 million per project.[49]

The MIF was originally envisioned as a grant-making institution that would assist with the privatization of state-owned enterprises underway in Latin America in the 1990s, but that initial mission soon changed. As Susana Garcia-Robles, Principal Specialist in charge of the MIF's Early Stage Financing Group/Access to Finance, described it, "[B]y the time the MIF was operational, the focus switched to try[ing] to help the LAC region be more competitive vis-à-vis

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[46] EMPEA. *Emerging Markets Private Equity: 2014 Annual Fundraising and Investment Review*. Washington, D.C.: EMPEA, March 2015: 32.

[47] Organization of American States, "Agreement Establishing the Inter-American Development Bank," OAS.org, accessed October 15, 2015.
http://www.oas.org/dil/treaties_C-15_Agreement_Establishing_the_Inter-American_Development_Bank_sign.htm.

[48] Definitions of SMEs vary widely. For the purposes of this report, the authors used the World Bank's definitions: companies with 5-19 employees were "Small," and those with 20-99 employees were "Medium." See World Bank, Enterprise Surveys (database), accessed Dec. 16, 2013.

[49] Inter-American Development Bank, "Micro and Small Enterprises," IADB.org, accessed October 2, 2015.
http://www.iadb.org/en/resources-for-businesses/financing-for-micro-and-small-companies-in-latin-america,5787.html.

other regions."[50] A Small Enterprise Investment Fund was created to work side-by-side with the MIF's grant-making operations on the theory that the two approaches would complement each other and more effectively further the MIF's development goals. The MIF thus incorporated seed and VC fund investing into its mission.

The MIF's funding activities reflect its view that entrepreneurship and innovation are powerful engines for improving the lives of people throughout LAC: "A core MIF mission is to act as a development laboratory – experimenting, pioneering, and taking risks in order to build and support successful micro and SME business models."[51] In pursuit of its mission, the MIF has become a prominent—and innovative—risk-taker in supporting the entrepreneurial ecosystem in LAC. Indeed, the MIF was among the first VC investors in the region, having made its inaugural investment in 1996.[52] The MIF often serves as an anchor investor in fledgling VC funds and, in some cases, serves on their Investment Committees to help guide investment decisions both to maximize their social impact and to impart best practices to fund managers.[53]

The reason for the move into seed and VC fund investing in addition to grant making and debt provision was simple. "[W]e started focusing on seed and VC because of the link with innovation and jobs creation," said Ms. Garcia-Robles. The MIF always co-invests with other institutions and only invests through funds, rather than making direct equity investments in companies. One of its objectives is to attract private risk capital to Latin America, and it has made noteworthy progress toward this goal. "In the beginning, most of our co-investors were government agencies, multilaterals, and European DFIs," said Ms. Garcia-Robles. As of September 2015, the MIF's co-investors included foundations, multinational corporations, pension funds, and high net worth individual investors.[54]

In 2013, the MIF began collecting data on the effectiveness of its investments using a new, formalized approach called the "Corporate Results Framework" (CRF). Using data from 57 projects representing a total of $70 million invested in 2013, the MIF published its first CRF report in 2014. The data showed that through those investments, the MIF helped raise the living conditions of 171,000 people, while improving the business skills of 368,000 people, and supplying credit to 85,000 companies and farms. As Nancy Lee, the MIF's former General Manager, concluded in the 2014 Development Effectiveness Report, "The data confirm that—as MIF Donors and partners expect and intend—small projects can have big impact."[55]

[50] LAVCA, "LP Profile: An Interview with Susana Garcia-Robles, FOMIN," *LAVCA*, May 16, 2013. http://lavca.org/2013/05/16/lp-profile-an-interview-with-susana-garcia-robles-fomin/.
[51] Multilateral Investment Fund, "Multilateral Investment Fund," Multilateral Investment Fund, accessed October 2, 2015, http://www.fomin.org/.
[52] Multilateral Investment Fund Assessing the Impact of MIF's Venture Capital Program in Latin America: Implementation Briefing, Multilateral Investment Fund, June 2012: pg. 4.
[53] Multilateral Investment Fund Assessing the Impact of MIF's Venture Capital Program in Latin America: Implementation Briefing, Multilateral Investment Fund, June 2012: pg. 4.
[54] LAVCA, "LP Profile: An Interview with Susana Garcia-Robles, FOMIN," *LAVCA*, May 16, 2013. http://lavca.org/2013/05/16/lp-profile-an-interview-with-susana-garcia-robles-fomin/.
[55] Multilateral Investment Fund, *Development Effectiveness Report 2014*, Washington, D.C., Multilateral Investment Fund, 2014: vi.

Project Objectives and Methodology

While the CRF provides a broad view of the MIF's projects, the organization sought a closer look at the impact of some of its funds within the broader communities in which they operate. In April 2015, the MIF commissioned this research project to examine the effectiveness of some of its investments in early stage seed and VC funds in Latin America. In consultation with the MIF's Market Innovation Lab and its Access to Finance Unit's Early Stage Equity Team, the research team selected Vox Fund I, Progresa, and NXTP Labs for evaluation. The funds and the selection process are described in further detail below.

The overarching goal of this report is to allow the MIF's policymakers and other stakeholders to assess the effectiveness of the Early Stage Equity Team's funding activities in Latin America. In collaboration with the MIF, the research team developed three core questions to guide the research:

1. Fund Objectives: Which types of companies are more frequently targeted by the funds?
2. Direct Impact: How do the funds add value to their companies? What is the importance of the financing and advice provided by the funds relative to that which is available more broadly in the market? To what degree do the funds focus on environment, social, and governance (ESG) practices?
3. Indirect Impact: How have the funds promoted growth, innovation, job creation, and other improvements in the broader market? How have they contributed to the local and regional VC ecosystem?

In the course of examining these questions, a number of other important areas are also explored. The study gleans insights into the important relationship between the funds and the MIF, and provides feedback from various interviewees regarding their views on the current and prospective financial performance of the funds. A project such as this one, which entails extensive in-person interviews, provides a valuable opportunity to meet the stakeholders and learn about their previous work, current projects, and future plans in their own words. This information lends an important dimension to the report.

Designing this study involved addressing a number of challenges. First, establishing a causal link between an early stage seed or VC investment and the myriad direct and indirect impacts that may flow from it is always difficult. For example, the structure of the industry and the ecosystem make the identification of causal relationships difficult (e.g., is the venture financing activity triggering or responding to changes in the entrepreneurial ecosystem?). Moreover, conjuring an alternate world in which the investment did *not* occur is impossible, thus preventing simple side-by-side comparisons. In addition, the use of statistical tools to create an artificial proxy for this alternate state of the world is usually not feasible in the context of the VC industry.

Despite the excellent work of organizations such as LAVCA, EMPEA, and other region- and country-specific PEVC industry groups, granular data on entrepreneurial firms in Latin America is generally quite limited, as it is in much of the emerging world. The type of detailed analysis of comprehensive data about entrepreneurial ventures that has been undertaken in the U.S. is rarely possible, although this situation is rapidly improving. A related issue is the relatively young state of the formal venture capital sector, particularly in Latin America, which makes assessing its long-term impact challenging.

The above notwithstanding, this study attempts to address these issues as well as possible, by focusing on the accessible micro-level data. For a more detailed discussion of how the research team developed and deployed an analytical framework for evaluating the funds, please see the Analytical Approach section, below.

Fund Selection

The research team used two principal criteria in selecting the funds for study from the MIF's myriad investments in Latin America. First, the funds had to be headquartered in a Latin American country and have investments in the region. In consultation with the MIF, the research team selected funds headquartered variously in São Paulo, Medellín, and Buenos Aires for inclusion.

Second, the research team sought strategic diversity in terms of the funds' investment goals. Although Vox Fund I, Progresa, and NXTP Labs are all early stage seed/VC investment funds, their missions and investment approaches differ. As a result, they play different roles vis-à-vis their portfolio companies as well as the larger business environments—including the entrepreneurial ecosystems—in which they operate.

- **Vox Fund I:** Founded in São Paulo, Brazil in early 2009, Vox Capital is a venture capital impact investment management company that focuses on small and medium-sized enterprises (SMEs) serving low-income populations. Its first flagship fund, Vox Fund I, is a "double bottom line" fund that seeks to create both beneficial social impacts among the base of the pyramid (BoP) citizens of Brazil and good financial returns from its early stage investments. Vox Capital raised a total of $35.5 million for its first fund and, including its seed investment program, Vox Labs, invested in a total of 19 companies. As of mid-2015, Vox Fund I's portfolio total value to paid in ratio (TVPI) stood at 1.08x, with a reported unrealized IRR of 3.9%, no exits, and one write-off. Vox Capital began raising its second fund in 2015 with a target of $32 million.

- **Progresa:** Progresa was founded in 2009 by Promotora, the investment-banking affiliate of the Colombian conglomerate Grupo Sura. Progresa is a classic VC fund—the first such fund native to Colombia—that targets promising SMEs operating in Colombia's burgeoning life sciences and ICT sectors. Progresa's investment team sought companies with scalable business models that could potentially compete in the global marketplace. Progresa raised $21.3 million for its first fund and ultimately invested in seven companies. By August 2015, Progresa had completed two full exits and one partial exit, generating multiples of 1.8x, 3.0x, and 3.5x—a total of 2.44x—and a gross IRR close to 40% for its exited portfolio. As of August 2015, the fund was projected to produce an overall gross IRR of 18.3%. In 2015, Promotora began raising Progresa's successor, the Early Growth Fund II.

- **NXTP Labs:** Founded in 2011 by four entrepreneurs, NXTP Labs operates Latin America's first regional accelerator, with headquarters in Argentina and a presence in Brazil, Chile, Colombia, Mexico, Uruguay, and the United States. NXTP's accelerator provides selected entrepreneurs with a small amount of seed funding, along with business training, assistance with product development, and introductions to other investors. By September 2015, NXTP raised a total of $38.5 million and had invested approximately $13.7 million in 164 companies across eight editions of its accelerator. The fund has achieved nine exits with a gross multiple of invested capital (MOIC) of 4.74x for its exited deals. While NXTP, like the Silicon Valley accelerator that inspired it, seeks to have a company reach the vaunted "unicorn" status ($1 billion valuation), its mission includes nurturing the entrepreneurial ecosystem in Latin America.

For basic information on the funds examined in this report, please see Table I-1, below. Please note that the multiples of invested capital (MOIC) in the table represent only the returns and capital invested in the exited deals, not the total value to paid in (TVPI) ratio for the funds as a whole. Additionally, the MOICs do not reflect fees or carried interest paid to the GP.

Table I-1: Fund Details

Fund	Year Founded	Funds Raised (USD millions)	Total Number of Investments	Companies Interviewed for this Report	Results to Date
Vox	2009[56]	$35.5[57]	19	9	0 exit events;[58] one write-off
Progresa	2009	$21.3	7	5	3 exit events; 2.44x MOIC
NXTP Labs	2011	$38.5	164	23	9 exit events;[59] 4.74x MOIC[60]

Please also note that for all three funds, the research team examined a subset of the total number of investments, rather than the entire portfolio. The Vox companies interviewed for this report consisted of seven Vox Fund I investments and two investments by the seed operation, Vox

[56] Vox Capital's $3 million "proof of concept" fund, Paradox Holdings, was founded and began investing in 2009. Paradox was rolled into Vox Capital's first flagship fund, Vox Impact Investing Fund I (Vox Fund I), which had its first close in September 2012.

[57] Vox Capital raised a total of BRL84 million for Vox Fund I.

[58] As of September 2015, Vox Labs had made 10 investments using convertible debt. Of those 10, four had fully repaid their loans; two were still repaying their loans, three were still active Vox Labs investments, and one had been written off. For more information on Vox Labs, please refer to Chapter II.

[59] In October 2015, NXTP Labs achieved its ninth exit when Docker, the developer of an open platform for running distributed applications, acquired Tutum. The exit generated $1.5 million and a 60x return for NXTP Labs. Despite the September 2015 cut-off date for our research, we chose to include this recent exit in the report because it illustrates that capital constraints remain an issue for NXTP Labs. Please see Chapter IV for a complete discussion of the fund and its challenges.

[60] NXTP's accelerator model invests both capital and services (i.e., mentoring, business training, and access to NXTP's network) in exchange for equity in the portfolio companies. The MOIC figure includes only the capital invested directly in portfolio companies and not the cost of NXTP's acceleration services.

Labs. Progresa, with two full exits and one partial exit, had five active investments, all of which were examined in this report. Together with the MIF, the research team chose to focus on 23 of NXTP Lab's portfolio of 164 companies.

The research team did not study the exited companies in depth for a number of reasons. First, the time that had elapsed between the exit events and our interviews, which were conducted in August and September 2015, had the potential to weaken the memories of interactions with the fund managers. Second, getting the attention of busy executives and/or founders is often difficult, and this difficulty was likely to be exacerbated if the executives were no longer interacting regularly with the fund managers. Finally, the budget for this project only covered a limited number of interviews. Thus, for Vox and Progresa, only the direct equity investments that were active during the interview window were examined. In the case of NXTP, the 23 companies were chosen with the goal of obtaining balanced representation across the eight editions of the accelerator. This total included two exited companies that were easily accessed due to their early stage of development and continuing interactions with the NXTP team.[61] For all three funds, however, the overriding goal was the same: to create a picture that would enable the reader to gain a broad understanding of the different investment strategies and make useful cross-fund comparisons. The research team agrees that a future study that focused only on exited companies would undoubtedly be helpful.

Mini-cases

For each fund, the research team selected two portfolio companies for further, detailed discussion in a "mini-case" that includes a description of the company's founding and subsequent history, the fund's investment rationale, how the fund helped create value at the company, and the lessons that may be drawn from the company's successes and challenges. As with the funds that are the focus of this report, the research team selected the portfolio companies for the mini-cases in consultation with the MIF.

The companies profiled in the mini-cases illustrate the creativity and innovation of the Latin American business community and its maturing entrepreneurial ecosystem:

- **Tamboro** (Vox Capital) develops educational software for Brazil's elementary schoolchildren.
- **Saútil** (Vox Capital) helps patients, particularly Brazil's BoP population, navigate the country's complex public healthcare system.
- **Ecoflora Cares** (Progresa) manufactures a potentially revolutionary shelf-stable blue colorant for food and personal care products using the fruit of the jagua tree, which is indigenous to Colombia. As of September 2015, the company was seeking FDA approval for its product.

[61] The two exited companies are ComentaTV, which NXTP exited in December 2013 with a return multiple of 3.4x, and Sinimanes, which NXTP exited in June 2014 with a multiple of 1.6x.

- **Ubiquo Telemedicina** (Progresa) provides telemedicine solutions that allow patients in remote areas of Colombia to consult with medical specialists in the country's urban centers.
- **iBillionaire** (NXTP Labs) is an app that enables users to monitor the publicly traded investments of the world's billionaires. Using its proprietary iBillionaire index, the company created an exchange-traded fund (ETF) in conjunction with fund sponsor Direxion Investments.
- **Satellogic** (NXTP Labs) is developing a constellation of nano-satellites to provide real-time, high-resolution satellite imaging of the entire globe.

Please refer to the individual fund chapters for the full text of the mini-cases.

Data Collection

The research team collected two general types of data. First, quantitative data from organizations such as LAVCA, EMPEA, and country-specific VC organizations was gathered to establish the general background of each fund and the PEVC ecosystem in which it operates. The authors also retrieved quantitative data from reports and memos prepared by the fund managers and by earlier evaluators from the MIF itself. These reports helped to shape our analysis and were crucial in the assessments of the direct and indirect impacts each fund had on its portfolio companies, the larger community, and the overall VC ecosystem.

Between April and October 2015, the project team undertook an extensive review of the data and documentation on the three funds and made site visits to each. A total of 67 interviews, in-person and via telephone, were conducted with fund managers, limited partners, portfolio company executives, and MIF staff members. Interviewees were selected based on their knowledge of the fund, its fundraising history and investment approach, and their familiarity with the provenance and current operations of its portfolio companies. The data collected through the interviews were supplemented with other information obtained from the MIF's and VC fund's records. For a breakdown of the interviews by fund and category of interviewee, please see Table I-2, below.

Table I-2: Interviews Conducted

Fund	Location	Fund Team Members	Portfolio Company Staff	Investors & Limited Partners	MIF Staff	Total
Vox	São Paulo	6	9	4	N/A	19
Progresa	Medellín	5	6	2	N/A	13
NXTP Labs	Buenos Aires	9	23	3	N/A	31[62]
Grand Totals		20	38	9	3	66

Analytical Approach

Measuring the effectiveness of a private equity or venture capital investment is an important and complex endeavor. For impact investors seeking to support economic growth, poverty reduction, and other socially beneficial goals—in addition to pursuing sound financial returns—measuring effectiveness is crucial for optimizing the allocation of scarce resources, which include not only capital, but also staff time, effort, and expertise. A detailed picture of a given investment's results also provides critical guidance as an investment program evolves. However, while determining the financial performance and direct impact of VC investments is difficult, threading out the indirect impact (often called multiplier effect, e.g., jobs created down or up the value chain, supplier revenues increased due to demand from the funded company, or businesses founded based on the entrepreneurial example of others) is even more so.

To begin with, the definition of "effectiveness" depends in large part on the objectives of the entity seeking to measure it. For Vox, investing for beneficial social impact is an explicit component of its mandate, and the fund measures its effectiveness in part on how well its investments improve the lives of Brazil's BoP citizens. For Progresa, effectiveness primarily means a good financial return and an improved entrepreneurial and VC ecosystem in Colombia, although beneficial social impacts are "a valued positive consequence of investments," in the words of one interviewee. For NXTP and its regional accelerator, effectiveness means good returns, an improved entrepreneurial ecosystem (with outreach to women), and the creation of a broad regional network of talented entrepreneurs, mentors, and investors. To measure effectiveness for the purposes of this report, the research team developed the four direct impact and four indirect impact criteria discussed in greater detail below.

Another challenge for an evaluation like this is timing. The work of institutions such as the MIF, which seeks to make a broad impact throughout a society and economy, often takes a long time

[62] Please note that at NXTP Labs, one member of the fund team and all three limited partners/investors were also entrepreneurs with companies that had gone through the accelerator program. For the purposes of the total and grand total figures in Table I-2, we counted these four interviews only once, despite the fact that the interviewees played dual roles in the organization.

to yield returns, sometimes decades or more. If the average life cycle of an emerging market VC fund is 8-12 years, then the funds evaluated in this report are arguably just entering middle age. This, in turn, raises the "J-curve" problem—the fact that the fund must invest (yielding negative returns) before companies accrete value and exit, generating a positive return later in the fund's life.[63] In one study prepared by Goldman Sachs, for instance, the author found that cumulative net cash flow in a PEVC fund tends to reach a minimum in the fifth year of a fund's operation.[64] Interim measures of a VC fund's financial performance, in other words, are best thought of as snapshots that may depict the fund in a deceptively unflattering light. A definitive analysis of the funds will only be possible at the end of their life cycles.

The timing issue is particularly relevant given the nature of the funds profiled in this report. As the MIF has learned over 20 years of development investing in Latin America, funds such as Vox that target BoP populations take more time to mature and often require a longer holding period before their portfolio companies exit. This dynamic thus delays the realization of returns and thus the accurate assessment of performance. Funds that pioneer new markets or geographies—as Vox, Progresa, and NXTP all do in different ways—also tend to require more time to reach maturity. The impact of a VC investment thus becomes fully visible only over time, so that the timing of the measurement may greatly influence the observed impact.

Even after defining the variables of interest and relevant timeframe, the process of measuring effectiveness then involves a question of causal attribution, i.e., whether any relevant impact observed can be imputed to the fund's investment in a causal manner. Although there exist well-known statistical and econometric techniques that can help to rigorously address the question of attribution in many contexts (e.g., experimental or quasi-experimental impact evaluation methodologies), the structure and characteristics of the VC industry make it a very challenging environment in which to employ these tools.

The chapters that follow this Introduction assess the "effectiveness" of Vox, Progresa, and NXTP fund using the data sources and analysis outlined above to address the eight direct and indirect impact criteria in a descriptive manner, without attempting to use statistical and/or econometric tools to probe the question of attribution. The results discussed below can thus be considered indicative, but should not be thought of as conclusive (ideally, a follow-up study in a few years and/or a more targeted impact evaluation that closely examines individual investments by interviewing their suppliers and customers would round out this assessment).

Variable Definitions

The MIF hoped to achieve two interrelated goals by conducting this research. First, it sought to understand the funds' *direct* impacts on their portfolio companies through the provision of

[63] Thomas Meyer and Pierre-Yves Mathonet, *Beyond the J Curve: Managing a Portfolio of Venture Capital and Private Equity Funds*, West Sussex, England: John Wiley & Sons Ltd, 2006.
[64] Murphy, Daniel, *Understanding the J-Curve: A Primer on Interim Performance of Private Equity Investments*, Goldman Sachs Asset Management, December 2006.
http://www.goldmansachs.com/gsam/pdfs/USTPD/education/understanding_J_Curve.pdf.

capital and training. Second, the MIF hoped to gain insight into the funds' *indirect* impacts on their communities, countries, or regions by examining the companies in which the fund managers invested, with an emphasis on each fund's ability to nurture an entrepreneurial ecosystem. In this report, the research team's assessment of each fund's progress in achieving these ends. In sections on direct impact and indirect impact for each fund, detailed discussion and analysis of the accomplishments thus far is provided.

The research team developed a set of four direct impact variables and four indirect impact variables, described in detail below, for rating the funds. To enable the reader to make useful intra- and cross-fund comparisons, each fund's interviewed portfolio companies were rated on a scale of 0 to 4 across all eight criteria, with one notable exception described below. To enhance readability, ratings were depicted using ideograms ("Harvey balls").

Despite the differences among the three funds, the research team employed a uniform approach to its direct impact and indirect impact analyses, and made a special effort to "harmonize" the assessment reflected by the Harvey balls across the funds. As a result, each fund was analyzed with the same degree of rigor, enabling the reader to make cross-fund comparisons with confidence. Metrics common to all three funds included job creation and ancillary job growth, effectiveness of committed capital, and usefulness of business training. Thus, if one fund received a rating of 2 and another a rating of 4 on the same criteria, each has been compared to the same standard.

However, the reader should note that one variation in this approach occurred where suitable data were not available. Specifically, the "BoP" indirect impact criterion was not used to assess NXTP Labs, which invested in Internet-based start-up businesses that did not specifically target BoP populations. Due to its investment focus, the majority of NXTP's companies did not appear to have a discernable BoP impact at this point in their development, and NXTP did not routinely collect data on the BoP impacts of its portfolio companies. Thus the research team did not deem it appropriate to rate the fund on this criterion. In the chapter on NXTP, however, due note is taken of interviewed portfolio companies that appeared to have a beneficial BoP effect.[65] Please see Table I-3 and Table I-4, below, for a matrix of the direct and indirect impact criteria used to evaluate each fund.

Direct and Indirect Impact Criteria Definitions

The research team used the following four direct impact criteria in evaluating the funds:

[65] It is entirely possible that NXTP's companies had BoP impacts due to the demonstrated ability of successful entrepreneurs to raise living standards of BoP individuals in their communities. The Koba grocery chain in Colombia provides a useful example. Koba is a "hard-discount" retailer that sells a smaller range of basic products at far lower prices than the established hypermarket chains, following a model pioneered by Aldi, the German grocer. As such, it offers BoP city-dwellers a broader range of groceries at better prices than had been available through the mom-and-pop bodegas. See The Abraaj Group, *Prosperity and Growth: Our Engagement in Latin America*, The Abraaj Group, 2014, http://www.abraaj.com/images/uploads/newspdfs/ABRAAJ_LATAM_FINAL.pdf.

- "Effectiveness of committed capital" measures the importance of the fund's investment to each of its portfolio companies. With the understanding that the funds' investment approaches differed and each portfolio company's experience was unique, the research team considered factors such as the availability of alternative sources of financing as well as the importance of the cash infusion to the company's operations and business plan at the time it was made.

- "Effectiveness of business training" measures the usefulness of any business-related classes, workshops, or one-on-one mentoring the fund facilitated, e.g., social media marketing workshops for entrepreneurs with Internet-based businesses, and whether similar training was available from alternatives sources.

- "Effectiveness of ESG training" measures the extent to which the fund assisted the portfolio company with its environmental-, social-, or governance-related activities, e.g., the drafting of articles of incorporation or recruitment of independent board members. The availability of similar assistance from other sources was also a factor.

- "Effectiveness of networking opportunities" seeks to gauge the usefulness of any professional introductions that the fund managers facilitated, including referrals to prospective partners, clients, and/or government agencies.

Table I-3, below, provides a matrix illustrating the direct impact factors the team used in evaluating each fund. For a detailed description of each criterion and how it was used to evaluate the fund in question, please see the individual fund case studies (Chapters II-IV).

Table I-3: Direct Impact Criteria Examined

Fund	Committed capital	Business training	ESG	Networking
Vox	✓	✓	✓	✓
Progresa	✓	✓	✓	✓
NXTP Labs	✓	✓	✓	✓

In addition to the direct impacts described above, the authors assessed each portfolio company using the following four indirect impact criteria:

- "Created ancillary economic growth and/or job creation" measures the extent to which the portfolio company's activities created beneficial economic externalities, including jobs outside the company, or economic growth among peer firms, vendors, suppliers, or the larger community.

- "Demonstrated innovation" measures the extent to which innovation was central to the company's business plan, e.g., whether it sought to compete on the basis of a new product or process, or pioneered a new market. The research team used four sub-criteria in evaluating innovation at the funds' portfolio companies: i) novelty of business plan; ii) novel use of existing technology; iii) development of new technology and/or product(s); and iv) innovativeness within the country, region, or market. Because these companies often become role models in their regions, their use of innovation can spur other entrepreneurs and companies to exhibit greater innovativeness, particularly among those who wish to compete in an increasingly innovative market.

- "Improved quality of life for BoP citizens" measures any beneficial effects from the company's operations on economically marginalized citizens, e.g., did the company's products or services address a previously unmet need within this population?
- "Improved entrepreneurial and VC ecosystem" measures the extent to which the fund's portfolio of investee companies, taken as a whole, improved the local, regional, or national environment for entrepreneurial and venture capital activities. This criterion examines a slightly different ecosystem for each fund. In the case of Vox, the research team examined the firm's impact on the Brazilian Impact VC ecosystem. For Progresa, the Colombian VC ecosystem is analyzed. In the case of NXTP, the research team evaluated NXTP's effect on the Latin American entrepreneurial and start-up ecosystem. This criterion takes into account each fund's effectiveness at addressing different types of companies at different stages of development and furthering LP interest in its region and area of focus.

Table I-4, below, provides a matrix illustrating the indirect impact factors the authors used in evaluating each fund. For a detailed description of each criterion and how it was used to evaluate the fund in question, please see the individual fund case studies (Chapters II-IV).

Table I-4: Indirect Impact Criteria Examined

Fund	Ancillary growth & job creation	Innovation	BoP	VC Ecosystem
Vox	✓	✓	✓	✓
Progresa	✓	✓	✓	✓
NXTP Labs	✓	✓	N/A	✓

Using these analytical frameworks and the authors' combined 56+ years of experience studying the VC industry, the team distilled hundreds of hours of interviews and thousands of pages of documentation into the most important direct and indirect impacts of each fund. Insights gleaned from this analysis, it is hoped, will be especially useful in Latin America and the Caribbean, where the VC industry and the infrastructure that supports it are still relatively young but important to the development of the region's economies.

Literature Review

Below, a brief overview of the research conducted by academics and NGOs relevant to this project is provided, focusing on three principal areas of inquiry. First, the importance of access to financing for SMEs is discussed, particularly in emerging markets where other forms of financing are often limited or unavailable. Second, the beneficial externalities—indirect impacts—that flow from VC financing for SMEs are considered, including the importance of the demonstration effect and VC's impact on innovation and job creation. Third, the role VC plays in creating an entrepreneurial ecosystem and the importance of such ecosystems in emerging market economies is discussed.

VC Provides Crucial Access to Financing for SMEs

Worldwide, SMEs create the majority of jobs in the formal economy and, according to research by the World Bank, are responsible for an even greater proportion of those jobs in emerging markets.[66] Despite the outsized role SMEs play in the economies of the emerging world, however, these companies often have difficulty gaining access to the credit, insurance, and other financial products necessary for managing risk and funding further growth.[67] A 2013 study by the International Finance Corporation revealed that globally, SMEs faced a financing gap of at least $2.1 trillion and that bank loans to SMEs represented approximately 13% of GDP. This figure was even lower in emerging markets, where SME bank loans were estimated to comprise only 3% of GDP.[68]

Kuntchev et al. (2014) analyzed data from 31 countries in Latin American and the Caribbean, and found that smaller companies and those in poorer regions face even greater credit constraints than their larger peers in wealthier areas (in particular, the authors found that 57% of companies in the LAC region were either partially or fully credit constrained).[69]

Capital constraints on SMEs have an important developmental impact through their strong empirical links to employment growth. Data assembled by the World Bank in 2012 showed that in low-income countries, 21.0% of all firms rated access to finance as the single biggest obstacle to their success. Breaking this statistic down by firm size, as shown in Table I-5, the data reveal that 23.0% of small firms (5-19 employees) in low-income countries identified access to finance as their biggest obstacle, while 16.6% of medium-sized firms (20-99 employees) did so. Only 11.8% of large firms named access to finance as their biggest obstacle.[70] That business owners

[66] Meghana Ayyagari, Asli Demirguc-Kunt, and Vojislav Maksimovic, "Small Vs. Young Firms Across the World: Contribution to Employment, Job Creation, and Growth," *World Bank Policy Research Working Paper 5631* (April, 2011).
[67] Simone D. McCourtie, "Micro, Small, and Medium Enterprise (MSME) Finance," *The World Bank,* April 5, 2013, http://www.worldbank.org/en/results/2013/04/05/msme-finance-expanding-opportunities-and-creating-jobs.
[68] Peer Stein, Oya Pinar Ardic, and Martin Hommes, *Closing the Credit Gap for Formal and Informal Micro, Small, and Medium Enterprises*, Washington D.C.: International Finance Corporation, 2013.
[69] Veselin Kuntchev, Rita Ramalho, Jorge Rodríguez-Meza, and Judy S. Yang, *What have we Learned from the Enterprise Surveys regarding Access to Credit by SMEs?*: World Bank Enterprise Analysis Unit, May 2014: 23.
[70] Data is from 2012 and extracted from World Bank. *Enterprise Surveys* (database), accessed Oct. 16, 2015.

viewed access to finance—or lack thereof—as a substantial hurdle to the success of their enterprises has a host of additional implications. These include slower rates of job growth and wealth creation and increased vulnerability for already economically marginal populations.[71]

Table I-5: Access to Finance in Low-Income Countries[72]

Size of Firm	Percentage of Firms in Low-Income Countries Identifying Access to Finance as Biggest Obstacle to Success
Small (5-19 Employees)	23.0
Medium (20-99 Employees)	16.6
Large (100+ Employees)	11.8

A number of factors contribute to the scarcity of suitable financing for emerging market SMEs. Among them are the scarcity of audited financial records for SMEs; the preference among banks for lending to larger, often state-supported companies; the sheer difficulty in establishing creditworthiness of SMEs;[73] and the significant collateral required as a proportion of the loan size. Not only is the amount of collateral substantially larger in low-income countries than high-income countries—close to 190% of the loan amount, compared to 130% in wealthier nations—but the types of assets acceptable as collateral also tend to be out of the reach of many SME entrepreneurs.[74] While 78% of the assets for SMEs in developing countries are movable (machinery, equipment, or receivables), banks require "immovable" assets, such as real estate.[75] Yet in emerging markets, real estate titles are often uncertain due to weak property rights, and long-term contracts, which could serve as collateral, are also insecure due to contract enforcement that is often uncertain. Finally, when financing is available, loan terms are usually for less than a year and interest rates can approach 72% per annum.[76]

Moreover, research has also shown the link between financing and job growth. A 2010 study that examined more than 39,000 firms between 2006 and 2010 across 98 developing countries found that emerging market companies with either a loan or an overdraft facility had employment

[71] Simone D. McCourtie, "Micro, Small, and Medium Enterprise (MSME) Finance," *The World Bank,* April 5, 2013, http://www.worldbank.org/en/results/2013/04/05/msme-finance-expanding-opportunities-and-creating-jobs.
[72] World Bank, *Enterprise Surveys* (database), accessed Dec. 16, 2013.
[73] Tobias Baer, Massimo Carassinu, Andrea Del Miglio, Claudio Fabiani, and Edoardo Ginevra, *The National Credit Bureau: A Key Enabler of Financial Infrastructure and Lending in Developing Economies*, New York: McKinsey & Company, 2009.
[74] World Bank, *Enterprise Surveys (database),* accessed Oct. 16, 2015.
[75] Inessa Love, Maria Soledad Martinez Peria, and Sandeep Singh, "Collateral Registries for Movable Assets: Does their Introduction Spur Firms' Access to Bank Finance?" *World Bank Policy Research Working Paper* no. 6477 (2013): 2. This study of 73 countries also reported that the introduction of movable collateral registries increases access to bank finance by almost 8 percentage points and access to loans by 7 percentage points (p. 4).
[76] Josh Lerner, Ann Leamon, Andrew Speen, and Chris Allen, *Evaluation of SME Ventures Final Report Project no. 11-16058*, Washington, D.C.: International Finance Corporation, 2013.

growth 3.1% higher than companies without these financial levers. An even larger gain (+4.2%) was found in companies receiving capital from external investment funds.[77]

VC Creates Beneficial Externalities

In addition to providing critical capital for credit constrained firms, PEVC investing can have follow-on effects that make it a powerful way to spur economic growth in emerging markets. For example, there is evidence that profitable investments go hand-in-hand with developmental impact. In a study of 469 investment projects between 1998 and 2003, the International Finance Corporation (IFC) found that 97% of the projects with satisfactory or excellent financial performance also met or exceeded the organization's development benchmarks.[78] In a subsequent study of the mature private equity funds in the IFC's portfolio as of March 2009, the author found that the top decile of funds in terms of financial performance also performed significantly better than the rest of the portfolio on developmental impact metrics.[79]

In addition to developmental impact, VC investing creates a host of other benefits in the broader market. Research on the IFC's SME Ventures program—which is similar in many important respects to the MIF's work in Latin America—reveals demonstration effects in frontier and pre-frontier markets stemming from the establishment of a PE fund. The establishment of domestically based IFC-backed PE funds in pre-frontier countries such as Sierra Leone/Liberia, the Democratic Republic of Congo, and Nepal inspired other organizations to announce or actually start fundraising for their own PE funds—even without any exited investments from the IFC-backed groups.[80]

The degree of financial success required for high developmental impact, however, remains a topic of debate. Research by Anna Kovner and Josh Lerner established that spectacular financial results are not necessary for beneficial externalities to flow from a VC investment. In their study of Community Development Venture Capital (CDVC) funds, PE groups in developed markets that invest in underserved regions and often produce sub-market returns, the authors found that the presence of a CDVC fund in a county otherwise unserved by VC funds increased the likelihood that a traditional VC fund would become active in the region.[81] Therefore, there appeared to be a type of positive demonstration effect simply from creating a group of entrepreneurs and an environment familiar with the expectations of VC investors.

[77] Hinh T. Dinh, Dimitris A. Mavridis, and Hoa B. Nguyen, "The Binding Constraint on Firms' Growth in Developing Countries," *World Bank Policy Research Working Paper 5485* (November, 2010): 12.

[78] International Finance Corporation, "Are Profits made at the Expense of Development Impact?" *IFC Monitor*, October, 2007. http://www.norfund.no/getfile.php/Documents/Homepage/Reports%20and%20presentations/External%20reports_flyers/IFC_DE_Monitor_Sheets_2v31.pdf.

[79] Wilton, David. Perspectives of an LP in Emerging Markets Private Equity. Washington, D.C.: EMPEA: 5.

[80] Josh Lerner, Ann Leamon, Andrew Speen, and Chris Allen, *Evaluation of SME Ventures Final Report Project no. 11-16058*, Washington, D.C.: International Finance Corporation, 2013.

[81] Anna Kovner and Josh Lerner, "Doing Well by Doing Good? Community Development Venture Capital," *Journal of Economics & Management Strategy* 24, no. 3 (2015): 643-663.

VC's Contributions to an Entrepreneurial Ecosystem

Although research demonstrates the effectiveness of PEVC funding as a tool for economic development in emerging market countries, the establishment of a self-sustaining PEVC ecosystem—one with an active community of entrepreneurs, fund managers, and investors—can be extremely difficult. It is far easier to do the 100th deal than to do the first—which means that an early entrant is at a comparative disadvantage, because the benefits of its work accrue to others.

Many investors who pioneered private equity in emerging markets recount having to build a set of expectations among entrepreneurs along with associated ancillary expertise, such as lawyers, accountants, investment bankers, and human resource specialists. Doing a later deal becomes much easier because the entrepreneurs know what to expect and the investors need not explain the mechanics. Ultimately, a network of firms begins to develop with the associated sharing of information and deal flow, while intermediaries develop the professional skills and expertise necessary for smooth transactions.[82]

As an ecosystem evolves and deal flow improves, firms tend to develop networks through which they can refer entrepreneurs to one another and/or share deals. As institutional investors gain comfort with the asset class, two dynamics occur: first, the initial investors become willing to invest more and in more nascent funds; and second, institutions that had earlier stayed on the sidelines become willing to invest. Over time, entrepreneurs who have succeeded with their venture-funded companies start to participate as investors, either funding very young companies as angels or investing in funds as limited partners.

Research has borne out these conclusions. A 2014 study of accelerators—NXTP Labs, profiled in greater detail below, operates one—showed that the presence of an accelerator led to a marked increase in the number of seed and early stage VC deals, the total dollar amount of VC funding, and the number of distinct investors within the accelerator's operating region.[83] Importantly, the authors found that the bulk of this increase stemmed from growth in the number of local investment groups, rather than an influx of investors from outside the region.[84] Accelerators also increased seed and early stage funding of SMEs and improved the local entrepreneurial ecosystem, creating a "spillover effect" that attracted other VCs and even improved the fundraising environment for companies not directly involved in the accelerator.[85]

[82] Josh Lerner, Felda Hardymon, and Ann Leamon, *Venture Capital & Private Equity, 3rd Edition*, Hoboken, N.J.: John Wiley & Sons, 2005: 336-346; Josh Lerner, Ann Leamon, Andrew Speen, and Chris Allen, *Evaluation of SME Ventures Final Report Project no. 11-16058*, Washington, D.C.: International Finance Corporation, 2013.

[83] Daniel C. Fehder and Yael V. Hochberg, "Accelerators and the Regional Supply of Venture Capital Investment," *Working Paper* (September 19, 2014).

[84] Daniel C. Fehder and Yael V. Hochberg, "Accelerators and the Regional Supply of Venture Capital Investment," *Working Paper* (September 19, 2014).

[85] Daniel C. Fehder and Yael V. Hochberg, "Accelerators and the Regional Supply of Venture Capital Investment," *Working Paper* (September 19, 2014).

In its role as a pioneering VC investor in Latin America, the MIF has played the role of accelerator as well as guide and instructor, not just for fund managers themselves, but for the ecosystem as a whole. In this report, the research team explores not only the degree to which the three fund managers under analysis have created direct and indirect impacts by financing their portfolio companies, but also the role that they and their portfolio companies have played in supporting the growth of a VC ecosystem in Latin America—and by extension, the role that the MIF has played through its support and advice to these groups. The PEVC ecosystem in Latin America, despite its status as a relatively recent phenomenon, has come a long way from its origins in the early 1990s, and it continues to evolve.

Using This Report

This study is designed to provide an in-depth look at three early-stage investment funds—Vox Fund I, Progresa, and NXTP Labs—that were active in the LAC region in 2015. Each of the following three chapters contains information on the profiled fund's formation and the economic and demographic characteristics of the country or region in which it operates. After discussing the fund's background and formation, each fund's direct impacts and indirect impacts are assessed in easy-to-read tables, followed by a discussion of the assessments using select portfolio companies as examples.

To further illuminate the relationship of the fund manager to its investees, each chapter also includes "mini-cases" that discuss two portfolio companies in more detail. Following these profiles, the implications of the MIF's involvement with the three funds are discussed in a "Lessons Learned" section, and each case concludes with a consideration of the fund's future.

The last section of the report is a conclusion that provides an overall assessment of each fund's direct and indirect impacts.

Caveats

The research team undertook its evaluation of Vox, Progresa, and NXTP Labs in 2015, and it is thus important to keep in mind that the results presented in this report are best thought of as a snapshot of each fund at a particular moment in its life cycle. The funds profiled below have made investments in some promising companies, but fulfilling that promise will likely require several more years. A follow-up review of each fund at the end of its life cycle would provide an illuminating coda to this report.

With the exception of the exits to date, the financial performance of the funds was largely prospective at the time of evaluation, as these funds were arguably in mid-cycle. While the exits to date may provide some insight into future performance, a more definitive evaluation of financial performance will not be possible for several more years.

As discussed, the research team took great care in analyzing the funds in a consistent manner that enables cross-fund comparisons, and the reader will find that a given fund tends to lead its peers in certain areas and lag in others. It is important to keep each fund's investment strategy and objectives in mind when making these comparisons. For instance, NXTP's role in running a regional accelerator and Progresa's desire to fund companies in the Colombian life sciences and ICT sectors meant that their ability to spur innovation was an important gauge of their indirect impact. Social benefits were welcomed but not an explicit component of either fund's mission and thus a less meaningful measure of their effectiveness. For Vox, which did have a social impact mandate, the opposite was true. That fund's ability to create beneficial environmental, social, and governance (ESG) outcomes was a key measure of its effectiveness.

Finally, it is important to keep in mind the axiom that "success has many parents while failure is an orphan." The beneficial impacts of these funds can be ascribed to many actors ranging from politicians to fund managers to the variety of LPs, including the MIF, that took the risks of investing in the funds and the entrepreneurs who risked starting the venture. The many influences that have helped create these changes are recognized, but allocating the precise impact that each has had is beyond the scope of this project.

It is reasonable to conclude that the MIF's investments in Vox, Progresa, and NXTP Labs have succeeding in supporting entrepreneurship and fostering economic development in Latin America and the Caribbean. Although the funds profiled in this report have not been without their challenges, it is clear that each is playing an important role in strengthening an entrepreneurial ecosystem capable of producing vibrant companies. Indeed, each of the funds, in its own way, represents an important milestone in the development of that ecosystem.

II. Vox Capital

Summary

In January 2009, Vox Capital, the first impact investment venture capital firm in Brazil, was founded by Daniel Izzo, Antonio Moraes, and Kelly Michel, all of whom had a long history in supporting social causes. Their idea was to invest in scalable companies satisfying two criteria: a high social impact potential and a solid financial return, achieved by addressing the most critical needs of the country's base of the pyramid (BoP) population—education, healthcare, housing, and access to finance. In 2015, the BoP segment included more than 120 million people (60% of Brazil's population), and accounted for 47% of the country's total annual income.[86] Despite representing such a huge market, this population is highly underserved by both the private and public sectors.

The Vox Capital team initially launched a US$3 million fund, Paradox Holdings, funded by Potencia Ventures (also founded by Ms. Michel), to test the concept and demonstrate the approach and impact to potential subsequent investors. Following Paradox Holdings' initial success, the Vox Capital team raised a total of R$84 million (US$35.5 million[87]) for its Impact Investing Fund I (Vox Fund I), with a final close in January 2014. The investors included development finance institutions (DFIs), international foundations, and Brazilian high net-worth individuals (HNWIs) and families.

As of September 2015, Vox Capital had screened over 1,430 investment opportunities throughout Brazil, of which 32% were in education, 21% in healthcare, 8% in financial services, 7% in housing, and 32% in other sectors. From these, it chose to invest in 19 companies, which, according to the firm's estimates, serve more than 150,000 people daily. Nine of these were structured as equity positions, while 10 were convertible notes issued through Vox Labs, the fund's seed investment program. The Vox Labs effort was established in 2011 to provide funding for promising businesses that were not mature enough to receive equity investments. In total, 83.3% of Fund I's committed capital had been allocated as of September 2015. The equity investments ranged from R$1,000,000 to R$10,000,000 (between US$450,000 and $4,500,000) per company and the Vox Labs convertible notes ranged up to R$300,000 (US$150,000). As of June 30 2015, Vox Fund I's total value to paid in (TVPI) ratio stood at 1.08x with a reported unrealized IRR of 3.9%, no exits, and one write-off. Encouraged by generally positive feedback from its investors, which sought both financial performance and social impact, Vox Capital started fundraising in 2015 for its second fund, which has a target of R$120 million (US$32 million) and will follow a similar investment thesis as Fund I.

[86] Internal Vox data and documents.
[87] In this document, all conversions from R$ to US$ are approximate and based on R$/US$ exchange rate for the respective date, month or year.

Background & Fund Formation

The Economy and Demographics of Brazil

Brazil is the largest country in Latin America, in terms of both land area and population. In 2014, its GDP was over $2.3 trillion, making it the second-largest economy in the western hemisphere, exceeded only by the United States.[88] Accordingly, it has been at the center of Latin America's growth story at the beginning of the 21st century.

During the 1980s, Brazil experienced a period of stagflation[89] during which annual inflation reached nearly 2,000%, driven by high levels of foreign debt. Important reforms in the 1990s helped the economy to recover and led to the period of high growth in the 2000s. From 2004-2011, Brazil's average annual GDP growth rate was more than 4.3%, exceeding Latin America and the Caribbean's average growth of 4.1%.[90]

The country's economic growth, coupled with public policies that sought to alleviate poverty and expand access to education and health services, helped lift 35 million people out of poverty from 2003 to 2012, and supported a large expansion of the middle class.[91] This in turn caused domestic private consumption to more than quadruple over the same period.[92] According to IDB data, consumption was the largest contributing factor to Brazil's GDP growth in all but one of the ten years from 2004 to 2013.[93] The country has also seen a rapid increase in internet penetration, which reached 49.3% in 2013 and is projected to surpass 60% by 2018. Furthermore, Brazil leads Latin America in the number of smartphone users, with over 27.1 million in 2013.[94]

However, despite improvements, Brazil still suffers from issues of poverty and inequality. As of 2011, 80% of the population belonged to low income classes, earning less than $9 per day.[95] As of 2012, over 64% of the population did not have access to banking services.[96] While student enrollment has increased, it still falls below OECD averages across all levels, and over half the

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[88] The World Bank, "Brazil," The World Bank, accessed October 15, 2015, http://data.worldbank.org/country/brazil#cp_wdi.
[89] A situation in which the inflation rate is high while economic growth slows.
[90] The World Bank's World Development Indicators, accessed September 27, 2015.
[91] Economy Watch News Desk Team, "35 Million Brazilians Escaped Poverty Over Last Decade: Study," *Economy Watch*, September 20, 2012. http://www.economywatch.com/in-the-news/35-million-brazilians-escaped-poverty-over-last-decade.21-09.html. And The World Bank, "Brazil," The World Bank, accessed October 15, 2015, http://data.worldbank.org/country/brazil#cp_wdi.
[92] The Economist Intelligence Unit, accessed October 15, 2015.
[93] In 2009, imports contributed more to GDP growth than did consumption. (Inter-American Development Bank, "Latin Macro Watch: Brazil," Inter-American Development Bank, accessed November 3, 2015, http://www11.iadb.org/en/research-and-data/latin-macro-watch/latin-macro-watch-country-profiles,18579.html?show=0&country=BRA.)
[94] U.S. Media Consulting, "The Data Every Latin American Digital Marketer Needs," Latin Link, accessed October 15, 2015, http://latinlink.usmediaconsulting.com/2015/02/the-data-every-latin-american-digital-marketer-needs/.
[95] Aspen Network of Development Entrepreneurs, LGT Venture Philanthropy, Quintessa Partners, and University of St. Gallen, *Mapping the Impact Investing Sector in Brazil*, Aspen Network of Development Entrepreneurs, 2014.
[96] Aspen Network of Development Entrepreneurs, LGT Venture Philanthropy, Quintessa Partners, and University of St. Gallen, *Mapping the Impact Investing Sector in Brazil*, Aspen Network of Development Entrepreneurs, 2014.

population between the ages of 25 and 64 have not completed high school.[97] Approximately three-quarters of the population rely on the public health care system, which is plagued by inefficiencies.[98] Housing is another problematic issue for Brazil, with an estimated shortage of 5.8 million units as of 2014.[99]

Moreover, since 2011 Brazil's economic growth has slowed. In 2014 the economy grew by less than 0.5%, and is expected to contract 2.8% in 2015, and by an additional 0.7% in 2016.[100] One of the main factors contributing to Brazil's economic slowdown is lower commodity prices, driven by slowing global growth, especially in China, which had been a major purchaser of Brazil's commodities such as iron ore, beef, and oil. The slowdown has resulted in higher unemployment rates and decreased domestic consumption.[101]

Brazil's PEVC Ecosystem

Brazil has the largest private equity and venture capital (PEVC) industry in Latin America. In 2014, domestic and international fund managers raised over $5.5 billion to invest in the country, accounting for nearly 54% of the region's total capital raised that year, and almost twice the Brazil-focused total in 2013.[102] In the first half of 2015, Brazil-focused funds raised an additional $2.4 billion, 56% of the region's total.[103]

Brazil has similarly dominated the regional industry in terms of investments. In 2014, PEVC firms invested approximately $4.6 billion across 141 deals in Brazil, of which the information technology (IT) sector accounted for more than half. Other notable sectors for investment included logistics and distribution, energy, and healthcare/life sciences.[104] The amount invested in Brazil represented more than half of the region's total that year, yet reflected a drop from 2013 when the $6.0 billion invested in Brazil represented over 75% of the regional total.[105] In the first half of 2015, despite the slowing economy, fund managers invested an additional $2.3 billion across 69 deals.

Exited investments in Brazil generated $1.6 billion in 2014, down from $2.5 billion in 2013.[106] Following the downward trend, in the first half of 2015, PEVC funds realized only $676 million across 10 exited investments.

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[97] OECD, Country Note - Education at a Glance 2014: Brazil, OECD, 2014.
[98] Aspen Network of Development Entrepreneurs, LGT Venture Philanthropy, Quintessa Partners, and University of St. Gallen, *Mapping the Impact Investing Sector in Brazil*, Aspen Network of Development Entrepreneurs, 2014.
[99] Vanessa Barbara, "Brazil's Unaffordable Homes," *The New York Times*, July 30, 2014. http://www.nytimes.com/2014/07/31/opinion/vanessa-barbara-brazils-unaffordable-homes.html?_r=2.
[100] The Economist Intelligence Unit, accessed October 15, 2015.
[101] Central Intelligence Agency, "The World Factbook: Brazil," accessed October 15, 2015. https://www.cia.gov/library/publications/the-world-factbook/geos/br.html. And Adam Lidgett, "Brazil Recession: Slow Global Growth Blamed on Country's Shrunken Economy," *International Business Times*, August 28, 2015. http://www.ibtimes.com/brazil-recession-slow-global-growth-blamed-countrys-shrunken-economy-2072978.
[102] 2015 LAVCA Industry Data.
[103] 2015 LAVCA Industry Data.
[104] 2015 LAVCA Industry Data.
[105] 2015 LAVCA Industry Data.
[106] 2015 LAVCA Industry Data.

Looking more closely at early stage investing, Brazil has accounted for over half of the region's VC investments each year since 2012. In 2014, Brazilian fund managers deployed $389 million across 85 deals, nearly 74% of the region's total.[107] Of the $264 million invested in Latin American VC in the first half of 2015, over 80% flowed into Brazilian companies, with the majority of investments made in the IT sector.

Impact Investing

Impact investments are investments made into companies, organizations, and funds with the goal of generating social and environmental impact alongside a financial return.[108] Such investments can be made in both developed and emerging markets. Impact investors challenge the idea that the private sector should focus exclusively on financial returns, and that social and environmental issues are the domain of the public and nonprofit sectors. The impact investing industry has grown in recent years. In research recently conducted by JP Morgan and the Global Impact Investing Network (GIIN), 145 investors and fund managers reported a total of $10.6 billion in new commitments to impact investments in 2014, and estimate that this asset class will raise an additional $12.2 billion in 2015.[109] Sampled fund managers collectively managed $60 billion in impact investments as of the beginning of 2015. Major asset management and PE firms are beginning to enter the impact investing space as well. In early 2015 BlackRock, the world's largest asset manager, announced the launch of BlackRock Impact, a new initiative to consolidate and expand the firm's impact offerings.[110] Only a few months later, Bain Capital, a leading global investment firm, announced its plans to launch an impact investment fund under the leadership of former Massachusetts Governor Deval Patrick.[111]

Brazil's nascent impact investing industry has also grown recently. Recent research by the Aspen Network of Development Entrepreneurs (ANDE) examined the history of classic impact oriented VC-fund managers (that is, excluding groups such as the MIF that invest in fund-managers) that entered the country. The first formally defined impact investment player in Brazil was Oikocredit, a microfinance fund from the Netherlands that began investing in the country in 2003.[112] Between 2003 and 2009, impact investing in Brazil grew very slowly, with projects such as the IFC's Inclusive Business Models Group and the IDB's Opportunities for the Majority

[107] 2015 LAVCA Industry Data.

[108] Global Impact Investing Network, "What You Need to Know about Impact Investing," Global Impact Investing Network, accessed November 15, 2015, https://thegiin.org/impact-investing/need-to-know/#s1.

[109] J.P. Morgan and Global Impact Investing Network, *Eyes on the Horizon: The Impact Investor Survey*, J.P. Morgan and Global Impact Investing Network, May 5, 2015. https://thegiin.org/assets/documents/pub/2015.04%20Eyes%20on%20the%20Horizon.pdf

[110] Jessica Toonkel, "Exclusive: BlackRock to Ramp Up Impact Investing," *Reuters*, February 9, 2015. http://www.reuters.com/article/us-blackrock-impact-exclusive-idUSKBN0LD18W20150209.

[111] Bain Capital, "Former Massachusetts Governor Deval L. Patrick Joins Bain Capital to Launch New Business Focused on Investments with Significant Social Impact," *Bain Capital Press Release*, April 14, 2015. http://www.baincapital.com/newsroom/former-massachusetts-governor-deval-l-patrick-joins-bain-capital-launch-new-business.

[112] Aspen Network of Development Entrepreneurs, LGT Venture Philanthropy, Quintessa Partners, and University of St. Gallen, *Mapping the Impact Investing Sector in Brazil*, Aspen Network of Development Entrepreneurs, 2014.

program.[113] Domestic investors began exploring the impact investing sector in 2008, but Brazil did not produce a dedicated domestic impact investor until 2009, when Vox Capital was founded.[114] At that time, there were still few players and little coordination in that space. Between 2012 and 2013, the number of impact investors active in Brazil nearly tripled from seven to twenty, nine of which are domestic.[115] From 2003 through the end of 2013, a total of $76.4 million was invested in 68 impact-oriented businesses, and investors reportedly planned to invest an additional $89-$127 million in 2014.[116]

In May 2014, the ANDE report identified 22 impact investors active in Brazil, 40% of which were closed-end funds, 10% business accelerators, 10% open-ended or evergreen funds, and the balance family offices and other types of entities.[117] Nine of the firms were domestic investors, and the rest international. More than half of the investors aimed to produce financial returns comparable to those of conventional VC funds. Most of the funds are quite small; the eight Brazilian impact investment funds that provided financial data collectively managed approximately US$177 million as of May 2014, and targeted industries such as financial inclusion, education, healthcare, renewable energy, housing, water and sanitation, and waste management.[118] Looking to the future, the domestic fund managers planned to raise an additional US$150 million in 2014 and 2015.

Vox's Origins and Fund Formation

In 2008, Daniel Izzo, Antonio Moraes, and Kelly Michel realized that they shared the same vision: to start Brazil's first impact investing fund. The fund would invest in companies satisfying two criteria: a high social impact potential and a solid financial return, achieved by addressing the most critical needs of the country's BoP population.[119] Members of the team had

[113] Aspen Network of Development Entrepreneurs, LGT Venture Philanthropy, Quintessa Partners, and University of St. Gallen, *Mapping the Impact Investing Sector in Brazil*, Aspen Network of Development Entrepreneurs, 2014: 12.

[114] Multilateral Investment Fund, *Vox Capital Impact Investing Fund I: Donors Committee Memorandum*, Multilateral Investment Fund, 2012.

[115] Aspen Network of Development Entrepreneurs, LGT Venture Philanthropy, Quintessa Partners, and University of St. Gallen, *Mapping the Impact Investing Sector in Brazil*, Aspen Network of Development Entrepreneurs, 2014.

[116] Aspen Network of Development Entrepreneurs, LGT Venture Philanthropy, Quintessa Partners, and University of St. Gallen, *Mapping the Impact Investing Sector in Brazil*, Aspen Network of Development Entrepreneurs, 2014.

[117] Unlike closed-end funds, evergreen funds have no set time limits, but rather continuously invest and fundraise from a single vehicle. (Aspen Network of Development Entrepreneurs, LGT Venture Philanthropy, Quintessa Partners, and University of St. Gallen, *Mapping the Impact Investing Sector in Brazil*, Aspen Network of Development Entrepreneurs, 2014.)

[118] Aspen Network of Development Entrepreneurs, LGT Venture Philanthropy, Quintessa Partners, and University of St. Gallen, *Mapping the Impact Investing Sector in Brazil*, Aspen Network of Development Entrepreneurs, 2014.

[119] According to GIIN's Impact Program Discussion Paper from January 2015, "Tracking reach to the Base of the Pyramid through impact investing", the 'Base of the Pyramid' is not strictly defined and is used by Development Finance Institutions (DFIs) and businesses without specific definition. As such it generally refers to 'low-income people' and 'poor people.' For more please see Ashley Caroline and Joe Shamash, *Tracking Reach to the Base of the Pyramid through Impact Investing: Impact Programme Discussion Paper*, United Kingdom: Department for International Development, January 2015. http://www.theimpactprogramme.org.uk/wp-content/uploads/2015/01/TRACKING-REACH-TO-THE-BOP-for-PDF-final-CA2-.pdf.

been working toward this vision for some time—for some of them, most of their lives. As Mr. Moraes noted:

> When I was 16, I was very inspired by my great-great-grandfather's story. He was a pioneer and created a new industry in Brazil. I realized I wanted to help reduce social inequality in Brazil and I wanted to be an entrepreneur. Brazil has thousands of problems but the most pressing one, in my opinion, is deep social disparity. Later on, during my undergraduate studies, I determined that I want to combine the profitability and efficiency of the business world with the ability to create social change. My undergraduate thesis was a business plan for a social impact fund - the idea eventually matured a few years later. Most of my business school colleagues had a dream of earning their first million [dollars] before their 30th birthday; I set myself a goal to impact at least one million people before I turned 30.

In addition to their passion for social investments, three co-founders had prior experience in the field. Mr. Izzo had implemented corporate programs focusing on the BoP population while he was working for Johnson & Johnson. He was also an angel investor in Tekoha, a business focused on handicrafts. Ms. Michel had founded Artemisia, a business accelerator and an impact hub in Sao Paulo, in addition to Potencia Ventures, a social impact investing vehicle, through which she had made over 15 investments in businesses targeting the BoP between 2002 and 2009. Mr. Moraes co-founded the Votorantim Group's Family Fund, his family's investment vehicle, and made several investments in Brazilian social enterprises.

The founders met through mutual networks. In early 2008, Mr. Izzo contacted Ms. Michel with the idea of starting a social impact fund. Ms. Michel already knew an investor who was willing to provide capital to support social impact businesses in Brazil, and was looking for a partner. She also knew Mr. Moraes from a network of HNWIs, who were interested in social impact investment, and invited him to join the project as well.

At the time, Brazil had no social impact funds. Mr. Izzo said, "The three of us were the only ones thinking about creating a social impact investment fund in Brazil. At the time, the term didn't even exist in the country. We knew we wanted to invest in companies that would generate social impact."

Vox Capital began investing in January 2009 with US$3 million in funding from Ms. Michel's Potencia Ventures, which played a key role as the seed investor in the fund. Initially, the Vox fund team wanted to focus on businesses that developed scalable solutions for the most pressing problems of the Brazilian BoP population—education, healthcare, housing, and access to finance.

According to data from the Secretariat for Strategic Affairs of Brazil and internal Vox documents,[120] the BoP population comprises social classes C, D, and E, defined as families with a total monthly income below US$1,500 for an average family of 3.7 people. In 2015, the BoP

[120] Internal Vox data and documents.

segment consisted of more than 120 million people, or 60% of the Brazilian population, who accounted for 47% of the total annual income in Brazil.[121] Despite representing such a huge market, this population has been underserved by both private and public sectors. For example, data from Plano CDE, one of Vox Fund I's portfolio companies, showed that as of 2014, 70% of the BoP population has received only elementary school education, 50% lacked access to any type of credit, and 75% relied entirely on public health services.[122]

The team chose Sao Paulo for Vox Capital's headquarters. Over the years, this city has become the center of business and investment for both Latin American and Brazilian companies, as well as the center of the Brazilian VC industry. Located in the Southeast region, it has the largest number of start-ups and, by numbers, was the biggest market for the BoP socioeconomic segment, making it an ideal location for the fund to tap those opportunities.

At first, Vox Capital managed the initial US$3 million of capital through Paradox Holding, its first investment fund. This fund was essentially a "proof-of-concept," operating with the goal of building a track record to demonstrate its approach and impact to potential subsequent investors. As Mr. Moraes noted, "The target was to invest in five to seven businesses during a three-year span to test the concept and to determine the optimal model for impact investing. Eventually, we would choose among providing debt, seed equity, and Series A financing."

None of the three founders had ever run a fund before, so the test phase was also a period of learning by doing. Ms. Michel commented, "At the beginning, it was difficult to find the right companies to invest in, as Vox didn't have the brand recognition nor the network of relationships with other fund managers that it has today." During that phase, the fund did not receive any 'conventional' management fees. According to Mr. Izzo, "The fees were barely enough to cover the operational costs."

The five initial deals, although small, played a critical role in Vox's further growth, as the team built an initial track record and gained valuable experience.

Raising Fund I

In 2011, based on the success with the "proof-of-concept," Paradox Holdings, the Vox Capital team started raising its Vox Impact Investing Fund I (Vox Fund I). The process took almost 30 months, from the initial talks with potential investors in July 2011 to the fund's final close in January 2014. Perhaps the key challenge was the fact that the team was "very young"—at 33, Mr. Izzo, the CEO, was the eldest—and lacked significant investing experience, as it was composed primarily of first-time fund managers.

Between 2011 and 2012, Vox received formal certification from the Comissão de Valores Mobiliários (CVM) – the Brazilian SEC – allowing it to become a fund manager. "At that time, we were a 'no-profit', not a non-profit, and we wanted to create a sustainable, scalable business

[121] Internal Vox data and documents.
[122] Internal Vox data and documents.

model," said one of the partners, "and for that we needed a proper fund structure." The fund charged an annual management fee of 2.5% of committed capital during the investment period. Thereafter, the fee was based on the aggregate cost of current investments. Of the 2.5%, 2.25% came to the fund itself, as 0.15% went to BTG Pactual, the fund's administrator, and 0.10% went to CM Capital markets, the management company.

The performance fee (carry) was set at the standard 20% level with a 6% hurdle rate. The payout was based on the European waterfall method in which LPs received their entire committed capital and the hurdle before GPs received carry. To show their commitment to the social impact cause, however, Vox's founders made an unconventional move—by contract, they would be entitled only to half of their carry share (10% rather than the agreed 20%) if the fund failed to achieve a Global Impact Investment Rating System (GIIRS) Fund Ratings score of at least three stars out of five.[123]

In September 2012, Vox Capital's Fund I had its first close of R$24 million (US$6.3 million), launching the first Brazilian impact investing fund regulated by CVM. By the final close in January 2014, Vox had raised a total R$84 million (US$35.5 million). The LPs included three development finance institutions (DFIs)–IDB's MIF, the Development Bank of Latin America (CAF), and the Brazilian Innovation Agency (FINEP) — which together provided 44% of committed capital. Thirty-five Brazilian high net worth individuals and families provided 32% of committed capital, while two international foundations, Instituto Alana and Ms. Michel's Potencia Ventures, supplied the balance.

While the team was raising the fund, they recruited two new individuals to augment their skills. Gilberto Ribeiro, with experience in the mining and financial industries, joined the team in March 2011 as a partner in charge of investment evaluation, financial control, and portfolio management. In September 2012, Erik Cavalcante, who had founded and managed Brazil's first alternative VC-backed telecom company, joined the team as a partner responsible for portfolio management and operational improvement. His background complemented Vox's need for credibility among entrepreneurs and experience in running start-up businesses. "It seemed most suitable to bring on board a person who had been a VC-backed entrepreneur," said Mr. Cavalcante.

Both of the additions to the team were looking for new challenges and were deeply passionate about social impact. Along with their skills and experience, they were a complementary fit to the existing Vox team, creating a five-partner group. Over time, this shrank to four when one of the founding partners, Ms. Michel, moved to London to expand her impact investing focus. Since then, she has only been involved with Vox as an LP. As of August 2015, Vox's staff of nine included the four partners and five others, including associates, interns, and administrative staff.

[123]GIIRS Ratings are a well-known international standard for impact measurement. They are rigorous, comprehensive, and comparable ratings of a company or a fund's social and environmental impact.

Creating Vox Labs: A Vehicle for Deal Flow

For VC funds, a pillar of a sustainable business model is deal flow. Initially, deal sourcing at Vox was done mostly through the founders' personal networks and existing relationships with members of the business community. Some of the opportunities came as cold calls by prospective companies, while others were sourced through Vox's participation in VC/entrepreneurship events organized in Sao Paulo.

As Vox's brand recognition rose, it encountered more potential investees, but few met the firm's parameters. "In analyzing these opportunities," Mr. Moraes commented, "we found that many had good entrepreneurs and good business models with promising potential, but they were too immature." In response, the team started Vox Labs in 2011. This seed stage program would act as a platform for deal sourcing, working alongside incubators and accelerators, and providing financing to help its companies mature into candidates for equity investment.

According to one of the partners, Vox Labs was envisioned as a very "hands-off" platform that would consume only 1% of the team's time and 2.3% of the fund's capital (US$800,000). To achieve the team's time allocation target, Vox Labs investee companies were accelerated by third-party providers – Artemisia, Instituto Quintessa, 21212, and Pipa. The estimated investment per company was planned to range from R$50,000 to R$300,000 (US$20,000-$125,000), but the actual amount tended toward the higher end of that range, averaging between R$150,000 and R$300,000 (US$60,000-125,000).

Vox Labs structures its investments as convertible debt to reduce the risk. The portfolio company pays interest of 1% of the principal per month over a period up to 12 months with a repayment grace period of up to one year. By the end of the grace period, Vox can either i) convert both the principal and interest into shares of the company, at a 20% discount to the company's valuation in its first equity financing round or ii) receive interest and principal payments in a period of up to two years. During the one-year monitoring phase, the third-party operators manage the acceleration program to minimize the demands on the partners. "If the company screened by Vox Capital is too immature, we send the entrepreneur to Vox Labs. We make decisions about it quickly—in one to two months since we first considered the opportunity," explained one of the partners. He continued, "To be approved by Vox Labs, an entrepreneur first needs to get the permission from a third-party accelerator who manages and operates the Vox Labs accelerator program. The whole process is very flexible and works much better than we initially thought it would."

In general, when assessing an investment of either equity or a convertible note, Vox placed the highest weight on the entrepreneur and the quality of the team. Mr. Cavalcante commented, "For example, an entrepreneur who seeks to build a company in the healthcare sector needs to have a certain level of experience and knowledge in the field. In addition, an ideal entrepreneur must have a good business sense and the ability to create a good team that can deliver. Finally, he or she needs to have some general knowledge of the technology involved."

Portfolio Overview

As noted earlier, by September 2015, Vox Capital had screened over 1,430 investment opportunities throughout Brazil. Of these, 32% were in education, 21% in healthcare, 8% in financial services, 7% in housing, and 32% in other sectors. Further analysis was performed on more than 750 of the screened companies. In total, the fund made 19 investments, which serve more than 150,000 people daily. Out of these, nine were in Vox's equity fund and 10 in Vox Labs. In total, these investment account for 83.3% of the fund's committed capital. The equity investments ranged from R$1,000,000 to R$10,000,000 (between US$450,000 and R$4,500,000) per company.

By September 2015, the fund had one write-off (Balcão de Empregos) but no returns-generating exits. An early write-off like this is expected for a fund at this stage. The old adage "lemons ripen faster than plums" applies to VC as well as horticulture, as faltering companies often reveal their inability to perform before promising companies can conclusively prove their strength. Because VC funds usually have small partnership groups, cutting an under-performing company is an important and difficult decision, as it allows the team to focus its energies on companies with more potential, rather than trying to rescue a floundering operation.

Thumbnail descriptions of the companies from Fund I are listed by date of investment below. Please note that the description includes two companies from Vox Labs—Biva and INBEP—which were interviewed as part of the information gathering process. These are also listed by date of investment, and are followed by descriptions of the impacts of each.

Individual Company Thumbnails

<u>Saútil</u>

In November 2012 Vox Capital invested R$3.7 million (US$1.8 million) in Saútil, a technology company that develops software and hardware solutions to provide organized and up-to-date information about resources and services offered by the public and private Unified Health System (SUS) that serves the entire Brazilian population. The company aimed to address the asymmetry of information between high- and low-income patients in the Brazilian healthcare market, by providing the latter with more easily accessible information about waiting times and pharmacy inventories at public healthcare facilities. For more on Saútil, please see the discussion in the Mini-Cases section.

<u>Balcão de Empregos</u>

Vox made an equity investment of R$2.6 million (US$1.3 million) in Balcão de Empregos in December 2012 through Fund I. The company operated a job placement marketplace that combined online operations with physical locations. The founders sought to decrease the asymmetry of information between companies and low-income job candidates, reducing the time and cost of a job-hunt. The investment was written-off in the beginning of 2015, as it had not reached its expected business goals.

The management team, led by the founders, proved unable to manage the company's growth, largely due to challenges in recruiting and retaining talented staff. For two years, Vox had worked with the entrepreneurs to improve performance and turn around the business. Eventually, it became clear that Vox's efforts were not paying off, and the fund decided to write off the investment to free up the team's time for more promising portfolio companies.

Bille

In 2012, through Fund I, Vox Capital invested R$0.4 million (US$200,000) in Bille Empreendimentos (Bille), a Special Purpose Enterprise (SPE) created by the Brazilian housing developer Crinale, which built and managed houses for low-income families in Brazil that were financed through the "Minha Casa, Minha Vida" government program. The program was trying to address the 8 million home housing deficit s by making it more affordable for low-income households to become homeowners. As of August 2015, Crinale had built over 4,000 low-cost houses, providing affordable homes for approximately 50,000 low-income households.

Bille, Crinale's largest fund, was established to build and sell 1,200 affordable houses in cities with fewer than 50,000 inhabitants in the interior of the states of São Paulo and Minas Gerais. Bille uses an innovative, lean business model that reduces the time from development to sale by more than 50%. The average price per house (45-48 square meters) is around R$115,000 (US$54,000). The harsh macro-economic conditions in 2015, however, have slowed the sale of the lots. Even so, according to Vox's valuation as of June 30, 2015, the company was the portfolio's top performer, with an unrealized multiple on invested capital (MOIC) of 2.92x and an IRR of 43.9%.

Plano CDE

Plano CDE is a market research company founded in 2009 to focus on the Brazilian BoP. The company uses both qualitative and quantitative methodologies to produce "independent, objective, relevant, and actionable" market surveys of the socioeconomic segments C, D, and E. These surveys, along with consulting and training, help clients address the needs of lower-income markets in hopes of boosting positive social impacts through the development of new policies, initiatives, products, and services. Plano CDE's clients include groups from the public and non-profit sectors, such as the Brazilian government and various domestic and international foundations, corporations, and multinationals.

Through Fund I, Vox invested R$3.4 million (US$1.6 million) in the company in December 2012, primarily to access its research and expertise on the Brazilian BoP.

Tamboro

In November 2013, Vox invested R$3.6 (US$1.6 million) in Tamboro through Fund I, and later had a follow-on investment of R$3.0 for a total of R$6.7 invested as of September 2015. The company offers an affordable technological solution (an educational software platform that includes games) to improve the quality of education in Brazilian primary and secondary schools. While its software initially focused on language and mathematics, over time it expanded into other subjects and has been adopted by a major textbook publisher. The company is in conversations with other vendors to enhance their printed material.

As of August 2015, Tamboro's products have been used by 8,000 students at 50 schools in several cities across Brazil. Through its partnerships with publishers, the company expects to reach 300,000 students in the next three years. As of September 2015 the company had not yet carried out a formal impact evaluation of its technology, but it claims that teachers report gains of up to 20% in student performance on standardized tests. For an extended discussion of Tamboro, please see the Mini-Cases section.

ToLife

ToLife is a healthcare technology company developing a combined hardware and software solution for triage processes in healthcare units. The company automates the patients' admission processes and risk classifications, allowing medical personnel to optimize their decisions about the patient's care.

As Mr. Moraes described:

> When a patient gets into an emergency room, he or she waits in the line. First, a nurse needs to measure, read, and report patient's vital signs (body temperature, oxygen level, blood pressure, heart rate, etc.). In Brazilian public healthcare facilities, this process usually takes between 10 to 15 minutes (as opposed to 4 minutes in Brazil's private healthcare facilities). ToLife's 'beta' product integrates all the medical devices so the nurse doesn't need to write down the collected information on paper. The information goes directly into the system reducing the standard data collection time by 80%, from 10-15 minutes to 2.5 minutes. That is an 80% time-reduction in the emergency room enabling nurses and doctors to dedicate more time to analyzing the information, making decisions, and focusing on the urgent problems of patients in critical conditions. More than 50% of deaths from heart attacks and strokes could be avoided by an immediate response in the emergency room. It is impossible to know how many lives have been saved because this technology has been implemented - but it has a huge impact.

The company produces both the equipment (hardware) and the software, and also provides maintenance and an e-learning platform for nurses and medical personnel. Vox Capital invested R$8.1million (US$3.5 million) in ToLife in November 2013 through Fund I with a later follow-on investment of R$2.0 for a total of R$10.1 invested as of September 2015. As of September 2015, ToLife's product was installed in over 5,000 public healthcare units across 900 municipalities in Brazil. Despite such high market penetration, the company has not met its targeted financial results as it still working on the optimal business model – software vs. hardware vs. maintenance and services.

Avante

Before launching Avante in 2012, Bernardo Bonjean, a former Paris-Dakkar Rally motorcycle racer, spent most of his career in finance with Brazil's leading investment banks and asset managers. Motivated by "the desire to leave a legacy for his children," Mr. Bonjean was inspired "to 'humanize' the financial services [industry]" by transforming it into a client-centered model. He established Avante to provide comprehensive financial solutions for families and micro-entrepreneurs in Brazil's *favelas* (urban slums). According to Avante, over 14 million people live in more than 1,000 *favelas* in Brazil, but less than 1% of that population has access to traditional retail banking services.

Avante offers banking services at considerably lower fees than do traditional financial service providers. For example, it charges 2.5%-4% in monthly interest on microloans, while commercial banks charge around 8% per month. Moreover, Avante's micro-loans exhibit a 0.5% average default rate, compared to 4.0% for its Brazilian peers. Instead of assessing collateral, Avante's loan approval process assesses a prospective client's creditworthiness through a proprietary evaluation system that performs algorithmic (objective) analysis on data from public databases, which is then informed by the human (subjective) assessment of Avante's agents who work with clients on the ground.[124]

Vox invested R$4.1 million (US$1.8 million) in the company through Fund I in July 2014 and has also helped the company to refine its business model.

ProRadis

Founded in 2013, ProRadis aims to decrease the cost of medical imaging diagnostics for Brazilians who do not have access to private health insurance. The company plans to negotiate bulk rates with private providers and redirect demand toward less popular time slots during which facilities are generally underused. To do so, ProRadis has developed a proprietary technological platform that links seamlessly with existing systems and doubles as an all-in-one facilities management tool by providing radiology information systems and picture archiving and communication systems (RIS/PACS) and enterprise resource planning (ERP) features.

The company targets a market of 40-50 million people—middle income individuals who cannot afford private health insurance but who could otherwise afford medical imaging services at the rates negotiated by insurance companies with private healthcare providers. For example, in 2015 the average waiting-time for an MRI scan in Brazil's public health sector was almost two years. With access to spare capacity in the private sector at an affordable price, public sector patients could obtain such examinations measurably faster—in a week or two. This change is expected to have an important social impact in terms of better treatment of injuries and, as a result of faster diagnosis, greater productivity and quality of life.

Vox's Fund I invested R$3.1 million (US$1.4 million) in the company. Investors in this round included Wayra, an accelerator program of Spanish global telecom giant Telefónica, and Performa, a Brazilian VC fund in which the MIF also invested.

Magnamed

[124] There is an extensive amount of research on the difference between "institutional" lending, which relies on hard data, and "relationship" lending, which focuses on the personal and reputational information to be gleaned by individuals in the community.

In 2005, Wataru Ueda, Tatsuo Suzuki, and Toru Kinjo started Magnamed in Mr. Ueda's mother's garage. They planned to design, develop, and manufacture more reliable, lower-cost, easily maintained ventilators to be used in ambulances and intensive care units (ICUs), and, although based in Brazil, they aimed to address the needs of the global market.

Over time, Magnamed developed and successfully introduced a portable respirator in Brazilian and international markets. The product is both cheaper and easier to operate than existing devices, most of which are produced in Europe, and its operational simplicity makes it safer to operate by emergency personnel with limited training and skills. Thus, it has become an attractive choice for the more resource-constrained health systems around the globe, and it has helped rescue teams to respond more efficiently to emergencies and save more lives.

On August 31 2015, Vox's Fund I invested R$10.1 million (US$2.8 million) in Magnamed as a part of an R$10.7 million (US$3.0 million) financing round, co-investing alongside Criatec, a Brazilian VC fund. Mr. Ueda noted that they talked to a couple of international funds but decided on a domestic investor because of its social impact agenda. Mr. Ueda emphasized that all three co-founders went to Brazilian public universities and received government funding to create their product, and thus felt the need “to give something back to the community. That is the underlying reason of our partnership with Vox. At the same time, [we also expect] Vox's network will help us grow."

INBEP

In 2012, INBEP was established to provide affordable e-learning and skill certification for individuals and companies. As of September 2015, the company claimed to have trained more than 6,000 students, many of whom attribute their employment to INBEP certification.

In April 2015, Vox invested R$300,000 (US$100,000) in the company through Vox Labs using a convertible note. According to Tiago Maciel, the company's co-founder and CEO, in addition to money and Vox's reputation in the market, being part of a business accelerator is essential for INBEP's growth.

Biva

Biva is a peer-to-peer (P2P) lending platform founded in 2014 by Eduardo Teixeira, Paulo David, and Jorge Vargas Neto. The company aims to bring down the funding cost faced by micro-entrepreneurs and SME business owners. "Our dream was to bring innovation into the Brazilian financial system," said one of the owners. The other added, "Our mission is to reach people that don't have access to the traditional system and instead work with the informal market, and bring them back to the system. Our model provides lower costs for borrowers and higher returns for investors."

Along with providing capital at lower cost to borrowers, Biva offers higher returns to small investors, essentially “democratizing” the access to investment products. Biva’s platform links the demand side—borrowers—and the supply side—capital providers. On the demand side, Biva offers uncollateralized credit at an interest rate of 2%-4% per month; in comparison to traditional lenders that charge up to 14% per month on credit cards. On the supply side, the minimum investment required to be a Biva creditor (capital provider) is R$500 (US$220). In April 2015 Vox invested R$300,000 (US$100,000) through Vox Labs using a convertible note.

Financial Results and Impact

Being the first mover in an undeveloped impact investing VC ecosystem required investors' patience, especially in terms of financial performance. One of Vox's LPs noted:

> They are a great team, open to learning and discussing their ideas with other people. They have great social and business networks. They are setting reasonable expectations and communicating them well to investors. Their reporting to LPs is superb. They always hire the right consultants, and they are good at communicating difficult ideas—for example, saying to an entrepreneur that she or he would not make a good CEO. They have no problem in admitting their mistakes, which we appreciate.

As of June 30 2015, Vox Fund I's portfolio TVPI stood at 1.08x with a reported unrealized IRR of 3.9%, no exits, and one write-off (Balcão de Empregos). The fund's portfolio as of June 2015 included the companies listed in Table II-1 below.

Table II-1: Vox's Fund I Portfolio Key Dates and Figures as of June 30, 2015[125]

Company Name	Date Founded	Description	Date Invested (1st round)	Amount Invested[126] *(millions)*	Current Status	GIIRS IBM Rating[127]
Saútil	2011	Healthcare information management	Nov. 2012	R$3.7	Invested	Platinum
Balcão de Empregos	2003	Job placement marketplace	Dec. 2012	R$2.6	Written-off in 2015	N/A
Bille	2009[128]	Housing development and construction	Dec. 2012	R$0.4	Invested	Platinum

[125] The data in this table are from the September 2015 private placement memorandum and accompanying slide deck for Fund I and Vox Labs, which was collected by Vox Capital as of June 30, 2015. The amount invested figures, however, are as of September 30, 2015.
[126] The Amount Invested figures are as of September 30, 2015.
[127] Refers to Global Impact Investing Rating System (GIIRS) Impact Business Models (IBM) Rating. Per definition, The Impact Model Rating recognizes business models that are specifically designed to solve social or environmental problems through company products or services, target customers, value chain, ownership, or operations.
[128] The year applies to Crinale, the parent company that managed Bille, one of its special purpose vehicles.

Plano CDE	2009	BoP focused market research	Dec. 2012	R$3.4	Invested	Gold
Tamboro	2011	Education technological solutions	Nov. 2013	R$6.7[129]	Invested	Platinum
ToLife	2009	Healthcare information management	Nov. 2013	R$10.1[130]	Invested	Platinum
Avante	2012	BoP microfinance	July 2014	R$4.1	Invested	Platinum
ProRadis	2013	Medical imaging diagnostics IT solutions	June 2015	R$3.1	Invested	Silver
Magnamed	2005	Respiratory medical devices	Aug. 2015	R$10.1	Invested	Gold
Other investments (Vox Labs)	2011	Investments in Vox Labs	See Table II-2	R$1.855	Invested	N/A

The Vox Labs seed investment program was also funded through Fund I. As of September 2015, Vox Labs had made 10 investments, as shown in Table II-2 below. Four of these (Saútil, Quitei, Kidopi, and WPensar) had been fully exited, meaning these companies either fully repaid the debt Vox had provided or (in the case of Saútil) were converted to equity positions. Two (Banco Perola and +60 Saúde), have been partially exited, or partially repaid their debt. Three (Biva, Kidu and INBEP) are active, and one was written off (CDI Lan). Vox Labs was not designed to deliver a return, but rather to contribute to Vox Capital's pipeline, hence only 2.3% of Fund I's committed capital was reserved for Vox Labs. One of Vox's equity investments (Saútil) emerged from this program.

[129] First round was R$3.6 million and follow-on round was R$3.0 million for a total of $6.7 million as of September 30, 2015.

[130] First round was R$8.1 million and follow-on round was R$2.0 million for a total of $10.1 million as of September 30, 2015.

Table II-2: Vox Labs' Portfolio Key Dates and Figures[131]

Company Name	Sector	Date Invested	Amount Invested *(in thousands)*	Current Status
CDI Lan	Retail/Distribution	Jan. 2011	R$150	Written-off
Saútil	Healthcare	Dec. 2011	R$55	Graduated/Fully exited[132]
WPensar	Education	April 2013	R$300	Graduated/Fully exited
Quitei	Financial Services	April 2013	R$150	Graduated/Fully exited
Kidopi	Healthcare	May 2013	R$50	Graduated/Fully exited
Banco Perola	Financial Services	Dec. 2011	R$100	Graduated/Repaying
+60 Saúde	Healthcare	Sep. 2013	R$150	Graduated/Repaying
Kidu	Education	June 2014	R$300	Graduated/ Grace period
INBEP	Education	April 2015	R$300	Graduated/Grace period
Biva	Financial Services	April 2015	R$300	Active/Grace period

The fund's social impact investment thesis, along with its overall performance, was very well received by one interviewed Vox LP that was new to this type of investment despite its history as an LP in VC funds. The LP's representative commented, "We understand that Vox's success would be measured not only through financial returns, but also by an internationally accepted methodology for measuring social impact. Also, we realize Vox is a first time fund manager facing some typical first-time manager challenges. From our perspective, in general, the fund has performed very well. Vox's team proved very capable and intelligent. Importantly for LPs, the fund's reporting quality has been high."

Based on quantitative and qualitative data provided by the GPs, entrepreneurs, and the MIF, the research team analyzed the impact of Vox Fund I's investments in two categories, direct impact and indirect impact, which are described in further detail below. It must be noted that these results, particularly the assessment of indirect impacts, should be considered indicative rather than exhaustive. Therefore, it is important to highlight two aspects of the impact analysis. First, the research team analyzed direct and indirect impacts only for interviewed companies – i.e.

[131] The data in this table are from the September 2015 private placement memorandum and accompanying slide deck for Fund I and Vox Labs, which was collected by Vox Capital as of June 30, 2015.
[132] The investment was exited on December 13, 2013 through equity conversion.

seven equity investments (Avante, Bille, Magnamed, Plano CDE, ProRadis, Saútil, Tamboro) and two companies from the Vox Labs portfolio (Biva and INBEP), funded through convertible notes. Secondly, the question of attribution invariably arises, as it is often difficult to determine with any certainty the impact—direct or indirect—of a given fund's investment in a portfolio company (e.g., the company may have multiple investors, and the indirect impacts are often influenced by many extraneous forces). Although the impact of a single investment fund may be debated, for simplicity purposes throughout this study it is assumed that the fund manager's investment implies that it has had an impact on the company's performance.

Direct Impact

Besides providing the needed capital for growth, this research found evidence that Vox had a direct impact on its investees in many important areas, as shown in Table II-3. Vox's nine portfolio companies have together generated R$34.4 million (US$12.8 million) in 2014 revenues and employed 410 people as of April 16, 2015.[133] These figures represent an increase of 84% in revenues and 105% in employment since the date Vox invested in the companies. On the other hand, in the period from the date of the investment to April 16, 2015, the average wage across the entire Vox portfolio decreased by 1%. This 1% decrease in average wages was driven in part by one company that outsourced a number of positions. If, however, we remove this company from the calculations, the average wage actually increased by 8%. It is once again worth noting that without a more sophisticated identification strategy these impacts cannot necessarily be causally attributed to Vox's investment in the companies.[134]

Table II-3: Vox Portfolio Performance[135]

Increase in Employment	Change in Average Wages	Increase in Revenue
105%	-1%	84%

To guide the discussion of Vox's direct impact on its portfolio companies, Table II-V below rates Vox's direct involvement with each of its portfolio companies, using four criteria and a scale of 0-4 depicted using ideograms ("Harvey balls") for enhanced readability. The ratings are discussed in greater detail below the table. The four criteria are as follows:

[133] In the case of one portfolio company, Bille, the employment figures include a number of positions that were outsourced and thus are supported by Bille, but do not appear on its payroll.

[134] In general, as discussed in the Challenges Section in the Introduction, accurately determining an investment fund's impact is very complex. Data are often sparse and difficult to obtain, and even when available, often based on small samples and best estimates.

[135] For Increase in Employment and Change in Average Wage, the performance data has been calculated by observing the respective aggregate data across all portfolio companies from Fund I in the period since the initial investment through April 16, 2015. For Increase in Revenues the performance was calculated usual the annual revenues figures from the respective year each company received initial investment from Vox through the year end 2014. All data were sourced from Vox.

- Effectiveness of committed capital: How important was Vox's funding to the company? Was the company barred from accessing alternative financing? A rating of 0 would indicate that Vox's investment was not deemed important and the company was seemingly not constrained in any way from accessing other sources of financing. A rating of 4 would indicate that Vox's investment was considered to be critically important and the company's access to other sources of financing was apparently severely limited or non-existent.

- Effectiveness of business training: Did Vox provide business training? If so, was the training provided useful and was Vox the only available source of the training? A rating of 0 would indicate that Vox either did not provide business training, or the training provided was not considered useful and/or was widely available from other sources (i.e., Vox would have not needed to provide it). A "4" would indicate that Vox was deemed to have provided vitally important business training, and that similar training was apparently unavailable to the company.

- Effectiveness of ESG training: Did Vox provide useful ESG training/guidance? Did it improve the company's environmental, social responsibility, and/or good governance practices? Was similar ESG training otherwise unavailable to the company? A rating of 0 would indicate that Vox provided no ESG training. A rating of 4 would indicate that Vox provided what was deemed as critically important ESG training that substantially improved the company's environmental, social responsibility, and/or good governance practices.

- Effectiveness of networking opportunities: Did Vox assist the firm with introductions or referrals to other businesses, professionals, government agencies, etc.? Were these activities useful to the company? A rating of 0 would indicate that Vox provided no networking assistance to the company. A rating of 4 would indicate that Vox provided ample networking assistance to the company and that it was considered to have had a substantial beneficial impact on one or more aspects of the company's business.

In the discussion below, the research team considered the general trends of Vox's direct impact on the seven equity portfolio companies and two Vox Labs companies under study (listed alphabetically).

Table II-4: Direct Impact

Company	Committed Capital	Business Training	ESG	Networking
Avante	◕	●	◕	●
Biva	◑	◕	◕	●
Bille	◑	◔	◔	◕
INBEP	◕	◕	◕	◕
Magnamed	◔	◕	◕	◕
Plano CDE	●	◕	◕	●
ProRadis	◑	●	◕	●
Saútil	●	●	◕	●
Tamboro	◕	◕	◕	●

Direct Impact: Committed Capital

The average rating of 2.7 out of 4 in the “Committed Capital” column echoes the importance of Vox’s investment for each company's growth as well as the relative shortage of capital for early stage impact investing in Brazil.

Vox's capital has been crucial for Saútil and Plano CDE, because both companies have experienced a severe illiquidity crisis. Saútil’s liquidity issues have been driven by product development costs and difficulty in defining the business model, while Plano CDE encountered timing challenges due to delays in receiving payments from its many public sector clients. Financing was a significant factor for Tamboro, INBEP and Avante as well. Biva, Bille, and ProRadis valued Vox's capital but had other funding sources available. Lastly, Magnamed, a start-up considered as a typical medical devices investment opportunity without specific BoP benefits, had other financing options available but chose to work with Vox primarily because it was a Brazilian fund focusing on impact investing.

Direct Impact: Business Training

Vox's assistance with business training, general strategy, and business development issues has been important for the observed portfolio companies, as seen in the overall average rating of 3.1 out of 4. Portfolio companies viewed business training as the second most important feature of Vox’s involvement (after networking), above committed capital and ESG assistance. One portfolio company CEO noted: “Our earlier investor was a passive, hands-off investor. We hope Vox is going to be more hands-on. We are still learning things related to financials and accounting - we count on their support in that regard."

Vox considers ways to improve its companies' social impact, often through informal workshops with entrepreneurs. The workshops usually last a half day, and provide a forum to thoroughly discuss business and development plans. These discussions might include identifying metrics, milestones, and capital allocation tranches, which often depend on achieving certain social impact targets. For example, Vox uses a formal *theory of change* – i.e. a logical framework that outlines the process by which impact will be achieved. This methodology is commonplace in the public policy and philanthropy/non-profit context, but currently still quite rare in the private sector, and even less common in the venture capital industry.

Vox helps portfolio companies to develop a formal theory of change model to understand how they can achieve a social impact and/or fine-tune their business models. The fund managers envision expanding the social impact workshops with the MIF's help to address topics such as outcome metrics, which often require longer periods to become apparent.

For Avante, ProRadis, and Saútil, Vox's advice has been instrumental in reshaping their business models and strategies. Based on Vox's feedback, Avante changed its business model, while Saútil reinvented its strategy. ProRadis needed to commercialize its service at a lower price point. Mr. Ribeiro further explained: "In working with ProRadis, I was able to shift their business plan to focus on measureable outcomes rather than vague hopes. This change allowed the team to set clear goals and metrics, greatly increasing their efficiency of execution."

According to another portfolio company's CEO, the Vox team's deep knowledge of Brazil's BoP socioeconomic segment allowed the company to better address these needs. He emphasized, "Vox brought us the mind-set of how to approach those people."

The entrepreneurs would welcome even more help with management training. The CEO of one of the portfolio companies noted, "All Vox portfolio companies have outstanding market opportunities. But not all of them have management teams that are on par with the challenges that come along. That is where Vox could add value."

Direct Impact: ESG

As impact VC investors, the Vox team fundamentally believes that achieving social impact is as important as producing financial results. Thus, ESG is viewed as a critically important criterion in its portfolio companies. Assessed relative to a typical VC portfolio, each of Vox's companies would score very high on the ESG criterion. To make the assessment more nuanced, therefore, we assessed Vox's impact on its companies' ESG policies relative to what would be expected from an impact investing vehicle, rather than a traditional VC fund. That means Vox's points would be discounted for the same effort when compared to non- social-impact focused VC funds. The average rating of 2.8 out of 4 therefore is not surprising - eight out of nine companies ranked its ESG training and advice as 3, or substantially helpful. For only one company, Bille, it was rated as less relevant, at a 1.

Vox's assistance is especially beneficial and innovative when encouraging its portfolio companies to design and implement their theory of change. One portfolio company's CEO commented: "We started working on the theory of change and designed the social impact map.

We created some indicators to measure our social impact. The process was very helpful. We clearly defined our social vision and talked about our mission. We now think more about social impact. Before working with Vox, we had no idea how to quantify or measure our social influence. Now we can measure it and plan accordingly."

Direct Impact: Networking

Networking is Vox's most important addition to the observed portfolio companies, with an average ranking of 3.7 out of 4. For some companies, Vox's network was the primary reason for partnering with the fund.

According to Vox's Mr. Cavalcante, the fund's network of contacts has been extremely helpful to portfolio companies that needed advice regarding product and business development, as well as market access. These contacts may also assess and validate investment proposals and often suggest better solutions. He added, "Some entrepreneurs, like Bernardo Bonjean of Avante, needed less help as he already had a broad network of contacts but Vox's network was still one of the main reasons he worked with us. Others are more reliant on our networks."

One portfolio company's CEO commented, "Vox has a large and influential network that we don't have. The partners introduced us to some high-profile people that are actively involved in our business now." Magnamed's Mr. Ueda hopes to use Vox's network to strengthen his company's position in the Brazilian market, where the company currently sells 50% of its products. Mauricio Prado, the CEO of Plano CDE, said that having Vox on his board helped the company find new clients.

Indirect Impact

As discussed in the Challenges Section in the Introduction, indirect impact—that is, the impact on a community or region due to the investment in a given company—is even more difficult to measure than direct impact. Here, an assessment based on existing data and interviews with relevant actors is provided as an indication of the role that Vox's companies have played in their community and region. However, as noted earlier, the question of precise attribution is not addressed in this study, and for simplicity purposes, it is assumed that Vox's investment in the company was instrumental in creating these impacts.

The ratings in the following indirect impact section are therefore based on the premise that the fund's investment enabled the portfolio company's indirect impact. Also, it is important to remember that impact is assessed *to date*, without anticipating any future impact if the companies succeed as planned.[136] As in the Direct Impact section above, outcomes are evaluated in four categories rated on a scale from 0 to 4, described in Table II-5 below. The four criteria are as follows:

- Created ancillary economic growth and/or job creation: To what extent did the portfolio company promote economic growth or create jobs among its peer firms, vendors,

[136] Research shows that even professional venture capitalists are very bad at forecasting performance of their companies. See William R. Kerr, Ramana Nanda, and Matthew Rhodes-Kropf, "Entrepreneurship as Experimentation," *The Journal of Economic Perspectives* 28, no. 3 (2014): 25-48.

suppliers, or greater community? A rating of 0 would indicate that the company was deemed to have had no impact on economic growth and/or job creation in the greater community. A rating of 4 would indicate that the company was considered to have had an extraordinarily beneficial economic impact on the greater community.

- Promoted innovation: To what extent did the portfolio company spur innovation, e.g., develop a new product or process or pioneer a new market? A rating of 0 would indicate that the company was considered not innovative. A rating of 4 would indicate that the company was considered to have had an extraordinarily beneficial impact on innovation promotion.

- Improved quality of life for BoP citizens: To what extent did the company create products, services, or other benefits for Brazil's BoP households and individuals? A rating of 0 would indicate that the company seemed to have no impact on Brazil's BoP. A rating of 4 would indicate that the company was deemed to have had an extraordinarily beneficial impact on Brazil's BoP.

- Improved impact VC ecosystem: To what extent did the overall Vox portfolio improve the impact ecosystem in Brazil for entrepreneurial and venture capital activities? A rating of 0 would indicate that Vox's portfolio was considered to have had little or no effect on the impact entrepreneurial and VC ecosystem of Brazil, while a rating of 4 would indicate a likely outsized and extraordinarily large impact.

Table II-5: Indirect Impact

Company	**Ancillary growth & job creation**	**Innovation**	**BoP**	**Impact VC ecosystem**
Avante	◑	◕	●	
Biva	◔	◑	◑	
Bille	●	◔	◕	
INBEP	◑	◑	◑	
Magnamed	◕	●	◑	●
Plano CDE	◔	◔	●	
ProRadis	◑	◕	◔	
Saútil	◔	◑	◕	
Tamboro	◑	◑	●	

The research team found that although Vox Capital focuses in the areas of health, finance, and education, the way in which its investee companies achieve their own impact—that is, the way Vox achieves an indirect impact—can vary considerably across business models. Therefore, the diverse business models in the Vox portfolio seem to have had disparate impacts along the four different dimensions highlighted in our analysis.

Indirect Impact: Ancillary Growth and Job Creation

With respect to ancillary growth and job creation, the results seem mixed across the portfolio, and record the lowest average score (2 out of 4) in comparison to other categories. However, such results should not raise red flags, given that the observed companies are early stage startups. They are therefore extremely young and thus naturally have a very limited impact on job creation. Magnamed was one of the companies that scored high in this category; with its substantial operations and high number of subcontractors and suppliers, it has helped create many indirect jobs and contributed to economic growth. With continued growth, it may ultimately create many more indirect jobs in Brazil and abroad.

Other companies like Avante, INBEP, ProRadis, or Tamboro have not created as many direct or indirect jobs, but have the potential to indirectly stimulate the Brazilian job market in the future, either by facilitating access to finance for businesses, or by contributing to strengthening the pool of potential entrepreneurs. Lastly, Biva, Plano CDE, and Saútil have had a very limited impact in terms of the indirect job creation to date. Again, if they succeed in growing, they would likely create a number of indirect jobs—whether through Biva's P2P lending, Plano CDE's provision of BoP market research, or Saútil's health care data.

Indirect Impact: Innovation

With respect to the promotion of innovation, results are again mixed, averaging 2.2 out of 4. Naturally, most of the portfolio companies feature at least some degree of innovation, and/or have developed new products and processes. In most cases, however, they did not constitute technological breakthroughs or are based on solutions already tested in other geographies (e.g., Biva's P2P lending). For other companies, the innovation does not appear to go beyond a market reorientation (e.g. Plano CDE's research focus on impact and the BoP). That said, the proprietary technological platform developed by ProRadis seems to depart considerably from other solutions offered in Brazil, and in the rest of the world. A similar case is Avante, which introduced disruptive digital technology and processes in the micro-credit segment in Brazilian *favelas* through its sales agents that perform the whole micro-credit application and approval process on tablets while in the field. Finally, Magnamed leads in this indirect impact category with the highest rating, which is driven by the company's proprietary medical technology for respiratory devices that challenges long-established global producers.

Finally, for Vox, the question of technological innovation has been important in refining its investment strategy. The fund manager has concluded that it needs to invest in tech-enabled companies if it wants to support successful, impactful, high-growth companies, as the non-tech solutions likely would not scale. As a result, Vox moved from its original target of housing, education, finance, and health, to its current focus on tech-enabled finance, tech-enabled health, and tech-enabled education.

Indirect Impact: BoP

Most of Vox's portfolio companies have a substantial focus on the BoP and alleviation of poverty, averaging 2.8 out of 4. Avante specifically targets the population in Brazilian *favelas*, and has the potential to advance the BoP by easing access to finance and, thus, business opportunities. Similarly, Tamboro's founding mission involved improving the primary and secondary education of low-income students, which as of 2015 accounted for 90% of its products' users. In fact, the company's pricing system aims to facilitate the tool's adoption by schools with limited resources. Plano CDE also has a clear BoP focus, and its research insights could help the private and public sector devise new solutions to alleviate poverty. At the same time, while Saútil has a clear BoP focus and aspires to improve the quality of healthcare for the low-income population that uses the public health system, its business model appears to have limited scalability. Thus, while it intends to have high BoP impact, the company has been unable to achieve it so far.

In the case of Biva and INBEP, while both seem to have improved the living conditions and education of the low-income population, their business models cater mainly to middle-income families and individuals, reducing their BoP impact rating. In the healthcare sector, Magnamed designs and produces emergency medical equipment that is more affordable and easier to operate, so that it might benefit low-income communities. However, as of September 2015, low-income household and individuals did not seem to be the focus of Magnamed's business model. Lastly, ProRadis' business model targets the uninsured middle class and does not yet reach the BoP.

Indirect Impact: Impact VC Ecosystem

As the first Brazilian VC fund with an explicit focus on impact investing, Vox Capital's crucial impact on the ecosystem was mentioned by all interviewees. It builds on the previous experience of the social impact business accelerator Artemisia and impact investing vehicle, Potencia Ventures —unsurprisingly, as Artemisia's and Potencia Ventures' founder, Ms. Michel, is a co-founder and an LP in Vox Capital. This focus influences not only the investment strategy of the fund, but also its organization and its interaction with the portfolio companies.

For example, Vox Capital employs a full-time *impact officer* to work with Vox's partners and provide specialized assessment of their capabilities for the fund, as well as external support for portfolio companies. Along with providing an assessment of the impact potential of prospective investments, the impact officer monitors impact indicators (such as jobs created, number of people affected by specific product or service, number of public sector clients – e.g. hospitals – that use a specific service or product, etc.) and provides impact-related advice to portfolio companies. The advice includes helping the portfolio companies develop a formal theory of change, as noted earlier in the text. The impact officer commented, "It was hard in the beginning, as the information was scarce. Gilberto [Ribeiro] started developing the theory of change process and he taught himself the method. I learned from him by working on assignments and projects. It took a lot of time to distill all the available information."

From an impact perspective, the development of a theory of change helps the portfolio companies refine their business models in order to maximize their impact, and also provides the basic data for more sophisticated program evaluation methodologies in the future. These methodologies include *ex-ante* and/or *ex-post* impact evaluations, which can provide very robust quantitative and qualitative evidence about a portfolio company's actual impact on socioeconomic variables of interest. As of September 2015 none of these analyses had been carried out yet, but the fund had been exploring the possibility of collaborating with the MIF to perform an impact evaluation of two of its investments.

Additionally, Vox's methodology has also been adopted by some of its investors to develop a theory of change when assessing the potential social impact of any investment. A member of an LP's team commented, "We want to have social impact with our investments. For us, the most important factor with all our investments is the financial return; social impact is the second. However, we want to develop a methodology— e.g. a tool or a matrix— that will help us analyze social impact and I have discussed it with Daniel [Izzo, CEO of Vox]. We are trying to use Vox's framework in some of our analyses."

Another LP said that working with Vox made his team rethink some of their operations. He commented, "Our organization currently reports results by showing financial results on one side and the technology advances on the other. However, we are considering starting a third reporting area, the social impact, using metrics like jobs created and tax revenue. This reporting would be for Vox and for other funds, and showcase social impact investments that not only benefit the BoP segment, but also the whole Brazilian economy. We also consider making social investing easier by opening new funds that would focus on typical social impact areas— for example, improving education—but also on linking technology and social impact investing. Another example of this type of linkage could be new construction technologies that result in cheaper houses due to lower construction costs."

Vox required all of its portfolio companies to be rated by GIIRS. As of October 2015, the MIF funded the costs of this process for one year. Moreover, while not required, the fund also encouraged its investees to pursue a B-Corporation[137] or analogous impact investing certificate.

All of the above highlights the fund's commitment to impact, exemplified by the partners' view that impact evaluation is not different from auditing: a costly but essential value-adding business function that should be an integral part of the fund's operations. However, although robust evidence of the fund's impact should be a comparative advantage when raising new capital, Vox Capital will also need to demonstrate to mainstream investors that it can integrate evaluations into its business model in a sustainable manner, beyond the initial support from multilateral organizations.

Mini-cases

As part of the report, the research team focused on two companies to provide an in-depth description of their interaction with Vox and the ways in which Vox has added value to their operations. In particular, the two investments discussed in greater detail are Tamboro, an

[137] According to the website www.bcorporation.net, B Corps are for-profit companies certified by the nonprofit B Lab to meet rigorous standards of social and environmental performance, accountability, and transparency. Furthermore, B Lab is defined as a nonprofit organization that serves a global movement of people using business as a force for good. (B Lab, "What are B Corps?" B Lab, accessed November 3, 2015. https://www.bcorporation.net/what-are-b-corps.)

educational software company, and Saútil, a technology company that provides information about resources and services offered by the Brazilian public and private healthcare systems.

Tamboro – "For All Without Exceptions"

Summary

In 2011, four entrepreneurs from diverse backgrounds with a shared commitment to improving kindergarten through high school (K-12) education in Brazil founded an adaptive learning software company. They named their fledgling venture "Tamboro," a word that means "for all without exception" in the language of the indigenous Ingaricó people of northern Brazil. Tamboro's CEO, Samara Werner, and her partners set out to develop a technology-based alternative to the increasingly unpopular—and, in their view, ineffective—model of classroom-based teaching in Brazil.

In 2013, after two years of development, the company's first market-ready product called *Ludz* was released, featuring educational games based on Brazil's elementary and secondary school mathematics curriculum. The company's second market-product, *Vivaz*, was released in 2015 and built on the flexible platform the company had developed for *Ludz*. *Vivaz* encompasses the entire curriculum taught in Brazilian public and private schools from first through fourth grades. Tamboro developed *Vivaz* in collaboration with Saraiva, a large Brazilian textbook publisher. Around 90% of students using the company's products come from low-income public schools. Impressed by the passion of Tamboro's founders and the potential scalability of its products, Vox invested an initial R$3.6 million in November 2013.[138] Along with the capital that has been used for product development, partnership with Vox has helped Tamboro with strategic, operational, and governance issues and provided access to new clients and opportunities.

As of September 2015 approximately 6,000 public school students (across 24 schools) and nearly 1,800 private school students (across 11 schools) have been using Tamboro's products.

Company Background

As of 2015, approximately 85% of Brazil's 75 million K-12 students attended public schools, which generally lagged their private counterparts. Only about 70% of public school students progressed beyond the ninth grade. Moreover, there was a distinct gap in educational achievement between wealthy and poor students. Tamboro aimed to improve the quality and efficacy of the Brazilian education system by addressing several distinct problems, which included lack of interest in school and learning, poor performance on standardized tests, teacher absenteeism, and discrepancy between school curricula and the needs of the workplace.

- <u>Lack of interest in school and learning:</u> In Ms. Werner's view, young, low-income primary and secondary public school students perceive the school environment and the traditional way of teaching as unstimulating, dull, and lacking interaction. The poor performance of Brazil's K-12 students as measured by widely used international metrics has clearly indicated problems with the country's approach. Grade repetition, for instance,

[138] As of September 30, 2015 the total amount Vox invested in Tamboro with follow-up rounds amounted to R$6.7 million.

has been widespread in Brazil and is firmly linked to poor performance in mathematics, which is prevalent among the socioeconomically disadvantaged students attending public schools. This lack of interest in education has been associated with the dismal student retention rate.[139]

- Poor performance on standardized tests: Among the 65 countries that participated in the 2012 PISA[140] assessment of 15-year olds, Brazil ranked 58th in math proficiency,[141] 55th in reading,[142] and 59th in science.[143] Tamboro management believes that the traditional method of teaching used in Brazilian public schools—and the unwillingness or inability of teachers to use technological resources—has discouraged students from realizing their full potential.

- Teacher absenteeism: Together with student attendance problems, many schools have been plagued by absenteeism among their teachers. Compounding this problem, substitute teachers for math and science have been particularly scarce.

- Discrepancy between school curricula and demands of the workplace: According to Ms. Werner, one in five students believes that the sole purpose of staying in school is to obtain a degree, rather than to prepare for a career. Given the widespread poverty and socioeconomic inequality in Brazil, this belief represents a steep barrier to educational achievement. Ms. Werner believes that Brazilian public schools have been unable to tackle issues that concern young adults and are not perceived as preparing students for jobs after graduation.

Yet, some positive changes have been taking place in the Brazilian education system. While Brazil performed below the OECD average, its mean performance on the PISA assessment test in mathematics jumped 10% between 2003 and 2012, a gain second only to Indonesia's.[144] Improvements have been particularly noteworthy among low performers in mathematics, reading, and science.

[139] Analysis performed by CEBRAP and the Victor Civita Foundation. (Fundação Victor Civita, "Fundação Victor Civita," accessed October 15, http://www.fvc.org.br/.)

[140] "PISA" is an acronym for the Programme for International Student Assessment, a worldwide measure of 15-year-old students' proficiency in mathematics, science, and reading developed by the Organisation for Economic Cooperation and Development (OECD). The OECD undertook the first PISA test in 2000 and has repeated it every three years since.

[141] Among Latin American countries, Brazil performed below Chile, Mexico, Uruguay, and Costa Rica but above Argentina, Colombia, and Peru in mathematics. (OECD, *Country Note - Programme for International Student Assessment (PISA) Results from PISA 2012: Brazil*, OECD, 2012, http://www.oecd.org/pisa/keyfindings/PISA-2012-results-brazil.pdf.)

[142] Among Latin American countries, Brazil performs below Chile, Costa Rica, Mexico, and Uruguay but above Argentina, Peru, and Colombia in reading. (OECD, *Country Note - Programme for International Student Assessment (PISA) Results from PISA 2012: Brazil*, OECD, 2012, http://www.oecd.org/pisa/keyfindings/PISA-2012-results-brazil.pdf.)

[143] Among Latin American countries, Brazil's 2012 results were below Chile, Costa Rica, Uruguay, Mexico, and Argentina, but above Peru and Colombia in science. (OECD, *Country Note - Programme for International Student Assessment (PISA) Results from PISA 2012: Brazil*, OECD, 2012, http://www.oecd.org/pisa/keyfindings/PISA-2012-results-brazil.pdf.)

[144] OECD, *Country Note - Programme for International Student Assessment (PISA) Results from PISA 2012: Brazil*, OECD, 2012, http://www.oecd.org/pisa/keyfindings/PISA-2012-results-brazil.pdf.

In general, educational products offered to public and private schools in Brazil differ in both quality and price. For instance, textbook publishers often create two versions of the same book, a basic version and a more expensive, higher quality version. Public schools typically utilize the inferior versions, while private schools utilize the better, more expensive materials. Ms. Werner's goal has been to bridge that gap. However, she was wary of starting an education-oriented non-governmental organization (NGO) dependent on potentially unreliable government funding. Instead, she co-founded Tamboro.

Ms. Werner is an engineer with a strong technology background that has been working with innovative approaches to education since 1988. She met Maíra Pimentel and Mario Ripper, two out of her three eventual partners, while working at the Oi Futuro Institute, a non-profit organization focusing on education and technology founded by Oi, the largest telecommunications company in Brazil. The fourth founding partner is Pedro Genescá, a lawyer specializing in corporate social responsibility matters.

During its first year of operation in 2011, Tamboro was financed by its founders, and focused on mathematics due to its unpopularity with yet importance for Brazilian students. The company's first market-wide product, *Ludz*, offers a suite of educational computer games based on Brazil's elementary school mathematics curriculum.

The company's egalitarian ethos—the founders firmly believe that all children should have equal access to top-quality educational resources regardless of their socioeconomic background—informed Tamboro's decision to market the same suite of products to both public and private schools. This business model set Tamboro apart from other market players, which typically offered higher quality products—at a higher cost—to private schools with more resources.

Initially, Tamboro partnered with the Department of Education in Rio de Janeiro, which paid the company to develop a product, called *ZUUUM*. Based on that experience, Tamboro stated developing *Ludz* in 2011. However, the Department fell behind on its payments, increasing liquidity pressure on the young company and convincing the founders that they needed to seek other sources of working capital to finance *Ludz*'s development. In 2012, Tamboro received investments from four angel investors and Leblon Equities, a Brazilian asset management firm.

Leblon provided R$3 million in Series A financing to ensure sufficient capital for additional improvements, along with future product development and market growth. Although this investment was unorthodox for Leblon, which typically targeted larger, publicly traded companies, the investors believed in the company's potential and its founders' vision. Swift-moving Leblon preempted Vox, which had also been contemplating an investment, and closed the round in one month.

The cash infusion enabled Tamboro to launch *Ludz* through a pilot program for five public schools in August 2012. A market-ready version with math curriculum for 5th and 9th grades was released in 2013. Finally, in 2014, the company released *Ludz* version covering full math curriculum for all secondary school.

In early 2014, Vox invested R$3.6 million in Tamboro in a deal with a post-money valuation of R$17.5 million to continue the improvement of exiting products and development of new ones, such as *Vivaz*. The product was built on the flexible platform the company had designed for *Ludz*. *Vivaz* included all school subjects taught in Brazilian schools from first through fourth grades - Mathematics, Portuguese, Science, History, and Geography. The product developed in 2014 was released in 2015 for a small number of schools as a pilot version to systematize the best way to implement it with teachers and students.

Looking back on Tamboro's financing, Ms. Werner noted that despite a lengthy due diligence process, Vox proved to be a good investor, providing capital, assistance, advice, and opportunities through its wide network of contacts.

Investment thesis

The Brazilian educational software market offered substantial growth potential at the time Vox was contemplating its investment in Tamboro. Brazilian textbook publishers were increasingly seeking software solutions to complement their books, and schools were demanding similar products. Indeed, in the wake of the debut of Apple's iPad in April 2010, the possibility that schools might discard textbooks entirely in favor of desktop, laptop, and/or tablet computers as the principal tools of pedagogy was becoming an increasingly plausible scenario.[145]

Tamboro's long-term business prospects thus looked bright, and Vox was optimistic about receiving a good return on its investment in the company. In the short term, Vox expected rapid growth and believed Tamboro was capable of reaching 300,000 students within two to three years. As an impact investor, Vox was also interested in funding companies with the potential for creating beneficial social impact, and Tamboro appeared to meet this requirement as well.

Certainly, there was much work to be done to improve K-12 educational outcomes in Brazil. In addition to Brazil's poor PISA results, research conducted by the Lemann Foundation found a substantial disparity between the school attendance rates of children in the top socioeconomic quartile and those in the bottom quartile.[146] Tamboro's goal of providing the same high-quality software products to both wealthy private schools and resource-constrained public schools dovetailed nicely with Vox's social impact mission.

"[Tamboro] is a very good investment target from the innovation and technology perspective, as well as by the social impact criteria," said one interviewee, the head of investments at one of Vox's LPs. "The company helps to close the quality gap between private and public schools." Another Vox LP also welcomed the investment in Tamboro, but for different reasons; "For us, the most important factor with all investments is the financial return; social impact is second." For Vox and its LPs alike, an investment in Tamboro satisfied both criteria.

[145] See, e.g., Carlo Rotella, "No Child Left Untableted." *The New York Times,* September 12, 2013, http://www.nytimes.com/2013/09/15/magazine/no-child-left-untableted.html?pagewanted=all;
Sophia Hollander, "Private School Goes all in With Tech," *Wall Street Journal,* November 18, 2012. http://www.wsj.com/articles/SB10001424127887323353204578127104047173928;
Gregory Ferenstein, "Will Computers Replace Schoolteachers?" *CNN.com*, June 9, 2011. http://www.cnn.com/2011/OPINION/06/09/computers.replace.teachers/.

[146] Lemann Foundation, *Inequality in K-12 Brazilian Education*, Illinois: Lemann Foundation, November 2014, https://lemanncenter.stanford.edu/sites/default/files/Louzano_BR_Inequality_Nov2014.pdf.

Value creation

According to Ms. Werner, Vox has been a valuable investor in Tamboro, providing not only capital, but also expertise and personalized assistance through its network of professional contacts. Prior to Vox's investment, the company's accounting practices and governance structure were relatively informal. With Vox's help, however, Tamboro gained the GIIRS Impact Business Model[147] (IBM) Platinum rating with a score of 113, which qualified it to become a B-corporation.[148] This rating reflected not just the nature of Tamboro's business, but also its internal efforts to develop a more sophisticated accounting system, a proper governance structure, and a stock option plan for its non-executive employees. The GIIRS score also reflected Tamboro's implementation of a program of monthly in-house training workshops on industry topics like student literacy and teacher training. Finally, Tamboro earned three stars on GIIRS Impact Operations Rating because 90% of students using its products came from low-income public schools.[149]

Encouraged by Vox, Tamboro has further improved the working environment for its employees, especially the software developers that are the heart of its workforce. These employees received additional benefits, such as charge cards that can be used for business-related meals and transportation. These changes have made Tamboro a more attractive employer and helped the company expand its full-time workforce to 25 as of August 2015. The company has also created jobs by hiring as many as 100 subcontractors during periods of intense product development.

Lessons learned

- **Investing in the right talent is crucial:** Despite the co-founders' enthusiasm and the quality of their software, Tamboro's biggest challenge was executing a go-to-market strategy for its products, as the team did not have the needed experience. To resolve this issue, the company hired Mr. Leonardo Rossi, a sales manager with experience in Tamboro's target market in October 2015. Mr. Rossi developed a commercial plan with different sales strategies for schools and large educational systems. He also implemented a strategy where Tamboro licenses its platform to educational groups that work with their own content.
- **Diversify the customer base:** According to Paola Pedroza, one of the MIF's investment officers who supervises Vox, the company needed to address different markets with equal focus rather than focusing on one. She noted, "Tamboro should focus on both private and

[147] The Impact Model Rating recognizes business models that are specifically designed to solve social or environmental problems through company products or services, target customers, value chain, ownership, or operations. GIIRS rating follows the triple bottom line principle, measuring environmental, social impact and financial return.

[148] Companies that earn an overall score of at least 80 on the assessment are eligible to become a Certified B Corp. This rating identifies a company as having met the certification requirements of B Lab, the nonprofit organization that maintains B Corp standards and oversees the certification process. (B Lab, "What are B Corps?" B Lab, accessed November 3, 2015, https://www.bcorporation.net/what-are-b-corps.)

[149] The Impact Operations Rating evaluates the effects of the company's operations on the wider community. These operations are are sometimes referred to as the company's "ESG" (Environmental, Social, and Governance) practices.

public markets." This became obvious after the company experienced a liquidity crisis due to delayed payments from the Rio de Janeiro Department of Education.

- **Meeting market demands and developments:** Some interviewees suggested that Tamboro must keep up with market demands and developments in order to stay competitive. The company has experienced difficulties selling its digital products, perhaps because they are too technologically advanced for Brazilian schools, as many still operate a curriculum without technological solutions. Therefore, Tamboro is developing a system that combines print and digital content, which will be adaptable to the processes of each school that wants to use the company's products. Mr. Werner believes that this new approach will help the company's products to be adopted more widely.

Current status

As of August 2015, Tamboro's products were in use by nearly 8,000 students in 45 schools throughout Brazil.

The schools' financing models vary. At public institutions, third parties such as foundations or the government assume the costs of Tamboro's software. In contrast, some private schools pay for the products themselves, while at others, parents pay for the software out of pocket. For these parents, the price is around R$32 (US$8.5) per year for the *Ludz* math package and R$79 (US$21) per year for the more comprehensive *Vivaz* package, which covers five subjects.

Tamboro's prospects for growth look bright. The company's bundling arrangement with textbook publisher Saraiva, which will sell Tamboro's *Vivaz* title alongside the publisher's products, is expected to increase revenues for 2016. Under the terms of the agreement, Tamboro will receive 40% of the software price for every bundle sold to the approximately 160,000 private-sector students that purchase Saraiva textbooks every year. In the public-sector market, Tamboro's software is provided free to schools, with the government covering the cost.

Saútil

Summary

In 2011, Edgard Morato and Fernando Fernandes founded Saútil, a health technology company that helps users navigate Brazil's complicated public healthcare system, the Sistema Único de Saúde (SUS). In December of that year, Vox invested R$55,000 in Saútil in the form of a convertible loan as part of the Vox Labs program. In 2012, Saútil participated in Artemisia, the social-enterprise business accelerator started by one of Vox Capital's founding partners, and in December 2013, Vox converted its investment in Saútil to equity as part of R$3.6 million (US$1.5 million) financing round. During its first five years, Saútil explored several different business models but struggled to find one that generated sustainable revenues and supported the firm's growth. As of August 2015, the company's business model was still uncertain and the firm remained in Vox's portfolio.

Company Background

Saútil's founders originally devised the online platform with the goal of revolutionizing access to health resources in Brazil, especially for the BoP population. While private healthcare facilities offer speedy service to those who can afford it, approximately 150 million Brazilians (75% of the population) rely on the state-run SUS for their medical needs. The system, however, has been notoriously difficult to navigate and is plagued by long wait times that hamper timely access to care. A lack of easily accessible information on where and how patients can receive health services and medications contributes to SUS's inefficiencies. In fact, many low-income families are not even fully aware of the public health benefits available to them.

Dissemination of important healthcare information has been complicated by the system's fragmentation—the federal government has set broad directives and regulations but left the implementation to local governments. Thus, each of Brazil's cities and municipalities has its own SUS network, resulting in large variations across the country. Additionally, many municipalities' websites provide little information on their health service networks, and any available information is frequently hard to find. Furthermore, many SUS employees lack either the knowledge or the motivation to provide important health benefits information such as where to obtain treatment or find free prescription medications. This lack of easily accessible information has led people to seek help in a small number of well-known facilities, such as hospital emergency rooms, which have been suffering from overcrowding and long wait times. Other medical facilities, at the same time, have been underutilized.

Saútil's online platform provides a comprehensive, simple, and easily accessible map of publicly available health resources. For example, a user can enter the exact medication or procedure she needs and the city or town in which she lives. The site then informs her about the locations that provide the services she requires, along with additional information about accessing the services, such as the necessary documents and approvals. Increased internet usage among low-income Brazilians, especially with the advent of smartphones, has made Saútil's online product more accessible to BoP consumers across the country.[150] By 2015, the firm's proprietary database contained information on the availability of exams and medicines for all but four of Brazil's 5,570 cities.

Finding a Business Model

In the company's four-year history, finding a business model had posed a thorny problem. In 2011, Saútil's founders focused on developing the online platform, but did not define a clear monetization strategy. They initially expected that the platform would generate a large user population that could be monetized through advertising revenues, only to realize that they would need at least 10 million visitors per month to do so. The founders deemed this number beyond the company's capabilities at the time, especially given their lack of capital for marketing. The founders also considered a model in which companies that provided medical services could

[150] According to one 2014 study, 71% of Brazilians said they connected to the Internet at least once every waking hour, higher than the global and the US average of 52%. (Jonathan Levin, "Venture Capital Heads to Brazil, Defying Economic Slump," *Bloomberg Business,* May 4, 2015. http://www.bloomberg.com/news/articles/2015-05-05/venture-capital-heads-to-brazil-defying-economic-slump.)

directly sponsor the website in exchange for client referrals. Again, they found such a model unsustainable, because the site could not generate a sufficient number of customers to interest corporations in sponsorship.

In 2012, Saútil's founders devised and implemented the company's second major business model while participating in Artemisia. Concurrently, Saútil's founders were introduced to Vox Capital through Artemisia, and received an investment from Vox Labs. At this point, Saútil's business model targeted corporate clients with large numbers of uninsured employees. For a small monthly fee, Saútil provided company employees with access to its online healthcare information database and to a telephone hotline staffed by nurses. The internet in 2012 was still relatively new to many low-income Brazilians, so the telephone call center served individuals who could not yet access online resources. To support this model, Saútil hired 22 employees and developed new technology and processes to handle the private information of its expected users.

By the end of 2013, however, this business model, too, had proved to be unviable. Rising levels of macroeconomic uncertainty in the Brazilian business community resulted in cost cutting and layoffs. Many of Saútil's potential clients could not afford to invest in providing increased services to their remaining workforce. Many advised Saútil to contact them when the business environment improved. After consultations with Vox Capital, the management team abandoned this plan and laid off its workforce.

In 2014, the company, comprising only its two founders and the proprietary software, developed a third business model in conjunction with Comunitas, a Brazilian NGO that encourages social responsibility among the country's corporate leaders and their public sector peers.[151] Comunitas launched a joint project with the administration of the city of Pelotas, a community of over 340,000 people in southern Brazil.[152] The program included an initiative to integrate Saútil's platform with the city's website to provide better access to public healthcare information. To extend this service to citizens without internet access, the project installed touch-screen internet kiosks in community health facilities. Using Saútil's software and the kiosks, patients could immediately find a relevant specialist for a follow-up, or leave their appointment with a prescription and quickly find where they could get it filled.

To finance the implementation of Saútil's system required support from third parties, either NGOs like Comunitas or large companies that want to sponsor community initiatives as part of their corporate social responsibility (CSR) programs. As of mid-2015, Saútil was in the late stages of implementing the system in Pelotas, and had signed a contract for a second project that would be implemented across a consortium of 10 cities in Santa Catarina state that pooled health resources to serve their combined population of 700,000 people.

As of September 2015, despite the advancements of the third business model, Saútil still did not exhibit a sustainable growth trajectory. According to interviewees, the company has had difficulty generating steady revenues and has been chronically undercapitalized.

151 Comunitas' website can be found at http://comunitas.org.br/.
[152] Estimated population as of July 2015 from the Instituto Brasileiro de Geografia e Estatistica.

Investment Thesis

In December 2011, the Vox team invested R$55,000 in Saútil through its Vox Labs program after being introduced to the company through Artemisia. In December 2013, Vox Capital converted Vox Labs' loan in Saútil to equity as part of an R$3.6 million (US$1.5million) financing round. Saútil satisfied Vox's standard investment criteria: the company targeted the BoP and sought to achieve social impact; it operated within healthcare, one of Vox's target industries; and its technology-driven solution was highly scalable, offering substantial growth potential that could generate high financial returns for the fund.

Value Creation

In addition to the capital it provided, Vox has supported Saútil with strategic advice, particularly related to the team's efforts to create a sustainable business model. As Saútil pursued its second business model (the employee health information model), Vox's investment funded the development of the company's operations, the hiring of nurses to staff the telephone hotline, improvements to the company's databases and computer security, and the installation of new servers to increase the platform's capacity to handle large corporate customers. When this model faltered, Vox also played an important role in helping Saútil's team devise its third business model. Furthermore, Vox has helped Saútil's team to think more carefully about the company's social impact and how it will improve the lives of Brazil's low-income families.

Lessons Learned

- **Unsuccessful business models can sabotage great products:** Saútil's digital product provides an easy, relatively inexpensive solution to the inefficiencies that have plagued Brazil's SUS. Rather than reorganizing the healthcare system, or providing additional health services, Saútil's product has improved SUS's effectiveness by putting knowledge in the hands of the citizens, helping them better utilize the resources that were already available to them. Despite this elegant solution, Saútil has been unable to achieve sustainable growth without a clear, scalable business plan. As of August 2015, the company had not yet found a sustainable business model. Without revenues to support its operations and growth strategy, it has been unable to capture sizable market share and achieve its social goals.

- **The healthcare sector in emerging market presents numerous challenges:** Healthcare in emerging markets can be a particularly difficult sector. A key challenge involves crafting a solution that is compatible with the local healthcare culture.[153] One LP explained, "You can have the best solutions and engaged partners but this doesn't mean much if the client doesn't see the value of your product." Additionally, large scale solutions often require working with the public sector, and the inconsistency of public sector funding often complicates the execution of business plans. Finally, technology-driven solutions are often limited by the technological capabilities of existing healthcare

[153] IFC, *IFC International Health Conference 2011: Private Health Care is Growing Rapidly in Emerging Market Countries, Says IFC*, IFC, May 2011. http://www.ifc.org/wps/wcm/connect/bec6d7804970befd9694d6336b93d75f/Health2011_FS.pdf?MOD=AJPERES.

facilities, which may not yet support digital patient records, appointment scheduling, and medication inventories.

- **Even the most elegant solution is useless if no one wants it:** Clearly, neither the governments that ran the local SUS nor the BoP patients whose lives would be improved by better healthcare access felt sufficient pain to change the status quo. This question, known in VC circles as “Will the dogs eat the dog food?” is a critical question of entrepreneurial existence. If the customers do not think the solution addresses an important problem, they will not change their behavior to use it.

Current Status

At the beginning of 2015, Saútil was unexpectedly contacted by a large, private-sector company that wanted to provide Saútil’s services to its large workforce. The company wanted to revive the second business model that provided health information through the call center, for which Saútil no longer had the necessary infrastructure. Instead, Saútil offered a modified product including both print materials and a digital map with information on local public and private healthcare resources. Responding to Brazil’s healthcare culture, the new product focused more closely on reactionary and curative medical care, instead of prevention.

As of August 2015, Saútil has been pursuing a pilot program with this large potential client. Additionally, it has been in the second stage of implementing the Pelotas project, which features health kiosks in community health centers, and has been planning to launch the second such project for the ten-city consortium in Santa Catarina. The company has been further exploring ways to monetize this third business model by devising a strategy in which the community governments where Saútil’s programs were implemented would pay Saútil to maintain the system.

Many challenges remain for Saútil. The effectiveness of its third business model remains unproven, making the future uncertain. As a result, some LPs have thought the company unlikely to succeed. As one LP explained, "Without a capital injection they won't be able to move on and even then, their constantly changing business model is yet to show some tangible success." Yet the company responds to a tangible need of Brazil’s BoP population and has found some level of demand for its product. Vox has provided critical financing and advice, but the amount of customer demand and willingness to pay is still unclear.

Conclusions and Next Steps

In this section the development of Vox’s interaction with the MIF is discussed, and its challenges in the current environment and in the future are outlined.

Interaction with the MIF

Daniel Izzo, Vox's Managing Partner, first met with Susana Garcia-Robles, the head of the MIF’s Early Stage Financing Group, in 2009 at a Brazilian Venture Capital and Private Equity Association (ABVCAP) meeting. At the time, the MIF had no Brazilian social impact funds in its portfolio, but was looking to invest in the sector. On the other hand, Mr. Izzo with his partners, Mr. Moraes and Ms. Michel, was keen to raise exactly that type of vehicle. Mr. Izzo noted, “We were very motivated to get funding from the MIF, as it is the most experienced VC LP in Latin America and its reputation is unparalleled. Also we wanted to diversify the LP base, which mostly consisted of Brazilian high net worth individuals, and balance it with ‘institutional’ money.”

The MIF started due diligence in 2011, and the investment in the fund was approved in 2012. Paola Pedroza of the MIF, who has been covering the investment in Vox from the start, as well as the MIF’s investments in other social impact VC funds across Latin America, explained: “After sorting out a few regulatory constraints as an international investor we decided to get on board. Brazilian VC is still in a developing phase and as such lacks consistent regulatory structures.” But the protracted process, was also driven by regulatory challenges. As recounted by Ms. Garcia-Robles, the organization had some initial concerns about Vox’s team given their youth and lack of investment experience. But, Ms. Garcia-Robles noted, “They were all very passionate about social impact, which was quite impressive. They suggested and negotiated half of the carry to be linked to social impact deliverables and rating by GIIRS. This was very unorthodox and bold, and showed their deep commitment to the cause.”

Since the investment, Vox’s team has matured into their specific roles. Ms. Pedroza has been pleased, explaining, “I am glad to say that the team excelled in many ways. They have proven to be sharp, clever, diligent, organized, well connected, and innovative. Although they didn’t know each other for very long, they complement each other and made a great team. Their reporting has been extremely professional—Gilberto [Ribeiro] is very diligent in his role of the investment evaluation and financial control, and it is a pleasure to work with him. Antonio [Moraes] has the contacts and does investor relations and public relations. Daniel [Izzo] is the visionary, always thinking about the next step. Meanwhile Eric [Cavalcante] takes care of the operational side of the business.”

From Vox’s side, Mr. Izzo believed that the MIF had played an important part in the fund’s development: "They [the MIF] have never burdened us with unnecessary requirements unlike other, less experienced LPs. The MIF’s comments, critiques, and suggestions are always constructive, and we have often relied on their support. They are the most experienced VC investor in Latin America, and the level of best practices they brought to Vox gave us great credibility and helped us attract other LPs. The MIF brought in standardized high-quality reporting, which soon became our biggest advantage. They have given us important support—when one LP tried to block the investment in Avante, because it disliked the idea of doing business in *favelas*, Susana [Garcia Robles], who had an observer seat on the investment committee, helped us overcome that resistance. "

Ms. Michel, Vox co-founder and now an LP, agreed: "The MIF’s investment in Vox sent an important signal to the nascent social impact investing market and gave the fund a stamp of approval." Vox’s early investors, primarily Brazilian HNWIs, lacked the investment experience to help the fund build its processes and governance. Ms. Michel elaborated, "These investors were more interested in the altruistic aspect of impact investing than in financial gain, although one of the HNWI’s helped with human resource issues. The MIF, on the other hand, made sure the team kept its feet on the ground. The MIF helped them stand out and brought [for Vox] unprecedented rigor to the investing, reporting, and deal management processes. For example, this type of reporting involved more work, but increased the confidence of other LPs. The MIF’s criticism has always been constructive and negative feedback was always given in a private setting."

In the future, Ms. Michel hopes that the MIF might take a more prominent role on the Investment Committee and increase its beneficial influence. While having LPs on the Investment Committee is unusual in developed markets, it is not uncommon in Latin America, where their presence can help share industry best practices.

Challenges

The Vox team has matured and is constantly improving, but many endogenous and exogenous challenges lie ahead of them. Below, those believed to be most important are described.

One of Vox's main challenges has been sourcing deals, despite the firm's position as one of the leaders on the social impact investing scene in Brazil. With the BoP market in excess of 120 million people, one would expect that an abundant array of opportunities would exist.[154] The team reviews around 250 opportunities per year to close two to three deals.[155] One LP raised this concern, saying, "Either Brazil does not have a lot of social-impact start-ups or Vox does not find these opportunities as effectively as it should. I don't know if their model of sourcing is the most efficient. When I look at Vox's pipeline, I'm not very excited, especially in the context of such a huge market on the demand side, and very few capital providers on the supply side."

In addition, awareness of concepts associated with VC investing remains limited among Brazilian entrepreneurs targeting BoP consumers. Mr. Cavalcante, a Vox partner, explained that even in 2015, a number of prospective entrepreneurs in Brazil did not fully understand the notion of a start-up, or what to expect from a VC fund during and after the investing process. For example, according to Mr. Cavalcante, many entrepreneurs still do not understand the difference between equity and debt investments, asking questions such as "What is the interest rate Vox charges on the provided capital?" Such concerns and questions are not uncommon in emerging VC markets and contribute to the use of convertible debt as in the case of Vox Labs. Not only is the concept more intuitive, but these quasi-equity structures mitigate the risks associated with exits, even though they limit the potential upside.

Mr. Izzo highlighted another challenge that involved the difficulty of measuring impact and the amount of time over which it appears. He explained a misunderstanding common in the ecosystem about the results of impact investing:

> Many people expect a 'certain' impact of an investment even before the capital is invested. They assume an investment will produce a desired social impact. At Vox Capital, though, impact is seen as another layer of risk, akin to business risk, and has to be accepted as such just as much as the business risk is accepted in VC. Measuring impact is also more complex and trickier than measuring business success— it is not limited to just serving the BoP segment for good photographs for report covers. Balancing between good business decisions and the largest impact measured in a robust way is especially challenging.

[154] Internal Vox documents and interviews.
[155] Internal Vox documents and interviews.

As opposed to the conventional view that impact investments produce lower returns, Mr. Izzo expects Vox's investments to generate higher returns than those of traditional VCs, because such impact investments aim to improve the customer's overall quality of life. He explains:

> Social impact businesses in which we invest should ideally generate a higher degree of loyalty, a stable and large client base, and a good image because they do not prioritize profit. Consumers understand and feel that. Therefore, such businesses need to spend less on marketing and public relations and these savings, in a scalable business in the longer run, can be transferred to research and development or product development, or just used to improve margins through lower relative costs. All that, in the end, can produce very high returns for investors.

Another important challenge, as noted by Mr. Moraes, is creating successful exits: "We hope to have our first exits in three to five years [2018-2020]. According to our conservative scenario we expect four write-offs out of 10 investments; two or three would lose some money; two would have mediocre returns and only one would have a successful exit with a good multiple. In such scenario, we expect Fund I's performance to be around 15% IRR."

However, with Fund I's unrealized performance of 1.08x MOIC and an IRR of 3.9% reported to LPs as of June 30, 2015, these results are yet to be seen. One improvement that would help in achieving better results is to insist on stricter deal terms with portfolio companies, as one LP commented:

> Vox should be more 'cynical' when negotiating deal terms with potential investees, as the deal structure should provide more protection for investors. The Vox team receives very positive feedback from entrepreneurs—they work with portfolio companies to help with sales strategy and execution, business partners, or in matters involving government. However, sometimes Vox gets too close with entrepreneurs, becoming too subjective. Perhaps, it should focus more on actions that are in the best interest of investors.

Furthermore, achieving good exits will be impossible without a good team, and hiring and retaining top talent, both for the fund and for investee companies, is yet another challenge. Mr. Izzo noted: "The high-quality talent pool is relatively small in Brazil. Compensation packages at Vox or at investee companies are not as good as in banking or at international corporations, and there is more risk involved in working at Vox or at start-ups, making it harder for us to attract the top talent. On the positive side, the talent can be motivated by stock option plans, a common practice in the VC industry. However, the inexperienced founders of investee companies may be reluctant to hire highly-skilled professionals or give them stock options because they fear being overshadowed by them."

Vox's need for a strong track record was echoed by interviewed investors. That aspect is not only important for Vox but for the development of the whole ecosystem, as the lack of performance results will dissuade investors. Mr. Ribeiro noted:

> So far we have discussed intentions. We want to facilitate social change while making financial returns. Vox wants to transform the market and create positive outcomes but all of this is still a work in progress. Without successful exits we will lose our

> credibility and given we are perceived as one of the market leaders, the whole eco-system will suffer.

That difficulty, coupled with the current on-going macro-economic turmoil in Brazil, poses challenges for the team's efforts to raise a new fund, a process started in 2015. The target size is R$120 million (US$32 million), an increase of 50% in local currency compared to the first fund. Mr. Moraes said they plan to continue with their Fund I investment philosophy and invest in 10 companies focusing on education, healthcare, and financial inclusion in the Brazilian South-West. As of September 2015, a few LPs, including some incumbents and some newcomers, had expressed interest in the second fund. The Vox team is working hard to generate successful exits and results that would inspire more to join them.

III. Promotora Progresa Early Growth Capital Fund

Summary

In 2009, Promotora, the investment banking affiliate of Colombian conglomerate Grupo Sura, founded the Progresa Early Growth Capital Fund (Progresa). Based on its experience providing project finance and strategic consulting to Colombian start-up companies, Promotora believed the Colombian private equity and venture capital (PEVC) ecosystem had matured enough to support a dedicated VC fund. At that time, only a handful of small, government-backed funds provided any sort of financing to small-scale startups; Progresa was thus the first full-fledged VC fund managed by a local team to emerge in Colombia.[156]

Initially, the fund planned to raise at least $15 million to make between eight and 10 investments in the information and communications technology (ICT), life sciences, and applied engineering sectors with a target deal size of $500,000 to $3 million.[157] Progresa sought minority equity stakes of 30-49% and a gross shareholder return of 16.6%. Prospective investees needed to have annual sales of at least $200,000 at the time of investment. Progresa ultimately raised $21.3 million and invested in seven companies, completing two full exits and one partial exit by August 2015.[158] Pleased with Progresa's results, Promotora and the Progresa team started fundraising for Progresa's successor, the Early Growth Fund II (EGF II), in 2015.

Background & Fund Formation

The Economy and Demographics of Colombia

Colombia's modern history began with the end of Spanish colonial rule in the early 19th century followed by decades of civil war and regional conflict. The Colombian constitution, modern day Colombia's founding document, was ratified in 1886.[159] In the late 20th and early 21st centuries, Colombia became known for its violent internal strife, as guerillas of the Fuerzas Armadas Revolucionarias de Colombia (FARC) established control over most of the southern and eastern jungle provinces where much of Colombia's coca crop was cultivated.[160] This situation, however, has improved in recent years. In 2012, the Colombian government began peace talks

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156 LAVCA, "MIF Supports Colombian Venture Capital Fund," Sept. 3, 2009, http://lavca.org/2009/09/03/mif-supports-colombian-venture-capital-fund/, accessed Sept. 10, 2015.

157 LAVCA, "MIF Supports Colombian Venture Capital Fund," Sept. 3, 2009, http://lavca.org/2009/09/03/mif-supports-colombian-venture-capital-fund/, accessed Sept. 25, 2015. All dollars USD.

158 Bancóldex, *Private Equity and Venture Capital Funds Colombia*, Bogota: Bancóldex Capital, 2014, https://www.bancoldex.com/documentos/4208_Cat%C3%A1logo_Fondos_de_Capital_Privado_en_Colombia_-_ING.pdf, accessed Sept. 5, 2015.

159 *The Political and Legal System in Colombia*, Minneapolis: University of Minnesota Human Rights Library, http://www1.umn.edu/humanrts/iachr/indig-col-ch3.html, accessed Sept. 26, 2015.

160 Theo Farrell and Olivier Schmitt, *The Causes, Character and Conduct of Armed Conflict, and the Effects on Civilian Populations, 1990-2010*, Geneva: UNHCR Legal and Protection Policy Research Series, April 2012, http://www.unhcr.org/4f8d606d9.pdf, pp. 17-19, accessed Sept. 26, 2015.

with the FARC in Havana. By mid-2015, the parties had reached agreements on a number of key issues and set a deadline of March 2016 for a final agreement.[161]

Between 2011 and 2015, Colombia's economy grew 4% or more annually, and as of 2015 the major bond rating agencies listed Colombia's government debt as investment grade.[162] Foreign direct investment, which primarily targeted the country's oil, natural gas, and mining sectors, grew from $2.5 billion in 2001 to $16.8 billion by 2013.[163] Heavily dependent on resource extraction, Colombia was the world's fourth-largest exporter of coal and 18th-largest exporter of oil in 2014.[164] As of July 2015, the country's population stood at 48.3 million,[165] and the International Monetary Fund (IMF) estimated 2015 gross domestic product based on purchasing power parity at $683.0 billion, or $7,780 per capita.[166]

Colombia has long been the focus of domestic and international efforts to address problems such as poverty and inadequate infrastructure. Among international development finance institutions (DFIs) that have sponsored efforts to address these issues are the United States Agency for International Development (USAID) and the Agencia Española de Cooperación Internacional para el Desarollo (AECID, the international development agency of the Spanish government), which have invested in social impact programs and funds, among them Progresa.

Colombia's PEVC Ecosystem

One interviewee acknowledged that Colombia could be a difficult environment for PEVC investors: "There are big macroeconomic challenges for Colombia as a country, including achieving and maintaining political stability, and facing the fluctuations in the price of oil and the value of the local currency against the dollar, which can severely depress IRRs measured in US dollars."

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[161] BBC News, "What is at stake in the Colombian peace process?" Sept. 24, 2015. http://www.bbc.com/news/world-latin-america-19875363, accessed Oct. 28, 2015.

[162] Central Intelligence Agency, "South America: Colombia," *The World Factbook*, Dec. 15, 2015. https://www.cia.gov/library/publications/the-world-factbook/geos/co.html, accessed Sept. 15, 2015.

[163] Adriaan Alsema, "Colombia FDI statistics," *Colombia Reports*, June 20, 2012. http://colombiareports.com/colombia-fdi-statistics/, accessed Sept. 11, 2015.

[164] Central Intelligence Agency, "South America: Colombia," *The World Factbook*, Dec. 15, 2015. https://www.cia.gov/library/publications/the-world-factbook/geos/co.html, accessed Aug. 31, 2015; Index Mundi, "Country Comparison: Oil exports," Jan. 1, 2014, http://www.indexmundi.com/g/r.aspx?c=co&v=95, accessed Sept. 12, 2015.

[165] Departamento Administrativo Nacional de Estadística, "Poblacion Colombia Ahora". http://www.dane.gov.co/reloj/reloj_animado.php, accessed Sept. 4, 2015.

[166] Central Intelligence Agency, "South America: Colombia," *The World Factbook*, Dec. 15, 2015. www.data.worldbank.org/country/colombia, accessed Sept. 12, 2015;
International Monetary Fund, *World Economic Outlook Database*, "Report for Selected Countries and Subjects," October 2014.
http://www.imf.org/external/pubs/ft/weo/2014/02/weodata/weorept.aspx?sy=2015&ey=2015&scsm=1&ssd=1&sort=country&ds=.&br=1&pr1.x=68&pr1.y=8&c=233&s=NGDPD%2CNGDPDPC%2CPPPGDP%2CPPPPC&grp=0&a=, accessed Sept. 7, 2015.

Nevertheless, Colombia has a small but growing PEVC ecosystem. In a 2014-2015 report, Bancóldex, the Colombian state-run bank that provides funding to entrepreneurs, identified a total of 46 PE and VC funds that were either actively investing or engaged in fundraising in Colombia.[167] The 30 funds that had completed fundraising had combined capital commitments of $4.3 billion.[168] Among these were three active VC funds with total combined capital commitments of $76.9 million: Inversor, FCP Innovacion SP, and Progresa.[169] In 2013, private equity and venture capital investment in Colombia increased by 155%, rising from $413 million in 2012 to $1.1 billion (it is worth noting that this figure is heavily influenced by a single transaction, Advent's purchase of a 22% stake in Ocensa, Colombia's largest oil pipeline operator).[170] Colombia accounted for 12% of the total PEVC investments made in Latin America in 2013, placing it ahead of Chile (8%) and Mexico (7%). Brazil dominated the region's PEVC landscape, with 72% of total PEVC investments.[171]

Two firms, Latin America Enterprise Fund Managers LLC ("LAEFM") and Small Enterprise Assistance Fund ("SEAF") pioneered the sector in 2005.[172] That same year, Colombia's financial regulatory agency enacted Resolution 470, which for the first time enabled pension funds to make private equity investments. The passage of this resolution set the stage for a decade of impressive growth in Colombia's PEVC ecosystem.

By 2015, there was even a fledgling alumni network of general partners. Velum Ventures, founded in 2012 by Esteban Velasco, a Progresa alumnus, closed on $10 million of its $20 million target in May 2014 and plans a final close in May 2017.[173] Like Progresa, Velum is a VC investor targeting small companies with promising technology in development or early implementation, and has also received MIF funding. As of September 2015, Velum's portfolio included 13 companies.[174]

[167] Bancóldex, *Private Equity and Venture Capital Funds Colombia*, Bogota: Bancóldex Capital, 2014: 3-4. https://www.bancoldex.com/documentos/4208_Cat%C3%A1logo_Fondos_de_Capital_Privado_en_Colombia_-_ING.pdf, accessed Sept. 5, 2015.
[168] Bancóldex, *Private Equity and Venture Capital Funds Colombia*, Bogota: Bancóldex Capital, 2014: 5. https://www.bancoldex.com/documentos/4208_Cat%C3%A1logo_Fondos_de_Capital_Privado_en_Colombia_-_ING.pdf, accessed Sept. 5, 2015.
[169] Bancóldex, *Private Equity and Venture Capital Funds Colombia*, Bogota: Bancóldex Capital, 2014: 4. https://www.bancoldex.com/documentos/4208_Cat%C3%A1logo_Fondos_de_Capital_Privado_en_Colombia_-_ING.pdf, accessed Sept. 5, 2015.
[170] Reuters, "PE firm Advent to buy Ocensa oil pipeline stake for $1.1 billion-WSJ," Nov. 13, 2013. http://www.reuters.com/article/2013/11/14/ocensa-offer-advent-idUSL4N0IZ0W320131114, accessed Sept. 21, 2015.
[171] Bancóldex, *Private Equity and Venture Capital Funds Colombia*, Bogota: Bancóldex Capital, 2014: 5; LAVCA, "LAVCA Releases 2013 Industry Data and Analysis Highlights," New York: March 5, 2013. http://lavca.org/2013/03/05/lavca-releases-2013-industry-data-and-analysis-highlights/, accessed Sept. 26, 2015.
[172] Ernst & Young, "Navigating through the Colombian Economy," 2015: 2. http://en.calameo.com/read/0041520203ce064145bf6, accessed Dec. 18, 2015.
[173] Preqin, *Fund Managers database*, www.preqin.com, accessed September 25, 2015.
[174] Bancóldex, *Private Equity and Venture Capital Funds Colombia*, Bogota: Bancóldex Capital, 2014: 140; Preqin, *Fund Managers database*, accessed September 25, 2015; LAVCA, "Velum Ventures Portfolio Increased to 13 Businesses," New York: September 14, 2015, http://lavca.org/2015/09/14/velum-ventures-increased-their-portfolio-to-13-businesses/#more-24268, accessed Sept. 25, 2015.

Government agencies, particularly in Antioquia— home to Promotora and Progresa, Colombia's third-largest state by population, and one of the nation's hubs of entrepreneurial activity—have taken steps to support the PEVC industry. For example, RutaN, which is based in Antioquia's capital city of Medellín, functions as an incubator, investor, and accelerator for entrepreneurs, and is now moving into becoming an investor in funds. There are a number of other organizations in Colombia, including iNNpulsa, a government agency created to support and promote innovative Colombian entrepreneurs, and the Asociación Nacional de Empresarios de Colombia (ANDI), that are working to improve the PEVC ecosystem, particularly in Medellín and Antioquia. "The VC sector has a lot of traction nowadays; five years ago it was very different," observed Miguel Duque Posada, the head of Promotora's investment banking unit. Nevertheless, challenges remain. Said Mr. Posada, "Colombia needs to adjust a lot of policies to address the challenges posed by the VC and entrepreneurial ecosystem, especially the complex regulatory environment for fund formation."

While significant advances in the PEVC environment are underway in Colombia, much work remains to be done. In its 2015-2016 scorecard, the Latin American Venture Capital Association (LAVCA) awarded Colombia's PEVC ecosystem an overall score of 60 on a scale of 1-100, placing it fourth among its Latin American peers, after Chile (74), Brazil (72), and Mexico (65). Colombia's overall rating has risen greatly since 2006, when it was 42, but it fell one point from 2014-2015 due to unfavorable legislation on fund formation.[175] On the individual metrics LAVCA uses in its ratings, Colombia generally received above average scores. On a scale of 0-4, with 4 representing the best possible score, LAVCA rated Colombia above average on "Protection of minority shareholder rights" (3); "Corporate governance requirements" (3); and "Entrepreneurship" (3). Other indicators received average ratings, but the level of perceived corruption received an unfavorable score of 1, indicating high perceptions of corruption.[176]

Interviewees largely concurred with LAVCA's assessment of the Colombian PEVC ecosystem. One practitioner noted a distinct improvement, from a personal assessment of "one or two" on a scale of 1-10 in 2012, to "five or six with the potential to grow" in 2015. A concerted effort by fund managers, investors, and other stakeholders to expand their capabilities contributed to this improvement.

The improvement in Colombia's PEVC ecosystem is not limited to Medellín or Antioquia. Different cities in Colombia have excelled in different sectors. Medellín, Progresa's headquarters, has traditionally seen itself as a future hub for Pan-American entrepreneurship. The PEVC ecosystem in the country's capital, Bogotá, has also grown, especially in terms of the advanced research and development pursued within its academic community. In addition, Cali is known for talent in the ICT sector, and Barranquilla's university is an important hub for biotechnology.

[175] LAVCA, *Scorecard 2015/2016*, pp. 4-5, http://lavca.org/wp-content/uploads/2015/07/Scorecard-2015-16-hirez.pdf, accessed Sept. 15, 2015.
[176] LAVCA, *Scorecard 2015/2016*, p. 5, http://lavca.org/wp-content/uploads/2015/07/Scorecard-2015-16-hirez.pdf, accessed Sept. 15, 2015.

One of the challenges for the PEVC industry is Colombia's complex regulatory environment. "For example, there isn't a clear precedent in taxing the financial gains made by Colombian funds," said Patricia Ospina Campo, a member of Progresa's investment team. As a pioneer in the field, Progresa has encountered a number of difficulties as it navigated Colombia's regulatory space. "Even the government agencies can't answer all the questions [we have] posed," she observed. "Potential LPs see this as a problem." Another issue involves the requirement that the accounting of a PE or VC fund be done by an outside trustee. [177]

Despite the overall progress observed by our interviewees, the general awareness of private equity and venture capital seems to have remained low in the wider Colombian business community. One interviewee, for instance, noted that venture capital and private equity were not taught at the country's business schools and universities. Progresa's investment team claimed that it often to explain basic PEVC concepts to prospective investors and portfolio companies. Part of the problem seems cultural, as even in 2015, some Colombian entrepreneurs seem resistant to the idea of selling a part of their company to outsiders in return for an investment.

Progresa's Origins and Fund Formation

In 2006, Promotora, under the leadership of Francisco Mira, the company's CEO since 2000, developed a program to promote investment in new businesses throughout Antioquia. Promotora ultimately raised USD $23 million for the initiative, dubbed the Integra de ProAntioquia (Integra) program. This initiative enabled Promotora to gain insights into the Colombian entrepreneurial ecosystem, and its success ultimately led to the formation of two funds in 2009: the later stage Escala Growth Equity Fund ("Escala") and Progresa, its VC counterpart.[178]

The founding of Escala and Progresa was the next logical step for Promotora, an investment bank that had always operated with a private equity mindset. Founded in 1987 by Grupo Sura, a conglomerate with operations that span banking, insurance, food processing, and cement, Promotora provided investment banking and structured finance services to corporate clients throughout Colombia and acted as an incubator and accelerator for companies in and around Medellín. Prior to the formation of Escala and Progresa, Promotora had been a financial services provider for some of Colombia's most prominent corporations, including aeronautic, automotive, industrial, and logistics and transportation companies. As of 2015, Promotora had 145 shareholders, and Grupo Sura retained the largest ownership stake in the firm (45%).[179]

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[177] In 2013, the Colombian Ministry of Finance, the nation's securities regulator, issued Decree 1242, which required general partners to employ an independent "fund administrator," essentially a trustee, to hold assets and handle disbursements to both the GP and its LPs. Colombian banking giant Bancolombia's trust company, Fiduciaria Bancolombia, fulfills this role for both Escala and Progresa. Under this arrangement, Promotora remains responsible for Progresa's investment decisions, including their execution and monitoring. As the financial administrator, Fiduciaria Bancolombia is responsible for handling disbursements to the fund's LPs and GPs.

[178] FOMIN, "MIF invests in new Colombian venture capital fund," Sept. 17, 2014, http://www.fomin.org/en-us/Home/News/PressReleases/ArtMID/3819/ArticleID/2582/MIF-invests-in-new-Colombian-venture-capital-fund.aspx, accessed Sept. 5, 2015.

[179] Grupo SURA holds a 45.5% stake in Promotora, while Grupo Argos holds 30.1%.

After Integra was established, Mr. Mira recalled, “Promotora's employees were essentially working as CFOs or project managers in [the Integra program’s] companies for nothing. We were doing exactly the same work private equity firms do, but we didn't get any fees or carry.” This realization prompted Mr. Mira to create Escala and Progresa.

The catalyst for Progresa was a 2009 event hosted by Bancóldex, the state-owned entrepreneurial and export-import bank that specializes in supporting Colombian SMEs, attended by prospective private equity founders and investors, including representatives from the Multilateral Investment Fund (MIF). Mr. Mira, who attended the meeting, credited it as the beginning of Promotora’s relationship with a number of important investors, including the MIF.

Although other organizations had pioneered the private equity space in Colombia, Progresa was the country’s first full-fledged, homegrown VC fund. In addition to his ongoing role at Promotora, Mr. Mira serves as Progresa’s fund director, while a dedicated team of four investment professionals—Juan Andres Vasquez, Diego Quintero Vasquez, Patricia Ospina Campo, along with Agostinho Joao de Almeida Ramalho, who joined the team in 2014—serve as Progresa’s investment managers.

Progresa sourced deals through a number of channels, including current and former portfolio companies and its network of industry contacts, pitches at incubators, and occasional in-bound cold calls from companies looking for investment. Progresa avoided cold-calling potential investees, instead preferring an introduction by a third party.

Progresa seeks to provide financial returns to its investors along with support for innovative portfolio companies and sustainable development in the region. The fund charges an annual management fee of 3%, of which 2.39% goes to the fund, while Fiduciaria Bancolombia, Progresa’s fund administrator, receives the remaining 0.61%. The carried interest rate is 20% with an 8% hurdle. Proceeds are distributed using the European waterfall method through which the LPs receive their entire committed capital and the hurdle before carry is paid to the general partners. The carried interest structure is intended to compensate Progresa’s employees fairly while aligning their long-term interests with the fund’s. Specifically, 50% of the carry is available immediately to the Progresa team, and 50% is put aside as the GP contribution to the subsequent fund, EGF II. “This keeps our long-term interests aligned and deters one from competing with the firm and starting a new fund," noted Mr. Mira.

The relationship between Promotora, which continues to operate its separate, standalone investment banking unit, and Progresa remains close, as seen in the executive overlap between the two entities and an intertwined decision-making process. Promotora’s quality committee, for instance, which is composed of the director, the managers of the investment banking unit, and the investment managers from Escala, the growth fund, prescreens potential deals before passing them along to Progresa’s five-member investment committee for a final decision. Ms. Ospina, one of Progresa’s investment managers, believes this process is important: “Here, a proposal can be openly discussed and criticized by people who were not directly involved in its creation.”

Our interviewees understand that Progresa’s multi-step deal-vetting process and the heavy involvement of Promotora’s investment bankers and Escala’s investment team is unusual. At the same time, they believed the arrangement was an asset to the fund due to the expertise and fresh perspective provided by these financial professionals.

Indeed, both Progresa and its sister fund, Escala, were initially staffed with professionals from Promotora's investment banking team. As Mr. Posada, the head of Promotora's investment banking group, said, "We in the investment banking unit collaborate a lot in terms of knowledge sharing with the VC team, though we never work on the investments."

Progresa's LPs include Suramericana (the insurance and pension fund investment affiliate of Grupo Sura), the MIF, Bancóldex, and AECID.[180] They also play a role on the fund's investment committee, a reflection of their desire not only to retain oversight of their capital, but also to provide guidance to the pioneering VC fund. As of September 2015, Progresa's five-member investment committee consisted of four LP representatives and the director of Escala. According to our interviewees, the composition of the investment committee for Progresa's successor fund, EGF II, will be somewhat different, with three members from Promotora and two independent members who will not come from the fund's LPs.

Although few LPs serve on investment committees of VC funds in developed markets, such activity is much more common in Latin America and other parts of the developing world.[181] As Leamon, Lerner, and Garcia-Robles observed in a 2012 paper:

> In [Latin America], LPs tend to have more governance power than in most of the developed markets—in part because the industry is so new…New or young funds with scant track records can hardly dictate terms to their investors. Instead, the relationship at its best becomes an education process through which the DFIs or other experienced LPs teach both the less experienced LPs and the GPs how to participate in venture capital.[182]

It appears that the relationship between Progresa and its LPs tends toward the "best" end of the LP-GP spectrum described above. Promotora used its connections in the national, regional, and international financial communities to help Progresa establish key early partnerships with a number of domestic and international institutions. Promotora also helped Progresa form partnerships with universities in Antioquia, through which it was able to source deals. AECID provided early technical assistance as well as 4.4 million euros to Progresa. Finally, the MIF provided crucial early technical support to Progresa, including a $300,000 grant, along with a $3 million contribution (14% of the total) to the fund.[183]

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[180] "AECID respalda la creación de Progresa Capital, el primer fondo de capital de riesgo colombiano," *Europa Press*, Bogotá: June 23, 2008, http://www.europapress.es/internacional/noticia-colombia-aecid-respalda-creacion-progresa-capital-primer-fondo-capital-riesgo-colombiano-20080623135003.html, accessed Sept. 12, 2015.

[181] In the US, for instance, such involvement can strip an LP of its limited liability status.

[182] Ann Leamon, Josh Lerner, and Susana Garcia-Robles, "The Evolving Relationship Between LP & GPs," *HBS Working Paper 09-12*, Sept. 5, 2012: 8.

[183] http://www.iadb.org/en/news/news-releases/2009-08-06/mif-supports-colombian-venture-capital-fund,5549.html, accessed Sept. 5, 2015.

Progresa's largest LPs, including Suramericana's parent, Grupo Sura, assist Progresa's portfolio companies in other ways. With its broad geographical reach, Grupo Sura is particularly helpful in establishing regional contacts with clients and partners in Mexico, Argentina, and Brazil.

Progresa's LPs viewed an investment in the fledgling VC fund as, among other things, an investment in the future of the PEVC sector in Colombia. Pablo Arroyave, the managing director of the M&A group at Grupo Argos, said, "We decided to invest for two reasons. First, we knew that our presence would encourage other potential LPs. Second, our goal was to serve as an anchor investor. We wanted to play an important role in the development of the Colombian SME sector."

Development was not the only motivation for Progresa's LPs. "We care about returns," said Mr. Arroyave. He noted that healthy returns and the prospect of raising a successor to Progresa were equally important: "If the funds don't perform well, the probability of raising new funds is very low. Therefore we are very involved in Promotora as an entity and in the fund management side [Progresa]."

By August 2015, Progresa had completed two full exits and one partial exit out of its seven total portfolio companies, for a multiple of invested capital (MOIC) of 2.44x on exited investments and an average gross IRR close to 40%. Among the fund's remaining portfolio companies, Mr. Mira, Promotora's CEO, expects Ecoflora Cares, a manufacturer of colorants for the global food industry that is in the process of seeking FDA approval for its flagship product, and PrimeStone, which provides smart metering solutions to the utility industry, to be the most successful.

Progresa's relationship with the MIF was and continues to be constructive. "The MIF has been a great partner of ours," said Mr. Mira. "We were the pioneers in VC in Colombia, and it was super hard for us to find LPs in the beginning. The MIF brings more than just capital to the table. They've helped us with building networks and relationships." An executive at Grupo Sura echoed this sentiment, saying, "The MIF is a helping hand and a valued adviser."

Portfolio Overview

As of September 2015, Progresa's portfolio of active investments consisted of Ubiquo, Ecoflora Cares, Brainz, PrimeStone, and HelpPeople. The full exits were from Easy Solutions, in May 2013 (2.5x), and Hybrytec, in March 2014 (1.67x). The partial exit in September 2011 (3.14x) was from Ecoflora Agro, the biopesticides unit of Ecoflora, and is discussed in more detail below. [184]

Progresa's investments target early stage companies principally in the information and communications technology (ICT), life sciences, and applied engineering industries, although its portfolio also includes a gaming company and a manufacturer of food and cosmetics ingredients.

[184] All data are from the June 2015 private placement memorandum and accompanying slide deck for EGF II, which was collected by Progresa in December 2014.

Thumbnail descriptions of the companies can be found below, listed by date of investment, and are followed by descriptions of the impacts of each.

Individual Company Thumbnails

Ubiquo Telemedicina

Progresa invested in Ubiquo Telemedicina in August 2009, and remained invested as of September 2015. The company specializes in software solutions for the digitization and management of diagnostic imaging, a product with immense potential to improve the lives of citizens in Colombia and throughout the world who live in areas with limited access to well-equipped clinics and medical specialists. For an extended discussion of Ubiquo, please see below.

Ecoflora

Founded as a grower and supplier of cut flowers to Colombia's large export market, Ecoflora's focus soon shifted to the commercialization of products made from Colombia's native plants. To obtain many of its raw materials, which often grow in heavily forested terrain in remote areas of Colombia, the company works with indigenous peoples to develop environmentally responsible supply chains. Progresa invested in the company in November 2009. In 2011, Ecoflora's biopesticide unit, Ecoflora Agro, was spun out in a partial exit via strategic sale to Arizona-based Gowan Company. Progresa's IRR on the partial exit was 3.14x.

The resulting entity became Ecoflora Cares and remained in Progresa's portfolio as of September 2015. In 2008, the company began the FDA pre-submission process for Jagua Blue, a novel blue colorant for use in foods and cosmetics made from the fruit of the jagua tree. As of September 2015, FDA approval was still pending. For an extended discussion of Ecoflora Cares, please see below.

Easy Solutions

In April 2010, Progresa invested in Easy Solutions, a software company that develops and sells fraud protection tools through its offices in the U.S. and the United Kingdom. Progresa's investment enabled the company to expand, creating new jobs for skilled labor in Colombia. Easy Solutions won a number of international technology awards and professional recognition for its products. In 2011, Inc. Magazine ranked Easy Solutions 210th on its list of the 500 fastest-growing private companies in the U.S., based on its three-year growth of 1,480%.[185] The fund exited its position in May 2013 with an IRR of 2.5x.

[185] Easy Solutions, "Easy Solutions Named to Inc. List of Fastest Growing Companies," 2011, http://www.easysol.net/inc-500-list-of-fastest-growing-companies, accessed Sept. 25, 2015.

Brainz

Progresa invested in Brainz, a developer of strategy video games for mobile devices, in February 2011. As of September 2015, Progresa remained fully invested in Brainz and anticipated an exit in 2016.

Established in 2000 as a digital animation studio by Alejandro Gonzalez and two university friends, Brainz moved from producing television commercials, websites, and customized applications for clients in the real estate industry to mobile game development. In the wake of the Global Financial Crisis and the collapse of the real estate market in 2009, the digital animation operation was spun off as ZIO Studios. Mr. Gonzalez remained with Brainz and refocused his company on gaming. Shortly after the spin-out, Progresa invested in Brainz, viewing it as a promising company that was pioneering the mobile gaming industry in Colombia.

As of September 2015, Brainz was the largest Colombian game developer in terms of headcount and had three titles, "Mark of the Dragon," "Audio Ninja," and "Vampire Season." According to the International Game Developers Association, the Colombian chapter of which Brainz founded, there were 47 start-ups and/or established companies in Colombia actively developing products as of 2015.[186] The gaming industry in Colombia, however, remains small relative to countries in North American, Asia, and Europe.

Brainz' flagship product, "Mark of the Dragon," was downloaded approximately 500,000 times in its first week of release and reached almost 2 million downloads by August 2015. Some of the company's other games received awards and critical praise. For example, "Vampire Season" was selected as an "editor's choice" by Apple.

Hybrytec

In August 2011, Progresa invested in Hybrytec, a designer, retailer, and installer of photovoltaic energy systems. Among Hybrytec's projects were installations for clients—including hospitals and schools—that were either too remote to connect to Colombia's power grid or had unreliable access to electricity. A solar-powered refrigeration system, installed in an isolated fishing community, enabled its 1,500 residents to store and sell their catch more effectively. Among other contributions, Progresa helped the company establish a five-member board of directors, featuring an independent member who was an expert in the photovoltaic power industry. Progresa exited its investment in March 2014 with a multiple of 1.67x.

PrimeStone

Progresa invested in PrimeStone, which manufactures and sells sophisticated meter data management (MDM) equipment and applications for use in the utilities sector, in December 2013.

[186] IGDA Colombia, "Directorio de Empresas," http://igdacolombia.co/desarrolladores/, accessed Dec. 18, 2015.

As of September 2015, PrimeStone was among the most mature companies in Progresa's portfolio. The investment team expected its revenues to grow by roughly 40% in 2016, with almost half of the total from sales in the U.S. market. PrimeStone has healthy margins thanks to exchange rate advantages (PrimeStone is paid in dollars but compensates its Colombian employees in pesos). The company has a strong presence in Alabama, Georgia, and Mississippi, and the investment team believes the firm is on track for Series B financing from a large, reputable U.S. private equity fund.

HelpPeople Software

In April 2014, Progresa invested in HelpPeople Software, which provides solutions for the management and support of enterprise IT service desks. As of September 2015, Progresa remained invested in HelpPeople.

While Progresa's investment team views HelpPeople as a sound company with a viable, successful product, the company's challenge will be to create and implement the roll-out proposition and go-to-market strategy for its products. Said one member of the team, "We need to find channels to penetrate the market; the company needs to be visible for the global buyer." The investment team and Promotora are helping the company develop plans for taking these critical steps.

Financial Results and Impact

Measuring the effectiveness of a private equity or venture capital investment is an important and often complex endeavor. As the first VC fund focused on Colombia and founded and managed by a local Colombian firm, Progresa faced a number of challenges, many of which stemmed from its status as a pioneer. Colombia's regulatory environment, for instance, while it continues to improve, posed a host of uncertainties for Progresa's investment team, including the tax treatment of its investments. Moreover, establishing a systemized approach to monitoring investments and reporting to LPs is time-consuming and resource-intensive even for VC funds in developed economies. As the VC pioneer in Colombia, Progresa had to build these systems from the ground up.

The research team's August 2015 interviews were conducted with the executives from the companies that remained in Progresa's portfolio at that time. As mentioned earlier, these companies are still growing and the results of this assessment can only be considered indicative, rather than conclusive. For an overview of key facts regarding Progresa's portfolio, please see Table III-1, below.

Table III-1: Progresa Portfolio Key Dates and Figures[187]

Company Name	Date Founded	Description	Date Invested	Amount Invested	Current Status
Ubiquo	2003	Telemedicine solutions	Aug. 2009	COP 1.6 billion	Invested
Ecoflora	1998	Biologically derived chemicals	Nov. 2009	COP 6.9 billion	**Partially exited[188] Sept. 2011 (3.14x)**
Easy Solutions	2007	Fraud protection software	April 2010	COP 3.0 billion	**Exited May 2013 (2.5x)**
Brainz	2000	Mobile gaming	Feb. 2011	COP 5.0 billion	Invested
Hybrytec[189]	2007	Photovoltaic power systems	Aug. 2011	COP 0.8 billion	**Exited March 2014 (1.67x)**
PrimeStone	1990	Smart metering solutions	Dec. 2013	COP 8.0 billion	Invested
HelpPeople	2000	IT help desk solutions	April 2014	COP 2.0 billion	Invested

Table III-2 summarizes additional information on Progresa's exits of Ecoflora Agro (the biopesticides division of Ecoflora that was spun off in 2011); Easy Solutions (developer of fraud protection software); and Hybrytec (manufacturer of photovoltaic energy solutions).

[187] The data in this table are from the June 2015 private placement memorandum and accompanying slide deck for EGF II, which were collected by Progresa in December 2014.
[188] Progresa partially exited its investment in Ecoflora when the company's biopesticides unit was spun off into a separate entity, Ecoflora Agro, and Gowan Company, an Arizona-based supplier of agricultural chemicals, bought Progresa's stake. As of August 2015, Progresa remained invested in the biologically-derived home and personal care products division of Ecoflora, which was rechristened Ecoflora Cares in the wake of the spin-off.
[189] Hybrytec was a co-investment with ECOS, a sustainable development consultancy headquartered in Switzerland, and its Sustainable Equity Fund.

Table III-2: Progresa Exits[190]

Company Name	Date Invested	Amount Invested	Date of Exit	Type of Exit	MOIC
Ecoflora Agro	Nov. 2009	COP 6.9 billion	Sept. 2011	Strategic sale (Gowan Company)	3.14x
Easy Solutions	April 2010	COP 3.0 billion	May 2013	Sale to GP (Medina Capital)	2.5x
Hybrytec	Aug. 2011	COP 0.8 billion	March 2014	Co-investor acquisition (ECOS Sustainable Equity Fund)	1.67x

The research team assessed the impact of Progresa's investments in its portfolio companies in two categories, direct impact and indirect impact, which are described in further detail below. The quantitative information was combined with the qualitative data that the research team gathered during interviews with Progresa's investment team, executives at its LPs, and the entrepreneurs and decision-makers at its portfolio companies, to form the foundation for this analysis. As already mentioned above, it is again worth noting that that these results should be considered indicative rather than exhaustive, particularly the assessment of indirect impacts.

In reviewing the following material, it is also important to keep in mind the importance of Progresa's successful exits and their effect on the VC ecosystem in Colombia. As a homegrown pioneer of the VC space, Progresa has demonstrated the viability of local venture capital investing both within Colombia and, arguably, Latin America ex-Brazil more broadly. Subsequent VC funds, while not guaranteed of success, may look to Progresa's successful track record as an indication of the possibilities of investing in the region's dynamic entrepreneurs. For a more complete discussion of the demonstration effect and its role in the creation of a self-sustaining entrepreneurial ecosystem, please refer to Chapter I of this document.

Direct Impact

The most important direct impact a VC investor can have, particularly in emerging and frontier markets, is often the most basic: the provision of risk capital to otherwise capital constrained companies. Globally, bank loans to SMEs are estimated at about 13% of GDP, and the figure is even lower in emerging markets, where SME bank loans are estimated to comprise only 3% of GDP.[191]

[190] Through August 2015.
[191] Peer Stein, Oya Pinar Ardic and Martin Hommes, "Closing the Credit Gap for Formal and Informal Micro, Small, and Medium Enterprises," (Washington, D.C.: International Finance Corporation, 2013).

Concerns about the barriers to finance and the importance of access to finance would be less urgent were it not for the role that SMEs play in creating jobs. With the critical need for job creation in emerging markets, and the fact that SMEs create 78% of the formal sector jobs in low-income countries, greater access to finance is commonly regarded as directly linked to job creation.[192]

The authors of a 2007 study examining data from over 39,000 firms between 2006 and 2010 across 98 developing countries found evidence suggesting that access to finance was the single biggest constraint on employment growth in emerging markets. The authors argued that emerging market companies with either a loan or an overdraft facility had employment growth 3.1% higher than companies without these financial levers. An even larger gain (+4.2%) was observed in companies receiving capital from external investment funds.[193] Another study that looked at 70,000 businesses from 2000 to 2006 in 102 emerging market countries found evidence suggesting that SMEs (5-50 employees) saw stronger employment benefits from enhanced financial access than did larger firms.[194]

Along with providing critical financing to its portfolio companies, it can be argued that Progresa may have had a direct impact on its investees in a number of other important ways. Table III-3, below, displays the aggregate performance of Progresa's portfolio along six criteria from the date of investment in the individual portfolio company through December 2013.

Table III-3: Progresa Portfolio Performance[195]

Increase in Employment	Increase in Female Employment	Increase in Wages	Increase in Revenue	Increase in Payments to Suppliers	Increase in Taxes Paid
35%	5%	61%	63%	241%	93%

The gains made by Progresa's portfolio companies seem particularly impressive given the state of the Colombian economy during the period of investment. For instance, in 2013 the rate of unemployment stood at 9.6%, nearly 50% higher than Latin America's regional average of 6.3%. And the unemployment rate for those seeking full-time jobs was likely even higher, given that

[192] International Finance Corporation, IFC Jobs Study: Assessing Private Sector Contributions to Job Creation and Poverty Reduction, (Washington DC: IFC, January 2013): 5.
[193] Hinh Dinh, Dimitris A. Mavridis, and Hoa B. Nguyen, "The Binding Constraint on Firms' Growth in Developing Countries," World Bank Policy Research Working Paper no. 5485 (November 2010): 12.
[194] Reyes Aterido, Mary Hallward-Driemeier, and Carmen Pagés, "Investment Climate and Employment Growth: The Impact of Access to Finance, Corruption and Regulations Across Firms," Inter-American Development Bank Research Department Working Paper no. 626 (October 2007): 26.
[195] Note that these figures include Ecoflora Agro, from which the fund exited in 2011, but do not include PrimeStone and HelpPeople, investments made after the December 2013 internal analysis that was the source of these figures.

DANE, the Colombian government's statistics bureau, considered anyone who worked more than four hours a week "employed."[196]

As mentioned above, employment is a critical part of developing an emerging economy. As noted in the 2013 IFC Jobs Study, the best way to lift a person out of poverty seems to be to get her/him a job,[197] a finding supported by other research into the topic.[198] Hence, the fact that Progresa's portfolio raised its employment levels by 35% from the date of investment through December 2013 suggests important social gains.

The status of women also plays a substantial role in the advancement of developing countries. Women are more likely to spend their wages to support their family—providing food, education, and care for children—implying longer-term developmental outcomes.[199] The observed 5% increase in female employment across Progresa's portfolio companies thus likely provided an important, albeit relatively small, multiplier effect to their impact on job creation.

Furthermore, the 61% increase in wages across the portfolio seems to indicate that the jobs created were of high quality. As noted in a 2014 OECD report on job creation, "In emerging economies, informal employment remains an important issue, with many people working long hours for low pay with limited social protection."[200] The relatively high-wage jobs in the formal economy created by Progresa's portfolio companies thus likely enhanced the socially beneficial effects of the portfolio's job creation.

Similarly, it is conceivable to think that the increase in payments to suppliers probably served to improve business conditions outside the individual portfolio companies, particularly since the bulk of these payments frequently went to suppliers within Colombia.

Finally, increased tax revenues generally represent a critical benefit for emerging market governments, particularly in Colombia, where the government has undertaken a number of ambitious, capital-intensive projects, including the build-out of the country's fiber-optic telecommunications infrastructure.

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[196] Adriaan Alsema, "Colombia's April unemployment drops to 9%, 'lowest in 14 years,'" *Colombia Reports*, May 31, 2014, http://colombiareports.com/colombias-april-unemployment-drops-9-lowest-14-years/, accessed Sept. 22, 2015.

[197] International Finance Corporation, "IFC Jobs Study: Assessing Private Sector Contributions to Job Creation and Poverty Reduction," Jan. 2013: 4.

[198] Meghana Ayyagari, Asli Demirguc-Kunt, and Vojislav Maksimovic, "Small vs. Young Firms across the World: Contribution to Employment, Job Creation, and Growth," World Bank Policy Research Working Paper no. 5631 (2011): p. 37 (table 1). The 78% figure is for the median low-income countries. The paper uses the World Bank's Enterprise Surveys between 2006 and 2010 and supplements them with data from 44 other countries drawn from other comparable sources that was taken mostly from 2008 but ranges from 1997 to 2009.

[199] See, Katrin Elborgh-Woytek et al., "Women, Work, and the Economy: Macroeconomic Gains from Gender Equity," IMF Staff Discussion Note SDN/13/10 (2013), https://www.imf.org/external/pubs/ft/sdn/2013/sdn1310.pdf:.4-5, accessed Sept. 26, 2015; and Esther Duflo, "Grandmothers and Granddaughters: Old Age Pension and Intra-household Allocation in South Africa," Nov. 2000, http://economics.mit.edu/files/732, accessed Nov. 3, 2015.

[200] OECD, "Effective local strategies to boost quality job creation, employment, and participation," Melbourne: August 15, 2014, http://www.oecd.org/g20/topics/employment-and-social-policy/OECD-LEED-Local-strategies-for-employment-G20.pdf, accessed Sept. 29, 2015: 3.

To guide the discussion of Progresa's direct impact on its portfolio companies, Table III-4 below rates Progresa's direct involvement with each of its portfolio companies, using four criteria and a scale of 0-4 depicted using ideograms ("Harvey balls") for improved readability. The ratings are discussed in greater detail below the table. Please note that the authors selected the individual companies discussed in detail below as exemplars to provide a clear understanding of how the criteria were used to evaluate all companies in the portfolio, and that not all companies are discussed in detail.

The four criteria are as follows:

- Effectiveness of committed capital: How important was Progresa's funding to the company? Was the company barred from accessing alternative financing? A rating of 0 would indicate that Progresa's investment was not deemed important and the company was not constrained in any way from accessing other sources of financing. A rating of 4 would indicate that Progresa's investment was deemed critically important and the company's access to other sources of financing was severely limited or non-existent.

- Effectiveness of business training: Did Progresa provide business training? If so, was the training provided useful and was Progresa the only available source of the training? A rating of 0 would indicate that Progresa either did not provide business training, or the training provided was not useful and was widely available from other sources, i.e., Progresa did not need to provide it. A "4" would indicate that Progresa provided vitally important business training and that similar training was unavailable to the company.

- Effectiveness of ESG training: Did Progresa provide useful ESG training/guidance? Did it improve the company's environmental, social responsibility, and/or good governance practices? Was similar ESG training otherwise unavailable to the company? A rating of 0 would indicate that Progresa provided no ESG training. A rating of 4 would indicate that Progresa provided critically important ESG training that substantially improved the company's environmental, social responsibility, and/or good governance practices.

- Effectiveness of networking opportunities: Did Progresa assist the firm with introductions or referrals to other businesses, professionals, government agencies, etc.? Were these activities useful to the company? A rating of 0 would indicate that Progresa provided no networking assistance to the company. A rating of 4 would indicate that Progresa provided ample networking assistance to the company and it seemed to have had a substantially beneficial impact on one or more aspects of the company's business.

Table III-4: Direct Impact

Company	Committed Capital	Business Training	ESG	Networking
Ubiquo	●	◕	◕	●
Ecoflora	●	◑	◔	●
Brainz	●	◕	◔	◑
PrimeStone	●	●	◕	◑
HelpPeople	●	◔	◕	●

Direct Impact: Committed Capital

The uniformly high rating of "Committed Capital" reflects both the assessed importance of Progresa's capital commitment to each company's overall development, as well as the relative scarcity of alternative sources for risk capital in Colombia. Scarcity of risk capital is a widespread problem among emerging markets, and the ability to access it is widely regarded as transformative of the prospects of small and medium-sized enterprises (SMEs).[201]

Progresa's work with Ecoflora, which was in the midst of a lengthy and resource-intensive approval process for a promising blue colorant with the FDA at the time of investment, rated a 4 because Progresa's capital infusion enabled the company to press ahead with this crucial effort. "There were few international funds investing in Colombia," noted Ecoflora's founder, Nicolas Cock.

Direct Impact: Business Training

The Progresa investment team encouraged its entrepreneurs to take classes on topics such as financial analysis, strategy, marketing, sales, corporate finance, and basic negotiations. With the entrepreneurial and VC ecosystem in Colombia still evolving, Progresa viewed these classes as an important resource for its portfolio companies.[202] In support of this effort, the MIF provided partial funding for the classes via its technical assistance program, with additional support from the Spanish government. One important aspect of the classes was the fact that they were led by third parties, as opposed to employees from Progresa or one of its LPs. As one member of the investment team noted, "[Because] the classes were mostly held by external consultants who

[201] Peer Stein, Oya Pinar Ardic and Martin Hommes, "Closing the Credit Gap for Formal and Informal Micro, Small, and Medium Enterprises," (Washington, D.C.: International Finance Corporation, 2013).
[202] Developing a cohort of model entrepreneurs within an emerging market creates important demonstration effects that benefit the overall PEVC ecosystem. See Lerner, et al., "Evaluation of SME Ventures: Final Report," (April 2014).

were experts in their respective fields, [they] seemed less like an imposition of ideas on the entrepreneurs by Progresa."

Progresa's rating of "4" on PrimeStone reflects the strategic advice the investment team provided to the company. "The strategy of our company was built with Progresa," said PrimeStone's CEO, Jose Gaviria, who credited the fund with encouraging his company to expand. "We undertook a strategic planning process and market analysis with Progresa and its parent, Promotora. As a result, we targeted three markets: North America, Mexico, and Brazil. It was teamwork with Progresa and Promotora." Progresa engaged in similar strategic planning exercises with the telemedicine company Ubiquo to develop its subscription-based business model.

The CEO of Brainz, Alejandro Gonzalez, shared Mr. Gaviria's favorable view of Progresa and its efforts to provide support and guidance to its investees. He said, "It's been an interesting journey with Progresa. I think that they've enabled us to develop an industry that is particularly new to the country, and although we had the capability and potential to deliver, with Progresa's help we've managed to make that a reality."

Direct Impact: ESG

For the purposes of this criterion, we define ESG as encompassing not only good environmental, social, and governance practices, e.g., representation of minority shareholders on a board of directors, but also Progresa's contributions to decision-making at the executive level.

According to PrimeStone, Progresa's presence on the board was an important aspect of the company's growth. "I love working with these guys," said Mr. Gaviria. "Promotora [Progresa's parent] is more than a venture investment bank. They have people that know innovation, that know technology. They know many of the secrets of the [information and computer technology] business, so they are helpful." Mr. Gaviria was particularly appreciative of the perspective that the Progresa representative on the company's board of directors brought to top-level decision-making, thus the rating of "3."

Direct Impact: Networking

Here Progresa has been awarded a rating of "4" with respect to Ecoflora because the investment team was actively involved in helping the company secure additional sources of financing for its FDA approval effort with Bancolombia, the parent of Progresa's fund administrator. Similarly, Progresa was considered to be instrumental in helping Ubiquo form relationships and interact with local entities such as the remote clinics and other health care providers that were the foundation of its telemedicine business model. In contrast, while Progresa helped PrimeStone with networking and other contacts in Colombia, the company claimed to need less in the way of intensive advice. "[PrimeStone] was a solid, cash-generating company with a mature team and consolidated operations," said one member of the investment team, hence the rating of "2."

Indirect Impact

Before reviewing the indirect impact results, it is again important to keep in mind the question of attribution. As previously noted, it is difficult to determine with any certainty the indirect impact of a given fund's investment in a portfolio company on the broader market in which the company operates (e.g., myriad endogenous and exogenous factors affect an enterprise's performance, and a single investment fund may only have full control over one or two of them). Therefore, for simplicity purposes in this report, investment is assumed to be the causal link between the fund's activities and a company's indirect impact. In other words, the authors assume, for the purposes of this section, that Progresa's investment in large part enabled each portfolio company to produce the outcomes described in further detail below, rated on a scale of 0-4. In view of all of the above, the results discussed below can be considered indicative, but should not be thought of as conclusive.

For the purposes of this study, "indirect impact" is defined as the impact of the fund investment not on each invested company itself, but on the wider economic and social environment, quality of life, entrepreneurship, and the VC ecosystem with the individual portfolio company as the mediator of that impact. Of particular concern in Colombia, where poverty and income inequality remained stubborn problems, was the so-called bottom of the pyramid ("BoP") population (i.e. the largest, poorest socioeconomic group).

As a classic VC fund, Progresa did not select its investments based on their potential for beneficial developmental impact; the fund was focused on investing in profitable companies. Pablo Fernandez, Managing Director at Grupo Argos, however, noted the importance of socially beneficial investing in Colombia saying, "As investors, we value community impact, and BoP-targeted investments usually imply significant impact." Although Progresa did not analyze prospective deals using strictly defined social impact criteria, the firm was aware of the potential for its investments to have a larger social impact and welcomed such outcomes.

Hybrytec, a producer of photovoltaic power systems, is one example of an investment that was assessed as likely to have improved the quality of life for some of Colombia's BoP citizens. Progresa's investment team and several of its LPs noted that the company's solar power installations provided much-needed electricity for schools, medical facilities, water pumps, and refrigeration equipment for consumers who were too remote to connect to reliable power sources.

Progresa recognized that a focus on the socially beneficial outcomes of its investments could also play a role in its economic success. Under the administration of President Juan Manual Santos, the Colombian government has undertaken an ambitious project to build a fiber-optic telecommunications network that would eventually reach 96% of the nation's cities and towns. The goal is to vastly expand Internet access and provide cloud-based data storage to nearly everyone in the country, with a particular focus on BoP citizens.[203] Progresa's investment team

[203] Brian Fung, "What Washington can learn from Colombia's genius plan to lift millions out of poverty," *The Washington Post*, March 12, 2014.

understood the potential of this initiative to open up new and previously underserved markets. Indeed, one of the fund's investments, Ubiquo, took advantage of the rapid build-out of Colombia's fiber-optic network to expand its suite of telemedicine products and services and reach new users.

To structure this discussion, Table III-5 presents the fund's indirect impact using four criteria on a scale of 0-4. The four criteria are as follows:

- Created ancillary economic growth and/or job creation: To what extent did the portfolio company promote economic growth or create jobs among its peer firms, vendors, suppliers, or greater community? A rating of 0 would indicate that the company was deemed to have no impact on economic growth and/or job creation in the greater community. A rating of 4 would indicate that the company is considered to have had an extraordinarily beneficial economic impact on the greater community.

- Promoted innovation: To what extent did the portfolio company rely on innovation, e.g., develop a new product or process or pioneer a new market? The research team created a four-part test for assessing innovation at the portfolio company level that assessed i) the novelty of the business model; ii) innovative use of existing technology or products; iii) development of innovative technology or products; and iv) the innovativeness of the company within its market, country, or region. Given that it is difficult to precisely define innovation, the research team used a holistic view of the innovativeness of a company when deciding between two different ratings. A rating of 4 indicates that the company is determined to be globally innovative, e.g., has developed a revolutionary new product. A rating of 3 indicates that the company is deemed highly innovative within its market, although it relies on existing technology invented by others. A rating of 2 indicates that the company, while reliant on existing technology, has important characteristics that set it apart from similarly situated companies, e.g., is globally competitive. A company with a rating of 1 is reliant on existing technology that is new within its market, e.g., the first online banking service in the country. A rating of 0 indicates a company that is reliant on existing technology that is already in use by its competitors.

- Improved quality of life for BoP citizens: To what extent did the company create products, services, or other benefits for Colombia's BoP citizens? A rating of 0 would indicate that the company had no apparent impact on Colombia's BoP citizens. A rating of 4 would indicate that the company was considered to have had an extraordinarily beneficial impact on Colombia's BoP citizens.

- Improved entrepreneurial and VC ecosystem: To what extent did the overall Progresa portfolio improve the ecosystem in Colombia for entrepreneurial and venture capital activities? A rating of 0 would indicate that Progresa's portfolio appeared to have had

https://www.washingtonpost.com/news/the-switch/wp/2014/03/12/what-washington-can-learn-from-colombias-genius-plan-to-lift-millions-out-of-poverty/, accessed Sept. 25, 2015.

little or no effect on the entrepreneurial and VC ecosystem of Colombia, while a rating of 4 would indicate a likely outsized impact.

Table III-5: Indirect Impact

<table>
<tr><th>Company</th><th>Ancillary growth & job creation</th><th>Innovation</th><th>BoP</th><th>VC ecosystem</th></tr>
<tr><td>Ubiquo</td><td>◕</td><td>◕</td><td>●</td><td rowspan="5">●</td></tr>
<tr><td>Ecoflora</td><td>●</td><td>●</td><td>●</td></tr>
<tr><td>Brainz</td><td>◑</td><td>◑</td><td>○</td></tr>
<tr><td>PrimeStone</td><td>◕</td><td>◑</td><td>○</td></tr>
<tr><td>HelpPeople</td><td>◕</td><td>◑</td><td>○</td></tr>
</table>

Indirect Impact: Ancillary Growth & Job Creation

If data on direct job creation within a start-up or rapidly growing company are often difficult to collect, reliable information on indirect job creation is even more elusive, and ratings in this category are largely speculative. Ecoflora, which sourced jagua fruits for its innovative blue colorant from approximately six suppliers, was the clearest instance of a company that had created a large number of indirect jobs, hence the rating of 4. The follow-on impacts of Ecoflora's mobilization of economically and culturally marginalized peoples—the results of which included increased income for the communities in addition to the sustainable use of Colombia's biodiversity resources—are likely to be extremely large. Ubiquo received a rating of 2 because, while its telemedicine technology was important for addressing the limited access to healthcare of remote populations, its principal function was to connect existing healthcare providers with new patients. In comparison to Ecoflora, then Ubiquo's business created fewer indirect jobs, hence the rating of 2.

Indirect Impact: Innovation

Innovation was an important aspect of each portfolio company's business, from PrimeStone's "smart metering" products for more efficiently delivering electricity to commercial and residential users, to Ubiquo's telemedicine solutions that dramatically improved access to healthcare for thousands of citizens in remote areas of Colombia. There were, however, fine distinctions among Progresa's five portfolio companies. Ecoflora, which was seeking FDA approval for a new blue colorant derived from the fruit of the jagua tree, was arguably the most innovative company, hence the rating of 4. While innovative in the Colombian market—and still relatively rare in all but a handful of developed countries—smart metering technology was developed in the 1970s[204] and was widely deployed in Italy, for instance, between 2000 and 2005.[205] PrimeStone thus received a rating of 2.

Indirect Impact: BoP

In addition to Hybrytec, mentioned above, Ecoflora was a leader among the fund's portfolio companies in terms of beneficial social and environmental effects, particularly on Colombia's BoP citizens. Ecoflora's innovative supply chains for identifying, maintaining, and harvesting forest products not only created jobs in remote locations and helped preserve Colombia's unique rainforest ecosystem, it enabled traditionally marginalized indigenous peoples to attain a measure of economic security while responsibly caring for their local biodiversity. For these reasons, Ecoflora rated a 4. By contrast, Brainz, while itself a pioneer in the Colombian gaming industry, had less of a demonstrable impact on Colombia's BoP citizens, hence the rating of 0.

Indirect Impact: VC Ecosystem

When considering Progresa's effect on the entrepreneurial and venture capital ecosystem in Colombia, the fund's successful exits warrant discussion. In a November 2014 study, Bain Capital examined the state of impact investing in Latin America and came to a number of conclusions that help place Progresa's exits in context. [206] At that time, the authors of the Bain study estimated that impact investors had invested a total of $800 million in Latin America, with $100 million going to companies in Colombia. They observed that impact investing in Latin America was in a transitional phase, moving out of what they termed "uncoordinated innovation" and into "marketplace building." The former phrase referred to an embryonic entrepreneurial ecosystem in which disruptive innovators had emerged to test different business models but competition was either non-existent or limited. By contrast, the "marketplace building" phase was characterized by the fast growth of industry players, the formation of hubs of activity (such as Medellín or Bogotá), the emergence of supporting institutions, and increased competition.[207] Against this backdrop, Progresa's exits have an impact beyond their role in the fund's overall financial return picture. Through its two full exits and one partial divestiture, Progresa proved that the larger Colombian entrepreneurial and VC ecosystem could function across the investment cycle of fundraising, investing, and exiting. Fundamentally, Progresa's exit activity demonstrated the viability of VC investment in Colombia. As one expert commented, "Without exits, VC is charity. You might as well donate the money."[208]

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[204] Theodore G. Paraskevakos, "Sensor Monitoring Device," *U.S. Patent no. 3,842,208*, 1974. https://www.google.com/patents/US3842208, accessed Sept. 25, 2015.

[205] "Enel smart meter is the world's benchmark," *ESNA*, 2011, http://www.enel.com/en-GB/media/news/enels-smart-meter-is-the-world-s-benchmark/p/090027d981a1b2f2, accessed Sept. 25, 2015.

[206] Andre Leme, et al., "The state of impact investing in Latin America," (Bain & Company brief) Nov. 21, 2014: 2.

[207] Andre Leme, et al., "The state of impact investing in Latin America," (Bain & Company brief) Nov. 21, 2014: 4.

[208] Josh Lerner, Ann Leamon, and Felda Hardymon, *Venture Capital, Private Equity and the Financing of Entrepreneurship*, (NY, NY: J. Wiley & Sons, 2012).

Mini-cases

Below, two Progresa investments, Ecoflora Cares and Ubiquo Telemedicina, are presented in greater detail. These were selected for in-depth examination in consultation with the MIF, and both companies hold important lessons for Progresa and for the fund's LPs. The mini-cases below are designed to provide a more detailed view of Progresa's relationship with its portfolio companies and how the investment team worked with the founders and company executives to unlock the value in each.

- Ecoflora Cares, which several interviewees viewed as the most promising investment remaining in Progresa's portfolio, represented the enormous potential value of Colombia's biodiversity resources and the real possibility of using environmentally sustainable raw materials and socially beneficial practices to create valuable products. As of September 2015, Ecoflora was still waiting for a key product to receive FDA approval, a process that one interviewee estimated would take at least two more years.
- Ubiquo Telemedicina provides custom software solutions for storing and transmitting digitized diagnostic images (CT scans, MRIs, radiographs, etc.) and other health records over the Internet. As a result, patients in remote areas of Colombia were able consult with health care providers, including specialists in large cities and towns, which had previously been difficult if not impossible to access.

Ecoflora Cares

"Our motto is 'understanding biodiversity not as a means of isolation, but as a means of—not development—but improving quality of life.'"—Juan Fernando Botero, CEO, Ecoflora Cares

Summary

In 1998, Nicolas Cock Duque, a civil engineer by training, founded Ecoflora S.A., a cut flowers supplier to Colombia's large export market. Notoriously vulnerable to fungi and pests, the cut flowers Ecoflora grew required careful tending and frequent applications of pesticides, a situation that prompted Mr. Cock to begin developing naturally-derived biopesticides in conjunction with the local universities in Antioquia. He soon discovered that it was more profitable to sell these biopesticides than it was to sell roses. Impressed with the company's track record of innovation, Progresa made an investment of COP 6.0 billion[209] in Ecoflora in 2009.

In 2011, Ecoflora spun off Ecoflora Agro (the biopesticide division) and its portfolio of valuable patents to Arizona-based Gowan Company, which made a minority investment in Ecoflora Agro, to distribute its products internationally. As part of the deal, Progresa cashed out its stake in Ecoflora Agro at a 3.14 multiple of invested capital, which became the fund's first successful exit.

[209] USD $2.8 million, see http://www.oanda.com/currency/converter/, accessed Dec. 15, 2015.

In the wake of the spin-off of its biopesticides division, the remaining company, Ecoflora Cares (Ecoflora) focused on naturally-derived cleaning and home care products and natural food and cosmetics ingredients, including food colorants. Among the most promising of Ecoflora's products under development was a natural blue colorant called Jagua Blue, which the company is expecting to submit for approval to the U.S. Food and Drug Administration (FDA), the European Food Safety Authority (EFSA), and Brazil's National Health Surveillance Agency (ANVISA), among other markets.

Jagua Blue was derived from a plant indigenous to the jungles of Colombia, and Ecoflora's founder envisioned a successful company based on sustainably harvested and fairly traded biodiversity resources. As of September 2015, Ecoflora believed the pre-submission process for Jagua Blue was 80% complete and was looking forward to a final decision from the FDA and marketing the product within the next several years. In the meantime, the pre-submission process, however, had taken far longer than expected. As a result, the company faced a cash shortfall of nearly $2.5 million. Constrained from increasing its investment by its fund size, Progresa was working with the management team to resolve the issue.

Company Background

Colombia is a "megadiverse" country, according to the U.N.'s Convention on Biological Diversity (CBD), which estimates that it is home to approximately 10% of Earth's biodiversity. Only Brazil, according to the CBD, is more biodiverse.[210] Ecoflora's experience developing biopesticides had led it to the realization that Colombia was likely full of similarly useful, as-yet-untapped biodiversity resources.

One of these untapped resources was the jagua fruit, *Genipa americana*, an ovoid, edible, tree-grown berry that was thought to be native to the Amazon River basin and grew throughout the western hemisphere's tropical and sub-tropical zones.[211] Pre-Columbian Amerindian peoples used an extract of the jagua fruit to prepare a dark-blue body paint that temporarily stained the skin. This property drew the interest of Ecoflora and its founder. In collaboration with the local communities in which the jagua fruit grew, Ecoflora established a supply chain for the raw material and began developing a natural blue food colorant that it eventually dubbed Jagua Blue.

Jagua Blue had qualities that made it suitable for use by food and beverage processors, as well as pharmaceutical and personal care product manufacturers. To access the huge potential of the North American market for such a colorant, Ecoflora started working on an FDA pre-submission strategy for Jagua Blue in 2008.

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[210] Convention on Biological Diversity, "Colombia-Overview," https://www.cbd.int/countries/?country=co, accessed Sept. 16, 2015.

[211] Food and Agriculture Organization of the United Nations, *Food and fruit-bearing forest species: Examples from Latin America*, Rome: 1986, pp. 141-143. https://books.google.com/books?id=RdWR42f-RTEC&pg=PA141&dq=jagua+fruit&hl=en&sa=X&ved=0CDQQ6AEwAWoVChMIqrrg8eD7xwIVxRo-Ch334gnz#v=onepage&q=jagua%20fruit&f=false, accessed Sept. 16, 2015.

In 2011, Mr. Cock turned over Ecoflora's day-to-day operations to Juan Fernando Botero, an international businessman and marketing expert from EAFIT University in Medellín. At that time, Ecoflora's cleaning and home care product line consisted of a basic portfolio of prototypes, some of which had already undergone market testing. Jagua Blue, in Mr. Botero's view however, was Ecoflora's most promising product.

By August 2015, Jagua Blue was in the final stages of the FDA pre-submission process for use in various food applications. Because Jagua Blue included a new molecule that needed to be approved for human consumption, the pre-submission process had been long and costly and was still expected to take more time.

In addition to regulatory hurdles, Ecoflora Cares faced supply chain challenges. When Mr. Botero joined the company, Jagua Blue had only one supply chain, which was remote and complicated. It consisted of communities of people living within one of the jagua fruit's growing regions, who stewarded the forest and the relevant species, sustainably harvested the species, and transported the fruit from the rainforest to Ecoflora's manufacturing facility.

In keeping with Mr. Cock's vision, the workers who tended and harvested the jagua fruit were organized into locally owned companies. To ensure a consistent, high-quality supply of the crucial raw material, Ecoflora provided technical and business training assistance. The remote communities that supplied the jagua fruit had historically subsisted primarily on products they could hunt and gather from the local environment on a daily basis; harvesting and selling an agricultural product was new to them. As Mr. Botero put it, "They have been isolated by biodiversity."

Ecoflora's initial jagua fruit supply chain was located in Chocó, a region of dense rainforest in northwest Colombia. Harvesting the fruit, a process done by hand in trees that could grow to heights of 15 meters, was nearly as challenging as the terrain in which they grew, and worker safety became a major focus for Ecoflora. The company required all pickers to undergo specialized training conducted by Colombia's National Learning Service ("SENA"). Ecoflora would only purchase jagua fruit from harvesters who had been SENA certified.

By 2015, Ecoflora had six supply chain communities with approximately 8,000 jagua trees marked in its GPS database, and the company hopes to substantially increase that number in the future. In 2015, Ecoflora began working with Carbon Decisions International, which advises governments, non-profits, and private sector companies on climate change mitigation, to plant jagua trees on a 4,000-hectare plantation in the Orinoquia region of eastern Colombia. A pharmaceutical company that plans to use the project to offset the carbon emissions of its other operations is supporting the effort. Mr. Botero believed the project could be transformative. "If you can show that this can be an interesting area to develop forestry products, it would change the entire economics of this region," he said.

Investment Thesis

Ecoflora's Jagua Blue was a potential game-changer for manufacturers looking for a shelf-stable, natural, and non-toxic blue colorant. Employing the same strategy it had used to develop Jagua

Blue, the company was also pursuing similar red and green colorants derived from Colombia's biodiversity. The Progresa team recognized the appeal these products would have in global markets, assuming they received the proper certifications.

In addition, the investment was likely to have a significant socially beneficial impact. Ecoflora was less interested in obtaining the best possible price from its suppliers than in providing them with the skills to maintain a profitable and environmentally sustainable business model. The company provided business training to the local jagua fruit cooperatives on topics such as structuring costs and defining a profit margin. "I want to teach them how to optimize their resources and their operations so that they can do things better," said Mr. Botero. "In that sense we both are going to win."

Finally, Ecoflora's novel approach to its supply chain was not only beneficial to the economically marginalized indigenous people that lived in the jagua tree's growing region, it had the potential to raise barriers to entry. Assuming Ecoflora continued to treat its suppliers fairly, it would likely be difficult for future competitors exerting full market power to draw them away.

Value Creation

Progresa helped create value at Ecoflora in a number of ways. In addition to establishing a five-member board of directors and institutionalizing (and formalizing) many of the company's previously ad hoc functions—something Progresa did for all if its portfolio companies—the fund encouraged the pursuit of FDA approval for Jagua Blue. Such approval was required before the company could enter the U.S. market, where Progresa's investment team believed Ecoflora would succeed in the future.

Lessons Learned

- **The certification process takes time and money, especially for new, ground-breaking products:** Jagua Blue was a potentially game-changing product, the first acid-, heat-, and light-stable natural blue colorant suitable for use in foods, beverages, and personal care products. Its enormous upside potential had impressed the Progresa investment team, but to realize that potential, the product would need FDA approval in the US, EFSA approval in Europe, and likely other certifications in other markets. As of 2015, after seven years, the FDA pre-submission was still only 80% complete, by one interviewee's estimate.
- **Have a plan in place to address prospective cash-flow problems:** "Ecoflora has a great potential, but it will have to overcome its current cash flow problems," said one member of the investment team, who acknowledged that the path to FDA approval had been an uphill climb. It had been more than 20 years since the last FDA approval of a similar colorant molecule, and that process had required numerous and lengthy tests.
- **Colombia's biodiversity and the knowledge of its indigenous peoples is a platform for innovation.** Once approved, Jagua Blue would be unique among the blue colorants approved for human consumption. Said one person involved in the project, "Jagua Blue may prove that true innovation is possible even in countries outside the developed Western world, such as

Colombia, by people who come from backgrounds traditionally considered to be disadvantaged."

Current Status

With the FDA approval process for Jagua Blue still a few years from completion, one of Ecoflora's most pressing challenges is a cash shortfall that had reached approximately $2.5 million as of August 2015. Although Progresa was still confident in Ecoflora's ultimate success, the fund had no ready source of funds for additional injections of capital. Working with Promotora, however, the Progresa team hoped to make arrangements with its LPs to address that issue, possibly via a co-investment or a bridge loan.

Assuming the company navigated the FDA approval process and had similar success with additional red and green natural colorants under development, the Progresa investment team anticipated that Ecoflora would eventually be able to stage a significant product roll-out. Mr. Botero, the CEO, projected that the market for Jagua Blue could eventually grow to $100 million or more in annual sales, with a gross profit margin of 50%.

The natural red color for use in food and cosmetics had the potential to become another commercial success. One interviewee noted the compelling nature of the story of the red colorant's development, saying, "It comes from regions where people were caught between narcos and guerillas and only had two options: coca crops or deforestation. Now, they might have another option."

Ubiquo Telemedicina

Summary

In 2009, Progresa invested $720,000 for a 49% stake in Ubiquo Telemedicina ("Ubiquo"), a software firm headquartered in Medellín that offered telemedicine and medical imaging solutions that connected patients in remote areas with doctors located in Colombia's larger towns and cities. Part of its suite of products and services was cloud storage of medical records, an innovation that, thanks to Colombia's aggressive roll-out of a nationwide fiber-optic telecommunications network, had the potential to revolutionize access to care. Combined, these services had already improved the quality and availability of healthcare to traditionally underserved populations, but whether the company would live up to its full potential was an open question. As of September 2015, Progresa remained fully invested in Ubiquo. While members of the investment team remained impressed with Ubiquo's technology and believed in its mission, they were concerned about its slow rate of growth.

Company Background

Ubiquo was founded as "MediaSoft" in 2003 with the goal of using information and computer technology to develop healthcare products and services. In 2009, the company changed its name to Ubiquo Telemedicina but its focus on health informatics and telemedicine solutions remained.

More specifically, Ubiquo specialized in the design and implementation of web-based systems for the management of diagnostic images, including MRIs, ultrasounds, and radiographs. Critically, the company's technology complied with Digital Imaging and Communications in Medicine (DICOM) standards, the common file format and network protocols for storing and transmitting healthcare images and media. Ubiquo expressly designed its technology and services to meet the goal of seamless integration and sold its equipment under the brand names Biomedical Image and Biomedical RIS/PACS VNA Platform.

In 2010, Dr. Camilo Ospina joined Ubiquo as its CEO. A medical doctor by training, he had spent the previous 15 years at ARP Sura, a Grupo Sura company that provided employee pension and benefits services to 36,000 companies with some 1.5 million workers. In this role, he gained a deep appreciation of the value of centrally located, easily accessible medical records in improving patient outcomes and increasing the efficiency with which medical personnel could work. During his tenure at ARP Sura, Dr. Ospina realized that the Internet could be a valuable, potentially revolutionary means of improving access to healthcare, particularly for underserved populations in Colombia. Dr. Ospina had always wanted to be an entrepreneur, and the opportunity at Ubiquo seemed to be an ideal opportunity to revolutionize the delivery of healthcare in Colombia.

During its first three years of operation, Ubiquo sold its software directly to its clients, who would then purchase upgrades and additional products as they became available for a flat fee. In 2010, the company adopted a software as a service (SaaS) model whereby it provided its software along with system support and maintenance in exchange for a subscriber fee. As of September 2015, Ubiquo had 60 clients, all but two of which were using the SaaS model.

Job growth had also been healthy. When Dr. Ospina joined Ubiquo, the company had five employees. As of August 2015, the company employed 18 people and expected the headcount to rise to 20 in the near term.

Investment Thesis

Ubiquo met Progresa's investment criteria because the company operated in the ICT sector and had developed proprietary technology that had the potential to compete in a global marketplace. The company's core products—its software, cloud storage of medical records, and "remote presence"—were designed to facilitate medical care and improve outcomes for Colombia's vast, under-resourced rural population. The investment team was also optimistic about the potential for significant investment returns from an eventual exit, assuming Ubiquo could effectively expand its market.

Indeed, the team believed that the firm's core products could be successful in Peru, Ecuador, Mexico, and Argentina, all nations with large rural populations that had difficulty accessing medical care. The expansion plans, however, were ambitious. "One of the challenges will be a commercial roll-out in all these markets," said Francisco Mira, Promotora's CEO. "Our challenge is to make [Ubiquo's products] visible, recognizable, and to establish a geographic footprint large enough to make the company attractive to prospective buyers."

Ubiquo's telemedicine solution also had the potential to help address the problem of injuries caused by undetonated landmines in Colombia, a scourge that primarily affected the country's rural population. Such injuries were often grave and complicated and required patients to consult with a number of medical specialists for treatment to be successful. Ubiquo's cloud storage solution for medical records of patients with landmine-related injuries, along with the "remote presence" capabilities of its system, made such consultations easier.

Value Creation

Among other things, Progresa's involvement functioned as a "stamp of approval" that the relatively young company would have support—both financial and advisory—due to access to Progresa, its investment professionals, and the fund's LPs, which included Dr. Ospina's former employer, Grupo Sura. The fund's investment enabled Ubiquo to grow from five to 18 employees. As of August 2015, the company had two additional open positions that it expected to fill quickly.

Progresa was instrumental in helping the company develop its business model. In coordination with Progresa's parent, Promotora, Ubiquo undertook a thorough strategic planning process and eventually landed on the subscription-based business model that targeted a larger regional market. Progresa also helped bring a new CEO, Dr. Ospina, to the company. His experience with entrepreneurship and the healthcare sector enabled Ubiquo to develop a new, more ambitious vision.

The MIF also provided key support. Dr. Ospina recalled that during his first several years at the company, the MIF facilitated business training for Ubiquo and other companies in Progresa's portfolio. Executives from the companies would attend different forums and workshops on subjects such as best practices in growth and development, product validation, etc. There were approximately three workshops per year, some of which were sponsored and organized by the Spanish development agency. More recently, however, the training and workshops had become less frequent. "Such events and knowledge sharing have not occurred in the same way over the past two years," said Dr. Ospina.

Overall, Dr. Ospina viewed his company's relationship with Progresa as constructive. One member of the investment team noted that Progresa had been instrumental in assisting Ubiquo in its communication and interaction with local entities.

Lessons Learned

- **Exits take time:** Ubiquo had been in Progresa's portfolio since 2009 and was thus the oldest investment in the portfolio at the time of evaluation. Despite its potential for social impact, Ubiquo experienced difficulty commercializing its products and expanding into new markets. "Ubiquo is the most challenging of all the portfolio companies," said one interviewee. "It would be possible to exit the company shortly, but at a valuation that would substantially hurt the fund's IRR."

- **Turning an entrepreneur's vision into a viable business plan requires hard work and time:** One member of the investment team praised Dr. Ospina's entrepreneurial spirit while acknowledging the need for a concrete growth strategy. "He is a dreamer, but an entrepreneur needs to be like that," he said. "[Ubiquo] could be worth $5 million or nothing. As a fund, perhaps we invested too early. We should have waited for the company to mature a bit more before investing."

Current Status

As of September 2015, Progresa was evaluating exit possibilities for its Ubiquo investment, a challenging prospect. As one member of the investment team noted, "Its product is ready, and it is available on the cloud, but Ubiquo's clients in Colombia right now prefer to have the information in-house, and it will take some time for them to get used to a cloud-based solution."

The company's expansion plans were focused on Latin America, where Dr. Ospina believed it had the best chance of success. Before expanding to North America, the company would need to comply with the Health Insurance Portability and Accountability Act's ("HIPAA") regulations, which required scrupulous protection of patient privacy.

As of August 2015, Ubiquo and Progresa faced a dilemma: the company's cash reserves could not support both a regional commercial rollout in Latin America and continued technological development. Without a larger commercial presence in Latin America, Ubiquo would not appeal to potential strategic partners.

Conclusions and Next Steps

The Early Growth Capital Fund II

As of September 2015, Promotora was raising money for the Early Growth Capital Fund II, the successor to Progresa. With the new fund, Francisco Mira, Promotora's CEO, seeks to focus on the same general sectors and company stages as had Progresa. Mr. Mira acknowledged that this approach was likely to be more challenging than investing in companies with tested concepts, but he was confident his investment team would find enough suitable investments for EGF II.

Colombia's unique comparative advantages—including its immense biodiversity resources and highly trained life sciences workforce—guided Mr. Mira as he charted a course for EGF II. "There are a number of Colombian healthcare and life sciences experts who studied and lived abroad and want to return to Colombia," he said. "They have the know-how, the experience, the capital, and the networks to start successful businesses here."

Another of Colombia's advantages, in Mr. Mira's view, was its suitability as a testing ground for small, promising companies with regional and even global ambitions. "We have learned that Colombia is a good place to test the initial commercial proof of concept or for adjusting product and process," he said. "Then you are ready to jump into the U.S. or E.U., but first you have to do it here."

Mr. Mira was optimistic about EGF II's ability to source deals, thanks to the increasingly robust entrepreneurial ecosystem in Colombia, which had evolved considerably since Progresa's first investments in 2009. "The ecosystem has matured a bit in the last few years, local entrepreneurs have become more reasonable with their expectations, and angels and investors have become more sophisticated," he said. There was still room for improvement, however, and Mira hoped that EGF II would be able to bridge what he viewed as a significant gap between local angel financing and Series B funding from international players.

Building on lessons learned from Progresa, Mr. Mira envisioned EGF II as a larger overall fund with a target size of COP 75-100 billion (USD $25.8-35.8 million) and a first close of COP 30 billion. In addition, EGF II would do larger average deals: $2.5-3.0 million up to 20% of the fund, as opposed to Progresa's average of around $1.5 million. The holding period for investment would be three to five years with target stakes of 30-49%. As of August 2015, Promotora had raised nearly all of its first close goal from early investors that included Progresa's LPs: Promotora itself, the MIF, Bancóldex, Bancolombia, Grupo Sura, and Grupo Argos.

In terms of performance, EGF II is targeting an IRR of 15-20% and a multiple of invested capital of 2.0-2.5x across 9-12 investments. The management fee would be 2.5%, to be split between Promotora and Fiduciaria Bancolombia, which would serve as the new fund's administrator. The carry is set at 20% with an 8% hurdle rate, with distributions to be made using the European waterfall method. As of August 2015, EGF II's deal pipeline was substantial, with 76% of prospective investments in the ICT sector, 13% in life sciences, and 11% in applied engineering.

Promotora was looking beyond Colombia and intends a regional focus for EGF II. Mr. Mira confirmed that the team had already begun evaluating potential investments in Peru, Chile, and Mexico. Like Progresa, EGF II is looking for a combination of financial return, truly innovative portfolio companies, and a significant impact on sustainable development in the region. The fund plans to implement the Global Impact Investment Rating System (GIIRS) to better track its effectiveness in meeting its development goals.

Interaction with the MIF

Our interviewees concurred that the MIF had been a constructive partner in Progresa. "Currently, it is one of Progresa's best LPs," said Mr. Mira, who acknowledged that the MIF had pushed the fund to improve its procedures and policies, particularly regarding environmental, social, and governance ("ESG") issues. "At the beginning, they were very demanding, and it was occasionally difficult to meet their expectations."

Mr. Mira hoped to see expanded cooperation with the MIF in leveraging its regional network to connect Progresa's portfolio companies with other IDB initiatives. For instance, it would be helpful if the fund managers could know about planned projects so they could alert their portfolio companies to research possible requests for proposals. He explained, "For example, IDB has a big project in Guatemala, a remote metering system for the electrical grid. PrimeStone has the solution that is proven and it would be great if IDB could give opportunities to small companies (in which IDB is indirectly a shareholder) to participate in such projects."

With the support of the MIF, the Progresa team plans to adopt the Global Impact Investing Rating System (GIIRS) for EGF II, a step that would enable it to systematically track and analyze the social and environmental impact of its capital commitments. This was particularly important to Promotora, which had learned from its experience with Progresa that companies with clear social impact tended to be more successful investments. “For example, we learned that a company like Ecoflora is more valuable not only because it has a disruptive product, but because of the social and environmental impact as well,” said Mr. Mira.

Our interviewees largely agreed that Promotora should focus on the VC space, as opposed to growth equity, the focus of the Escala fund. The principal reason given was size. Escala was not big enough to make single investments of $10-15 million—the requirement to be competitive at the “next level,” as one interviewee put it—but was too big (with an average investment of approximately $5 million) to participate in the disruptive innovation opportunities at the smaller end of the scale. Another reason was competition from larger firms with well-established international presences. “We are competing with big, reputable funds in the growth equity space,” said one interviewee. “For example, we were competing for one deal with Advent, and we cannot win in that race."

As the fundraising for EGF II has progressed, the MIF has played a key role. “The MIF has been helpful in suggesting other potential LPs during our fundraising for EGF II,” said one Grupo Sura executive. As an observer on Progresa’s investment committee, the MIF’s feedback was important due to the fund’s role as a VC pioneer in Colombia. Said one observer, “The MIF’s representatives have worked to dispel fear, uncertainty, and doubt by providing their perspective from working on similar projects in other countries.”

Mr. Mira was sanguine about Promotora’s prospects for raising even a third VC fund, a process that he believes will be underway within five years. He acknowledged that continued success in the VC space would depend on the track record of Progresa and EGF II. “We expect at least one home run from Progresa,” he said.

Challenges

Despite the interviewees’ largely favorable outlook on Promotora’s future as a player in Colombia’s entrepreneurial and venture capital ecosystem, they noted some challenges, including the unresolved problem of the cash shortfall at Ecoflora, and the relatively slow pace of growth at the four companies that remained in Progresa’s portfolio as of August 2015. One interviewee expressed disappointment at the relatively slow pace of fundraising for EGF II, the successor fund to Progresa. He assumed the fund would be up and running by year-end 2014 and noted that some of Progresa’s LPs had yet to decide on a commitment to EGF II.

One of the biggest challenges facing Promotora was increasing the rate of co-investment, which was mentioned as a potential solution to Ecoflora’s cash shortfall. At least one interviewee speculated that the PEVC ecosystem in Colombia was not yet mature enough to support co-investment activity. “The prerequisite for [increased levels of co-investment] is growth in the number of angel investors and VC funds,” said one interviewee. The business culture in

Colombia with respect to company growth and development was cited as another potential obstacle. “Ubiquo’s founders and initial investors are very good businesspeople,” said one member of Progresa’s investment team, “but they are accustomed to organic growth over a 20-year period. VC sector industries need to grow way more rapidly.”

Homegrown competition from Colombian conglomerates—including Progresa LPs such as Grupo Sura and Grupo Argos—represented another potential challenge. “These firms are building in-house innovation and investment departments,” noted one interviewee. “They have a different philosophy and are interested in much earlier stage investments, but there is the potential for a collision with Promotora’s VC funds.” There was also, however, the potential for Progresa or its successors to establish co-investment relationships with such groups as well.

Promotora’s tripartite structure—with is investment banking, structured finance, and PEVC arms—might be viewed as suboptimal, given the disparate revenue models of the three businesses. “Investment banking is highly dependent on success fees, which means that earnings fluctuate significantly,” said Mr. Mira, noting that there is the possibility that the investment banking arm could be spun off in the future and that Promotora may one day focus exclusively on VC investing.

Ultimately, it is perhaps too soon for Promotora to focus exclusively on fund management. “It’s still too early to definitively evaluate the performance of Escala growth fund, or write it off as ‘unsuccessful’,” said Mr. Mira. Also, it was still too early to conclude that Progresa had been an unequivocal success, because it could still be sidetracked by unlikely but possible events like the FDA’s rejection of Ecoflora’s Jagua Blue application.

The ever-present difficulties surrounding fundraising as well as exit were exacerbated by the conservative nature of Colombia’s institutional investors, and one interviewee believed this state of affairs would persist into the medium-term. “Domestic investors, such as pension funds, hesitate to put the money in this relatively new asset class in the Colombian market.” There was also a limited number of Colombian strategic buyers. “Most exits were made to foreign investors and buyers,” he commented

Progresa’s most impressive accomplishment is arguably its very existence. Founded as Colombia’s first full-fledged venture capital fund in the midst of the Global Financial Crisis in 2009, the fund was nevertheless able to raise $21.3 million. In the intervening years, the investment team sourced and negotiated seven promising deals and, by September 2015, had led Progresa to three successful exits: Ecoflora Agro in September 2011 (exit multiple of 3.14x), Easy Solutions in May 2013 (2.5x), and Hybrytec in March 2014 (1.67x). For a pioneering VC fund in an emerging market country where the business community was still largely unfamiliar (or uncomfortable) with the private equity model, Progresa’s achievements are remarkable. Although it was too soon to tell in September 2015 precisely how the fund had changed the entrepreneurial and VC ecosystem in Colombia, it appeared likely that its impact would be significant and lasting.

IV. NXTP Labs

Summary

In 2011, NXTP Labs, Latin America's first regional accelerator, was founded by four Argentines—all successful entrepreneurs in their own right—as a way of supporting other ambitious would-be entrepreneurs who were just starting out. The firm's seed fund makes $25,000 investments (and larger follow-on investments) in the region's promising start-ups, and provides mentoring and advice to their entrepreneurs, as well as connections to a strong regional network.

The founders raised the fund's first $2.5 million from their extensive personal networks, which also provided 80 mentors to support the program's entrepreneurs. In its first 18 months, NXTP Labs graduated 50 start-ups from its program and achieved its first exit. The firm leveraged this early experience to raise additional capital for the fund in 2013, anchored by a $5 million investment from the Inter-American Development Bank's Multilateral Investment Fund (MIF). By September 2015, NXTP had closed the fund at approximately $38.5 million.

By mid-2015, NXTP Labs had invested over $13.7 million of capital[212] in 164 companies across eight editions of its accelerator. In October 2015, it achieved its ninth exit when Tutum, a cloud service provider for developers and system administrators, was acquired by Docker, a U.S.-based tech company, generating a 60x return on invested capital. Considering all nine exited investments, NXTP had produced a combined multiple of invested capital (MOIC) of 4.74x by November 2015. Furthermore, the performance of its portfolio of start-ups had exceeded the firm's performance projections, as less than 20% of its companies were written-off or deemed "walking dead,"[213] a proportion far lower than the anticipated 60%. In fact, high-potential[214] and growing companies comprised more than half of the portfolio. Through and alongside this work, the firm spurred increased entrepreneurship in Latin America, particularly among women, and contributed to strengthening the region's start-up ecosystem and enhancing its innovativeness. Yet this success poses challenges, as NXTP faces the complicated task of effectively monitoring its large portfolio and helping its start-ups achieve lucrative exits. In addition, NXTP's founders must carefully implement recent changes to its accelerator model, consider how to structure and raise capital for a new VC fund, and manage the firm's evolution as it finishes investing its seed fund.

This case study describes first the background of Latin America's economy and PEVC ecosystem, along with the background of NXTP Labs. Thereafter, the direct and indirect impacts

212 NXTP's accelerator model invests both capital and services (i.e., mentoring, business training, and access to NXTP's network) in exchange for equity in the portfolio companies. The $13.7 million figure includes only the capital invested directly in portfolio companies and not the cost of NXTP's acceleration services.
213 Walking dead are companies that have not overtly failed, but that are expected to generate negative or very low returns.
214 NXTP defined high-potential companies as those that had validated their business model by the regionalization/internationalization of their products/services and had completed at least one round of fundraising with well-known VCs or superangel investors.

of its investments are described, and a conclusion section discusses NXTP Lab's relationship with the MIF and considerations for its future.

Background & Fund Formation

Although NXTP Labs is headquartered in Argentina, its operations now stretch to Brazil, Chile, Colombia, Mexico, Uruguay, and the United States. In fact, from its inception, it was envisioned as a regional accelerator. Thus, a brief introduction of the guiding forces behind the economy and demographics of the entire Latin American region is included below, along with the region's overall PEVC ecosystem. However, it is important to note that this overview, perforce, cannot take into account the differences—often stark—between the countries that make up Latin America.

The Economy and Demographics of Latin America

As of mid-2015, Latin America (LatAm) boasted a population of approximately 587 million people across 21 countries.[215] Between 2004 and 2011, the region's annual growth rate had exceeded 4%, with four years of growth over 5%.[216] Yet by 2014 annual growth rates had declined to 1.3%, and LatAm's growth continued to cool off during 2015.[217] Falling commodity prices, the "rebalancing" of the Chinese economy, and decreasing investment in the region were among the factors that contributed to this economic deceleration.

LatAm's economic growth in the 2000s was accompanied by major socio-economic shifts. In the decade before 2015, over 70 million people escaped poverty, and the middle class expanded by 50%.[218] The growing middle class drove strong regional consumption growth. Additionally, by 2014 Internet penetration in the region had climbed to 51%, creating new opportunities for tech and ecommerce companies.[219] Mobile phone adoption was similarly on the rise; over half of the population had mobile phones by 2014, with over 718 million mobile connections, including 154 million smartphones.[220] By 2020, the number of smartphones was expected to rise to over 600 million.[221]

Simultaneously, the business environment in many Latin American and Caribbean countries was improving. For example, according to the World Bank Group's Doing Business database, the average time to start a business in the region fell from over 70 days in 2005, to less than 34 days

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[215] World Population Bureau, http://www.prb.org/pdf15/2015-world-population-data-sheet_eng.pdf.
[216] The World Bank's World Development Indicators, accessed September 27, 2015.
[217] The World Bank's World Development Indicators, accessed September 27, 2015.
[218] The World Bank, "Latin America and the Caribbean: Overview," The World Bank, accessed September 28, 2015, http://www.worldbank.org/en/region/lac/overview.
[219] "Latin American Internet Audience Nears 310 Million," *eMarketer*, December 4, 2014. http://www.emarketer.com/Article/Latin-American-Internet-Audience-Nears-310-Million/1011667.
[220] GSMA Intelligence, *The Mobile Economy: Latin America 2014*, GSMA, 2014. http://www.gsmamobileeconomylatinamerica.com/GSMA_Mobile_Economy_LatinAmerica_2014.pdf.
[221] GSMA Intelligence, *The Mobile Economy: Latin America 2014*, GSMA, 2014. http://www.gsmamobileeconomylatinamerica.com/GSMA_Mobile_Economy_LatinAmerica_2014.pdf.

in 2015.[222] Similarly, the region's average scores improved across a number of categories, including getting credit (improved 8.1 points), and resolving insolvency (improved 14.5points).[223]

Latin America's PEVC Ecosystem

Latin America's PEVC ecosystem improved alongside its general business environment. The 13-indicator PEVC scorecards developed by the Latin American Private Equity and Venture Capital Association (LAVCA) showed average scores among countries in both the original (2006) and 2015/16 versions of the assessment increasing by over seven points.

Accordingly, LatAm's PEVC fundraising and investment activity has grown in recent years. Fundraising rose from $3.6 billion in 2009 to a record $10.3 billion in 2011, only to be topped again when the region's PEVC funds raised a collective $10.4 billion of capital in 2014.[224] Over $7.8 billion was invested in 2014, and the industry realized $4.6 billion in exits. In the first half of 2015, PEVC funds raised almost $4.3 billion, over $3.5 billion was invested, and over $1.7 billion was realized in exits.[225] While Brazil regularly received the largest share of the region's PEVC capital (for instance, more than half of PEVC investments flowed to Brazilian companies in 2014), the rest of the region was garnering increased attention from limited partners (LPs). According to the Emerging Markets Private Equity Association's (EMPEA) 2015 Global Limited Partners Survey, Latin America except Brazil ranked as the most attractive emerging market for GP investment for the second year in a row.[226]

Turning specifically to VC, a recent slump in activity still showed significant growth since 2010. In 2014 the region's VC funds raised $458 million, down from $714 million the previous year, but up 47% from 2011's total of $312 million. The number of deals and total amount of capital deployed in venture deals rose steadily from 2010, when only $63 million was invested.[227] In 2014, VC funds invested $526 million across 186 deals, with 50% of the deals and 75% of the total capital invested in Brazil. That year, Mexico and Argentina followed behind Brazil in the VC space, with $45 million invested across 31 deals, and $35 million invested across 26 deals, respectively. In 2014, the region's VC funds realized $99 million in 18 exits.[228]

[222] The World Bank's Doing Business Database, accessed September 27, 2015.
[223] The averages were calculated using only countries with scores for both 2005 and 2015. http://data.worldbank.org/data-catalog/doing-business-database. The scores reported are the Doing Business "Distance to Frontier" (DTF) scores. This measure shows the distance of each economy to the "frontier," which represents the best performance observed on each of the indicators across all economies in the *Doing Business* sample since 2005, on a scale of 0 to 100.For more detail on the methodology of the Doing Business survey, please see "Doing Business 2015: Regional Profile Latin America and Caribbean," http://www.doingbusiness.org/reports/~/media/G
[224] 2015 LAVCA Industry Data.
[225] 1H2015 LAVCA Industry Data.
[226] EMPEA, *2015 Global Limited Partners Survey*, Washington, D.C.: EMPEA, 2015.
[227] LAVCA, 2015 LAVCA Industry Data & Analysis, LAVCA, 2015.
[228] 2015 LAVCA Industry Data.

In the first half of 2015, over $260 million was invested in VC deals, approximately keeping pace with 2014.[229] Venture capital fundraising and exits, however, were considerably lower, with only $9 million raised for four Latin American VC funds and $20 million realized in three VC exits.

Accelerators

Accelerators represent the modern version of the incubators from the U.S. Tech Bubble of the 1990s. These programs help early-stage companies, often comprising only the founding team and an idea or prototype, establish and grow their businesses. Typically such programs accelerate start-ups in batches, and for a fixed period of time offer shared workspace, mentoring, and educational workshops, before culminating in a public pitch event where entrepreneurs can present their businesses to potential investors. Many programs also provide a small seed investment into the companies in exchange for a small equity percentage.

The first modern start-up accelerator was the U.S.-based Y Combinator.[230] Founded in 2005 and widely considered the industry's gold standard, Y Combinator's notable graduates include Dropbox, Airbnb, and Reddit.[231] Due in part to Y Combinator's success, the model quickly proliferated throughout the United States and the rest of the world. Estimates of the number of accelerators vary, but even conservative estimates place it over 300 by the end of 2014.[232]

Start-Up Chile, a seed accelerator sponsored by the Chilean Government's Corporación de Fomento de la Producción de Chile (CORFO), was one of the first notable accelerator programs in Latin America. By the end of 2014, it had provided over $8 million to over 239 companies, making it one of the region's largest funders of start-ups.[233] It was quickly followed by a number of new programs, including 21212 located in Rio de Janeiro and Wayra, Telefónica's accelerator based in Latin America and Spain, —as well as NXTP Labs in Buenos Aires—all of which started in 2011. By the end of 2014, the number of accelerators and accelerator-backed companies had grown tremendously in the region. One 2014 report identified 53 Latin American start-up accelerators that had collectively invested over $35 million in almost 900 startups.[234]

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[229] 1H2015 LAVCA Industry Data.

[230] NBIA, *2012 State of the Business Incubation Industry*, National Business Incubator Association, 2012. And Daniel C. Fehder and Yael V. Hochberg, Accelerators and the Regional Supply of Venture Capital Investment (September 19, 2014). Available at SSRN: http://ssrn.com/abstract=2518668 or http://dx.doi.org/10.2139/ssrn.2518668.

[231] http://techcrunch.com/2014/03/10/these-are-the-15-best-accelerators-in-the-u-s/

[232] *2012 State of the Business Incubation Industry,* National Business Incubator Association, www.nbia.org. And Daniel C. Fehder and Yael V. Hochberg, "Accelerators and the Regional Supply of Venture Capital Investment," September 19, 2014.
Available at SSRN: http://ssrn.com/abstract=2518668 or http://dx.doi.org/10.2139/ssrn.2518668.

[233] Fundacity.com, *Latam Accelerator Report 2014*, Fundacity, 2014, http://www.fundacity.com/latam-accelerator-report-2014.

[234] Fundacity.com, *Latam Accelerator Report 2014*, Fundacity, 2014, http://www.fundacity.com/latam-accelerator-report-2014.

Little research has been done to examine the effectiveness of accelerators, due in part to their relative youth. One 2013 study found evidence that start-ups that graduated from top accelerator programs were quicker to receive VC funding, to exit by acquisition, and to achieve customer traction than peers that had not been accelerated.[235] But accelerators appeared to play a role not just in the growth of individual companies but also in the overall expansion of a region's entrepreneurial ecosystem. A 2014 study conducted by Daniel Fehder and Yael Hochberg examined 59 U.S. accelerators founded between 2005 and 2012.[236] Its findings suggested that accelerators attracted more seed and early-stage entrepreneurial financing activity to the area, benefiting not only the accelerated start-ups, but also other start-ups in the region that did not participate in the program. Such findings indicate that accelerators can be both directly beneficial to a region's start-ups and also indirectly beneficial to the region's overall entrepreneurial environment.

NXTP Labs' Origins

Unlike Start-Up Chile and 21212, NXTP Labs was Latin America's first regional-focused accelerator program. Inspired by Y Combinator, NXTP Labs provides financing, mentoring, and support to early-stage, web-enabled technology companies in industries like big data, financial technology, ecommerce, security, agricultural technology, and gaming.

The accelerator was created in 2011 by four founders, each of whom were successful entrepreneurs in their own right:

> **Ariel Arrieta** was a serial entrepreneur who had founded several online advertising companies that were acquired by Fox International Channels, 21st Century Fox's international multimedia business, in 2007. He was an active angel investor and had graduated from Harvard Business School's Owners & Presidents Management Program. (In 2015, Ariel also graduated from the Kauffman Fellows Program, a highly competitive program aimed at supporting emerging leaders in the VC industry.)[237]
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> **Francisco Coronel** founded an architectural software firm in 2005. He also earned a master's degree in corporate finance from the University of California at Berkeley and had served on the advisory boards of a number of leading technology companies, such as Metrix and Cuponica. He has been an Endeavor Entrepreneur since 2007.[238] (In 2015, Francisco was also chosen to participate in the Kauffman Fellows Program.)

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[235] Benjamin Hallen, Christopher Bingham, and Susan L. Cohen, "Do Accelerators Accelerate? A Study of Venture Accelerators as a Path to Success," Working paper, 2014.

[236] *2012 State of the Business Incubation Industry,* National Business Incubator Association, www.nbia.org. And Daniel C. Fehder and Yael V. Hochberg, "Accelerators and the Regional Supply of Venture Capital Investment," September 19, 2014. Available at SSRN: http://ssrn.com/abstract=2518668 or http://dx.doi.org/10.2139/ssrn.2518668.

[237] The Kauffman Fellows website can be found at http://www.kauffmanfellows.org/.

[238] Endeavor is non-profit organization with a mission "to catalyze long-term economic growth by selecting, mentoring, and accelerating the best high-impact entrepreneurs worldwide." The Endeavor website can be found at http://endeavor.org/.

> **Marta Cruz** founded her first company, a men's apparel operation, with her husband in 1979. She then gained extensive experience in digital marketing while working for MRM, McCann Erickson Group's digital agency, where she served clients such as HP, Intel, Coca-Cola, GM, Hilton, Nortel, and MasterCard.
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> **Gonzalo Costa** earned an MBA from Duke University and had extensive experience in strategic consulting, PE, and VC. He founded Intelgia Management Partners, a financial and strategic consulting firm, and was on the investment committee of Santander Bank in Argentina's VC initiative, Nexo Emprendedor. He also served as the General Director of Endeavor Argentina from 2001 to 2004.

In 2009, Mr. Arrieta, Mr. Coronel, and Ms. Cruz cofounded Nextperience, a digital marketing firm, in Buenos Aires. With their collective expertise in building companies, they quickly amassed a clientele of start-ups that required marketing help in areas like online media campaigns and social media strategies. The three founders began investing in some of these start-ups and providing the entrepreneurs with guidance in other areas of their businesses. When they learned about Y Combinator and its model, they decided to emulate it by raising a dedicated fund to begin formally accelerating Latin American tech start-ups. Mr. Costa, with his entrepreneurial background and experience in consulting and PEVC, was the logical fourth partner to round out the founding team.

From the very beginning, NXTP Labs had a regional focus. Their own entrepreneurial endeavors had taught the NXTP founders that Latin American companies needed to develop a strong regional footprint if they wished to achieve a successful exit (likely via acquisition) or expand globally. As one entrepreneur stated, "Argentina is not the market; Latin America is the market. The globe is the market." Inspiring its entrepreneurs to think globally was thus a key focus for NXTP. In that sense, Argentina was an ideal location for a regional tech accelerator.

By 2011, the country, most notably Buenos Aires, had become a hotbed for tech development in the region, with notable success stories like MercadoLibre (Latin America's largest ecommerce site) and Globant (an Argentine IT and software development company that, since 2014, is listed on the New York Stock Exchange under ticker GLOB). Its highly skilled, largely multi-lingual workforce coupled with favorable exchange rates, has helped the country become a prime destination for technology development outsourcing.[239] While Argentina's challenging political macroeconomic conditions, driven by factors like high inflation rates and artificially maintained exchange rates, make growing a business difficult, they have also given birth to a generation of highly resilient entrepreneurs.[240] The country's economic challenges also benefitted NXTP

[239] Camila Russo and Cristiane Lucchesi, "Citi, Accenture Hire Hundreds for Buenos Aires Tech Hub," *Bloomberg Business*, August 8, 2014, http://www.bloomberg.com/news/articles/2014-08-08/citi-accenture-hire-hundreds-for-buenos-aires-tech-hub.

[240] For instance, the Global Entrepreneurship Monitor found that Argentina's rate of start-ups increased over 40% between 2001 and 2013, and that times of economic and political crisis have correlated with increased total entrepreneurial activity in the country. GEM, "Argentina Country Profile," Global Entrepreneurship Monitor, accessed September 28, 2015, http://www.gemconsortium.org/country-profile/36.

because entrepreneurs were forced to look beyond the country's borders when growing their businesses.

The Acceleration Program

The NXTP Labs model revolved around a four-month acceleration program that accepted batches of 20 to 30 start-ups at a time. NXTP Labs sought to invest in web-enabled technology start-ups that fulfilled the following criteria:

- Investee companies needed at least two founders dedicated to the project full-time.
- The businesses needed to focus on one of NXTP's target sectors, which included B2B, social media, online marketing and advertising, media and entertainment, e-commerce and marketplaces, internet consumer, and mobile games.[241]
- The team must have developed a prototype of the product or service to demonstrate its ability to execute the business plan.

In addition to these three objective criteria, the NXTP team also evaluated the complementarity of the team's skills, the strength of the business model, the reasonableness of the financial projections, and the quality of the team's references. NXTP's team also sought start-ups that aligned economic and social impact, although this was not a determining factor in its choice.

NXTP originally planned to invest its first fund in 300 start-ups. With such a high number of investees, the firm would mobilize the region's entrepreneurial ecosystem, allowing (and requiring) NXTP to reach many more entrepreneurs, mentors, and angel investors than if it set a more modest target. The large portfolio would also reduce the fund's exposure to idiosyncratic risk, which it would be able to diversify away more effectively than had it invested in fewer companies.

To reach this target, start-ups were sourced through referrals from NXTP's contacts, applications submitted online, and the various ecosystem-building events that NXTP's founders attended throughout the region. While NXTP's initial investees were drawn to the accelerator by the reputations of its founders, the accelerator quickly developed a positive reputation in its own right.

The screening process was carefully defined. The Program Director, a senior staff member, served as the initial filter for applicants, confirming that the start-ups were an appropriate fit with NXTP's investment criteria. Applicants that passed the Program Director's initial diligence were then presented to the Investment Committee, composed of NXTP's four founders and the Program Director, for more in-depth consideration and final approval. The investment committee considered the quality and scalability of applicants' proposed business models, and placed particular emphasis on examining the skills, experience, and team dynamic of each start-up's founding partners. Accepted start-ups were then accelerated in a specific batch of the program.

[241] NXTP Labs, "About," NXTP Labs, accessed September 28, 2015, http://www.nxtplabs.com/about/.

During the accelerator program, companies' founders were invited to work out of NXTP's offices in the Palermo Soho neighborhood of Buenos Aires. There, the entrepreneurs received access to training workshops, mentorship, and business advice from the NXTP team. The entrepreneurs also had access to office hours with the Nextperience team for advice on digital ads and marketing campaigns. The start-ups normally received investments of $25,000, usually structured as a convertible note, in addition to access to a number of "perks": free or discounted services such as web-hosting and email marketing from various vendors. NXTP took a small equity percentage, typically 2-10%, in exchange for the capital, services, and training that it provided. After the initial $25,000 investment, NXTP might make follow-on investments of up to $1 million, typically co-investing alongside other investors. "We do not lead second rounds," described Mr. Coronel. "We would like for other investment firms to validate companies' performance and business models."[242] Entrepreneurs often utilized NXTP's network to find investors to lead these later rounds. When describing the firm's model, the NXTP team often used the metaphor of driving a car. During the four-month program, NXTP wanted to be the founders' co-pilot, offering directions and guidance. After the program, however, NXTP needed to move to the backseat and let the entrepreneurs and new investors steer. This is discussed further in the After Acceleration section below.

The Three Phases of Acceleration

As co-pilot during the accelerator program, NXTP had two goals: to help entrepreneurs develop and validate their business models; and to get the companies to a level of investment readiness that would allow them to attract additional financing after leaving the program. To accomplish this, the program was divided into three general phases. The first phase focused on business model validation. It began with one of the program's key events, Mentors Day. This event, analogous to speed-dating for business mentors, gave the entrepreneurs a chance to speak with dozens of knowledgeable business professionals, many of them successful entrepreneurs, in a number of different fields. At the end of the event, entrepreneurs and mentors were matched based on their mutual interest in embarking on the program together.

During the second phase of the accelerator, entrepreneurs worked on scaling their businesses and executing their business plans. In addition to ramping up marketing and sales, the companies often began to plan expansion into new countries or geographies. They were aided in this task by NXTP's expansive network of regional and global business connections.

The final phase of the program involved readying the entrepreneurs and their businesses for future investment. NXTP organized workshops around topics like pitch preparation, the different types of investors, and how to structure investment rounds. The four months culminated in NXTP's Demo Day, when entrepreneurs presented their businesses in front of a large audience of potential investors and industry leaders, in hopes of making contacts that would result in further investments or strategic partnerships.

[242] "NXTP Labs is Raising US $60M," *NXTP Labs*, May 5, 2015, http://www.nxtplabs.com/nxtp-labs-is-raising-us-60m-to-strengthen-its-leading-position-in-early-stage-tech-investment-in-latin-america/.

After Acceleration

NXTP takes a passive role with the accelerator's graduates. Founders are expected to send monthly reports to the NXTP team and typically maintain ongoing relationships with their NXTP mentors. Additionally, NXTP organizes events, like its monthly First Thursday lunches, that bring together its start-up founders, investors, mentors, and other industry players across all of NXTP's country offices.[243] While NXTP's staff, mentors, and founders remain available to entrepreneurs long after the accelerator program ends, the entrepreneurs must be proactive in requesting their support. "Anytime we needed somebody or something," explained one entrepreneur, "we knew it was just an email or a call away." As NXTP's portfolio companies encounter new challenges and opportunities, the management teams often reach out to NXTP for guidance and assistance. With such a large portfolio, this entrepreneur-initiated support process has proven to be crucial to the sustainability of the NXTP model. At a basic level, NXTP relies on the self-selection of entrepreneurs to prioritize its support resources to the most proactive and determined graduates, characteristics that are likely to help their start-ups succeed. Similarly, NXTP's decision to rely on third-party investors in follow-on rounds allows it to more efficiently allocate capital to companies whose models and value are validated by other investors.

Comparisons were often drawn between NXTP and Wayra, the international accelerator organized by Telefónica, a Spanish multinational telecommunications provider. As of October 2015, the Spanish accelerator operated in twelve countries across Europe and Latin America, and had accelerated 438 start-ups since its founding in 2011.[244] Over the same period, NXTP established a presence in seven countries and invested in 164 companies.

While some considered Wayra and NXTP to be competitors, others found them complementary in their support of the Latin American start-up ecosystem. A major difference between the two was the company stage they targeted. Both accelerators invested in companies with innovative, technology-enabled products and services, but Wayra typically invested in more developed companies than did NXTP. In fact, a number of start-ups participated in both programs, typically completing NXTP's program first. According to these entrepreneurs, Wayra's program was more corporate and structured; it helped to professionalize companies and prepare them to work with Telefónica in the future. Wayra was also more likely to actively steer the start-ups to implement new practices. NXTP Labs, on the other hand, was more entrepreneurial; it helped start-ups develop their products and business models and customized its approach to the needs of each entrepreneur. This relationship, in which NXTP accelerated fledgling entrepreneurs and Wayra later helped them professionalize their companies, reflects NXTP's reliance (by design) on third parties after acceleration. As with NXTP's entrepreneur-initiated support process and co-

[243] By 2015, NXTP had a presence in seven countries: the firm's headquarters were in Argentina (founded 2011); it had operations managers in Chile (since January 2013), Colombia (June 2014), and Mexico (June 2014); and it had venture partners in Uruguay (December 2012), Brazil (June 2014) and the United States (November 2014). Venture partners are local contacts that link NXTP to promising deals and potential investors, while operations managers typically play a greater role, which includes fundraising, managing relationships with key investors, scouting new start-ups, developing NXTP's brand, and supporting local portfolio companies.

[244] Wayra, "Dashboard," Wayra, accessed October 14, 2015, http://wayra.co/dashboard.

investor-led follow-on strategy, the program's dependence on other players in the start-up ecosystem to support its graduates allows the firm to more efficiently manage its large portfolio. This is one of the reasons that NXTP purposefully develops and maintains its strong regional and global network.

Raising Capital

To raise the initial funding and create the mentor network, the founders turned to private individual investors. From 2011 to 2013, the NXTP founders convinced 80 members of their expansive personal networks to each contribute $25,000 to the fund. The founders themselves contributed an additional $500,000, bringing the fund's total to $2.5 million. Seeking a high number of investors at a low ticket price was a strategic decision for NXTP; the 80 initial investors also became NXTP's first mentors. Additionally, the mentors could invest in the portfolio companies that they found most promising, further aligning their interests with the success of NXTP's entrepreneurs and reducing the advisory load on the NXTP founders. For many of NXTP's investors, the opportunity to meet and invest in promising entrepreneurs was seen as more valuable than the potential returns from their investments in the accelerator.

With its initial round of capital and roster of mentors, NXTP graduated 50 companies from its program in the first three editions of its accelerator (mid-2011 through 2012). In July 2012, NXTP achieved its first exit, when Bixti, an online market place for handicrafts, was acquired by a Brazilian firm, Elo7, generating a 5x return.

In July 2013, NXTP started raising additional capital for its accelerator fund, this time accepting commitments from government and multinational investors, family offices, and individual investors, which could invest above the original $25,000 amount. The goal here was more ambitious: to increase the size of the fund to at least $25 million, allowing the company to invest in 300 start-ups.[245] The fund was organized in a traditional way, with a 2.5% fee and a 20% carry. After the investment period, the management fee would become budget-based, an industry best practice recommended by the Institutional Limited Partners Association (ILPA), albeit rarely seen, even in developed markets.[246] (This policy was adopted by NXTP at the MIF's suggestion.) Additionally, if the fund produced returns in excess of three times the invested capital, the carried interest could reach as high as 30%.[247]

For this second round of investment, NXTP's founders specifically targeted the MIF as a key investor. One reason for this was the MIF's experience—its 20+ years of investing in the region's venture capital industry made the MIF perhaps Latin America's most experienced limited partner. The MIF would not only be able to share its knowledge and best practices with

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[245] This number included the 53 companies already in the NXTP portfolio at that time, implying investments in 247 additional companies. This number was chosen because the founders believed it was the largest portfolio the firm could manage over the life of the fund.

[246] Institutional Limited Partners Association, *Private Equity Principles*, Vol. 2, Toronto, Ontario: ILPA, 2011.

[247] Multilateral Investment Fund, NXTP Labs - A Framework to Consolidate a Seed-Accelerator Model for Technology Start-Ups: Donors Memorandum, Multilateral Investment Fund, 2013.

NXTP, but would also signal to other institutional investors that NXTP was a reputable investor in the region. NXTP hoped that this "certification" effect would help encourage other institutions to invest in the fund.

Additionally, NXTP's founders knew that the MIF had been proactive in supporting a number of the region's first-time fund managers. One of the MIF's core missions "is to act as a development laboratory - experimenting, pioneering, and taking risks in order to build and support successful micro and SME business models."[248] Fundraising can often be challenging and time-consuming even for experienced VC fund managers. For first-time fund managers in emerging markets this can be particularly difficult—according to Preqin, only 7% of the capital committed to PEVC funds globally in 2013 was managed by first time teams.[249] Considering its ambitious goals and the still-nascent state of the accelerator model in Latin America, the MIF was a logical partner and anchor investor in the fund. NXTP offered the MIF an opportunity to help pioneer a model that could support hundreds of Latin America's entrepreneurs.

Recognizing both the high risks and high potential rewards of NXTP's model, the MIF invested $5 million in its fund. The MIF's motives for investing included supporting the innovative, high-growth companies in Latin America, contributing to the development of a strong entrepreneurial culture and ecosystem in the region (in part, by dispelling the strong cultural fear of failure), and supporting the region's female entrepreneurs. "With this project," explained MIF Principal Investment Officer Susana Garcia-Robles, "we hope to encourage the creation of a more dynamic entrepreneurial culture in which entrepreneurs can take risks without being stigmatized if their first attempts fail."[250] In addition to its investment, the MIF also granted the firm $750,000 in technical assistance funding, the majority of which was earmarked to help finance the creation and dissemination of innovative value-added knowledge products[251], and to support NXTP's activities related to promoting female entrepreneurship. The rest helped cover legal costs and costs associated with evaluation and supervision of the fund.

By early 2015, NXTP had raised a total of $31 million for its accelerator fund (including the $2.5 million raised in the first round), anchored by the MIF's $5 million investment. Other investors included the city of Buenos Aires, Chile's Corporación de Fomento de la Producción (CORFO), and Mexico's Instituto Nacional del Emprendedor (INADEM).

[248] Multilateral Investment Fund, "Our Mission," Multilateral Investment Fund, accessed October 15, 2015, http://www.fomin.org/en-us/home/aboutmif/ourmission.aspx.

[249] Preqin, *Fundraising for First-Time Private Equity Funds at Lowest Level Post Financial Crisis*, Preqin, April 10, 2014, https://www.preqin.com/docs/press/First_Time_Funds_14.pdf.; And Preqin, *2014 Global Private Equity Report*, London: Preqin, 2014.

[250] Inter-American Development Bank, "MIF and NXTP Labs Increase Support for Technology Companies in Latin America," *Inter-American Development Bank,* April 11, 2013. http://www.iadb.org/en/news/news-releases/2013-04-11/mif-and-nxtp-labs-increase-support-for-tech-start-ups,10420.html.

[251] The knowledge product component includes participation at international events that would create awareness of the accelerator model, and help connect NXTP with similar global initiatives.

Expanding Operations

Even while it was raising its fund, NXTP was expanding its regional presence. Although the actual acceleration program operates only out of the Buenos Aires office, NXTP established a presence in six additional countries through either venture partners or operations managers. Venture partners link NXTP to promising deals and potential investors. Operations managers typically play a greater role, which includes fundraising, managing relationships with key investors, scouting new start-ups, developing NXTP's brand, and supporting the NXTP portfolio companies located in or entering that country. By 2015, NXTP had venture partners in Uruguay (since December 2012), Brazil (June 2014), and the United States (November 2014), and operations managers in Chile (January 2013), Colombia (June 2014), and Mexico (June 2014).

NXTP's managers and partners continue to expand the firm's regional presence, and by 2015 the firm had strong deal flow from several of these countries. The founders of NXTP, for instance, said that they have access to and receive applications from a significant proportion of Colombia's most promising start-ups. On the other hand, NXTP's deal flow from Brazil is less promising, largely because promising Brazilian entrepreneurs have access to more early stage financing options than entrepreneurs in the rest of the region.

NXTP has also nurtured partnerships with other accelerators. It is a member of the Global Accelerators Network (GAN), a community of over 70 accelerators across six continents.[252] NXTP's Gonzalo Costa is a member of GAN's leadership team. Through GAN, NXTP and its investee start-ups have access to a global network of fund managers, investors, and entrepreneurs and also receive a number of discounts to various service providers.

NXTP also partners directly with some Latin American accelerators, one of which is the Acelera Partners, a Brazilian operation. The two firms share investment opportunities with one another when their entrepreneurs can benefit from the other firm's support—for example if an NXTP entrepreneur wants to expand to Brazil. In such instances, the entrepreneurs benefit from working with a local partner in the new market, and the firms benefit from access to each other's promising deals. NXTP Labs also collaborated closely with 21212, a Brazilian accelerator for digital start-ups, until 21212 announced in July 2015 that it would freeze its acceleration activities to focus its attention on supporting its current portfolio of accelerated companies.[253] While NXTP rarely collaborates directly with Wayra, Telefónica's accelerator program, the two accelerators appear to have a mutually beneficial relationship as Wayra continues support for some of NXTP's graduates.

NXTP's presence in the United States was recently established through a platform called Puente Labs.[254] Puente Labs helps high potential Latin American companies connect with investors and professionals in Silicon Valley to scale their businesses in the U.S. and globally. NXTP is a

[252] Global Accelerator Network, "The Network," Global Accelerator Network, accessed October 15, 2015, http://gan.co/the-network.
[253] 21212, "21212 - New Positioning," *21212*, July 1, 2015, http://21212.com/blog/21212-new-positioning/.
[254] Puente Labs, "Puente Labs," accessed October 15, 2015, http://puentelabs.com/.

sponsor of this Silicon Valley-based program, alongside the Samsung Global Innovation Center, technology-focused Silicon Valley Bank, Valor Capital Group, and VC-focused law firm Gunderson Dettmer. Additionally, Ariel Arrieta sits on its board, which also includes Alex Mendez, founder of Storm Ventures, a U.S.-based seed and early-stage VC firm, and Santi Subotovsky, partner at Emergence Capital Partners, a U.S.-based VC firm that targets enterprise cloud companies. In addition to providing NXTP's portfolio companies with a launching pad into Silicon Valley, Puente Labs has also provided helpful deal flow to NXTP through, for instance, an introduction to a particularly promising Colombian start-up.

Portfolio Overview and Financial Results

NXTP's team of 19 professionals (including its four founding partners) aimed to invest in 300 companies over the 10-14 year life of the accelerator fund.[255] The firm's investment strategy projected a series of outcomes in line with the early-stage focus. Among the 300 anticipated portfolio companies, 2% were expected to achieve returns between 8x and 12x the invested capital and IRRs over 50%; 11% to generate healthy returns of 5x – 8x; 27% to produce moderate returns of 1x – 5x; and 60% to break even or be written off.[256]

By June 2015, NXTP had made initial investments in 164 firms and follow-on investments in 58 firms, and the total value of NXTP's portfolio, including exited companies and then-current investments, was approximately $20 million. (For an overview of NXTP's portfolio, see Table IV-1 below.) As of September 2015, NXTP had produced a ratio of portfolio value to capital invested (TVPI) of approximately 1.5x.[257]

[255] NXTP's team consisted of 19 professionals as of October 2015.

[256] Josh Lerner, Maria Fernanda Miguel, and Laura Urdapilleta, "NXTP Labs: An Innovative Accelerator Model," *Harvard Business School Case 815-110*, 2015. U.S.-based VC investors have a rule of thumb that 30% of their early stage companies will fail completely, 30% will produce "venture returns" with IRRs in the high teens or higher, and the balance will essentially break even or produce small returns.

[257] NXTP's accelerator model invests both capital and services (i.e., mentoring, business training, and access to NXTP's network) in exchange for equity in the portfolio companies. The TVPI of 1.5x as of September 2015 considers only the capital that NXTP invested. The TVPI considering both capital and the value of acceleration services was 1.3x.

Table IV-1: Summary of NXTP's Portfolio as of September 2015[258]

Edition	Date	Investee Firms	Firms that received NXTP follow-ons	Exits	High Potential Firms	Growing Firms	Moderate Potential Firms	Walking Dead Firms	Write-offs
1	H2 2011	15	7	3	2	3	4	1	2
2	H1 2012	16	8	0	7	1	3	1	4
3	H2 2012	22	9	0	6	7	4	4	1
4	H1 2013	20	8	3	5	2	5	1	4
5	H2 2013	26	4	1	3	8	7	4	3
6	H1 2014	35	5	1	6	8	17	3	0
7	H2 2014	21	11	1	8	10	2	0	0
8[259]	H1 2015	9	6	0	3	6	0	0	0
Total		**164**	**58**	**9**	**40**	**45**	**42**	**14**	**14**

Exits

By November 2015, NXTP had also completed nine exits. Table IV-2 below provides a summary of NXTP's exited investments. Exits are important to any risk capital fund, because they provide the financial returns that motivate limited partners to invest, and give liquidity to the general partners and entrepreneurs. Exits are particularly significant in Latin America where much capital has been invested in recent years, but exits have been relatively rare. (LatAm VC funds invested over $2 billion from 2011 through the first half of 2015 and returned only $292 million over the same period.[260]) NXTP's nine exits are important indicators of the fund's ability to generate returns. Additionally, the exits illustrate the value that NXTP has generated in its portfolio, supporting its portfolio companies to grow in value and become attractive to global

[258] The data in Table IV-1 describes NXTP's portfolio as of September 2015 with one exception. NXTP exited Tutum (part of the fifth edition of the accelerator) in October 2015. We have included Tutum as an exited firm in this table. Before it was exited, Tutum was categorized as a high potential firm.

[259] Please note that determining portfolio companies' potential, especially early in an investment, is an inexact science. Thus, the performance categories that companies have been assigned to, especially in the two most recent editions of the accelerator, are indicative rather than conclusive.

[260] 2015 LAVCA Industry Data.

and regional buyers. Collectively, the nine exits generated approximately $2.6 million on $615,000 of invested capital, achieving a multiple of invested capital of 4.74x.[261]

Table IV-2: Summary of NXTP's Exits as of June 2015

Company	Edition	Investment Date	Total Capital Invested	Exit Date	Acquirer	Return Multiple
Bixti	1	Nov-11	$20,000	Jul-12	Elo7	5.0x
WeHostels	1	Nov-11	$25,000	Oct-13	StudentUniverse	4.5x
ComentaTV	1	Nov-11	$100,000	Dec-13	Wayin	3.4x
TheFanLeague	4	Mar-13	$25,000	Feb-14	BeGood	3.5x
Talemestories	4	Mar-13	$25,000	Jan-14	Kidloom	2.2x
Sinimanes	4	Mar-13	$145,000	Jun-14	Kinboy	1.6x
Aventones	6	Mar-14	$225,000	Apr-15	BlaBlaCar	< 2x
Sparkflow	7	Sep-14	$25,000	Jun-15	Undertone	~ 4x
Tutum	5	Oct-13	$25,000	Oct-15	Docker	~60x

NXTP's most recent exit, Tutum's acquisition by Docker in October 2015, was also the firm's most profitable, returning approximately $1.5 million and generating a 60x return. The exit, however, also sheds light on one of NXTP's biggest challenges: capital constraints that limit its ability to make follow-on investments in its promising portfolio companies. The firm made its initial investment in Tutum when the company was founded in October 2013. Over the two years that followed, Azure Capital Partners, RTP Ventures, and Techstars all invested in Tutum.[262] Over this period, NXTP, forced to ration its capital, never made a follow-on investment in the company. Thus, when Tutum was acquired by Docker, NXTP received a very high multiple on its low initial investment, but missed an opportunity to generate much higher returns in terms of absolute value.

The Rest of the Portfolio and the Happy Problem

While the first four editions of the accelerator accounted for over 75% of the portfolio's write-offs as of June 2015, as shown in Table IV-1, the earlier investments were not necessarily worse than the more recent investments. A popular adage in the venture capital industry states that "lemons ripen faster than plums." The low performers in a portfolio typically become evident and/or fail more quickly than the most promising companies mature and generate returns. Thus the early editions have simply had more time to generate write-offs than their more recent comparisons.

In fact, NXTP had far fewer write-offs in its portfolio than expected, contributing to what the team called its "happy problem": over 50% of its portfolio comprised high potential or growing

[261] As explained in footnote 257, NXTP invests both capital and services (i.e., mentoring, business training, and access to NXTP's network) in its portfolio companies. Please note that the 4.74x figure represents the returns relative only to the capital invested. It does not consider the value of the acceleration services provided.

[262] We further discuss the investors that have invested in NXTP's portfolio companies in the Impact section below.

companies, much higher than NXTP's original projections. To make follow-on investments in these promising companies and continue accelerating new start-ups, NXTP estimated it would need an additional $30 million in funding. Without additional capital to make follow-on investments in promising companies, NXTP and its investors would miss the opportunity to reap the value it had helped to create, as illustrated in the Tutum exit described above.

In March 2015, the firm tried to address this capital shortfall by creating a new investment vehicle called NXTP Labs Emerging Market High Impact Tech Start-ups (EMHITS) Flex Notes. EMHITS were exchange-traded bonds or notes listed on the Vienna Stock Exchange.[263] The notes were marketed by private banks and incorporated an equity stake in NXTP as an underlying asset, with the price of the notes corresponding to NXTP's portfolio valuation. The vehicle allowed small investors to invest as little as $1,000 in the fund. The NXTP team expected the EMHITS vehicle to generate up to $10 million, but the program greatly underperformed these expectations, ultimately raising less than $1 million in additional capital. In combination with more usual fundraising efforts at the time, however, NXTP was able to increase the fund's total size to $38.5 million by September 2015.

Impact

In addition to generating financial results, NXTP Labs and its portfolio of tech startups has had a strong impact in the region. While NXTP Labs is not formally defined as an impact investor,[264] its founders do acknowledge important social goals in their work. One such goal is to create a thriving entrepreneurial and early-stage investment ecosystem in Latin America. As noted in the recent research by Daniel Fehder and Yael Hochberg, accelerators like NXTP can play an important role in attracting additional early-stage financing to a region, helping not only start-ups that participate in the accelerators, but also other entrepreneurs in the area.[265] NXTP's hypothesis was that a healthy community of entrepreneurs, investors, and mentors would help the fund achieve strong economic returns.[266] In addition, such a community would likely contribute to the region's economy more broadly, improving quality of life and producing important social returns such as a more innovative and entrepreneurial business climate, higher taxes for the government, and a higher rate of job creation. Related to this goal, NXTP also strove to empower the region's female entrepreneurs. In this mission, it partnered with a number of important regional and global organizations to create opportunities for women with innovative ideas throughout Latin America.

[263] The NXTP team chose to list the EMHITS Flex Notes on the Vienna Stock Exchange to minimize costs and regulatory burdens. (The cost and regulatory hurdles of listing on that exchange were low relative to other exchanges.)
[264] According to the Global Impact Investing Network, Impact investments are investments made into companies, organizations, and funds with the intention to generate social and environmental impact alongside a financial return.
[265] Daniel C. Fehder and Yael V. Hochberg, "Accelerators and the Regional Supply of Venture Capital Investment," *Working Paper*, September 19, 2014. Available at SSRN: http://ssrn.com/abstract=2518668 or http://dx.doi.org/10.2139/ssrn.2518668.
[266] For example, research has found that VC firms with stronger networks experience significantly better fund performance. (Yael V. Hochberg, Alexander Ljungqvist, and Yang Lu, "Whom You Know Matters: Venture Capital Networks and Investment Performance," *Journal of Finance* 62, no. 1 (2007): 251-301.)

NXTP partnered with the MIF, for example, to advance this goal. NXTP runs the annual pitch competition for WeXchange, a MIF-founded platform that brings together women entrepreneurs, investors, and mentors. NXTP also cofounded the Day of the LAC Woman Entrepreneur and wrote its founding manifesto.[267] The firm hosts and speaks at events in different countries in the region in support of female entrepreneurship initiatives. NXTP's Marta Cruz has also worked alongside other organizations that enable female business leaders and entrepreneurs, such as Ellas2.0 and Vital Voices.

The MIF was an important investor in NXTP Labs' accelerator. It considered both NXTP's potential contribution to the regional ecosystem and its support of female entrepreneurs when making its investment decision. At the time, the business accelerator model was still unproven in Latin America, but the MIF believed that NXTP's founders had the necessary skills and background to demonstrate the model's viability in the region. In doing so, NXTP would support the growth of many promising start-ups, including many founded by female entrepreneurs, and thus contribute to the region's continued economic development. These start-ups could serve as examples and inspire new entrepreneurs, creating a virtuous cycle. Even NXTP's write-offs could have a positive impact in the region by helping dispel the region's prevalent fear of failure. Many entrepreneurs, including Apple's Steve Jobs, Uber's Travis Kalanick, and even NXTP's Ariel Arrieta, failed in early entrepreneurial endeavors before creating successful companies. As one entrepreneur described, "Failure is an incredible crucible for learning and personal growth."[268] While entrepreneurs in other parts of the world have begun to speak more openly about their failures,[269] failure is still considered shameful by many entrepreneurs in Latin America.[270] With such a large portfolio of early-stage companies, NXTP could help remove this stigma by encouraging entrepreneurs to share and learn from their mistakes.

In making its investment decisions, NXTP considered not only the quality of entrepreneurs and the scalability of their business models, but also the startups' potential impact on the region. Ariel Arrieta described NXTP's approach as, "We believe that all of the companies in which we invest need to have social impact aligned with economic impact. We believe that right now if you want to create a company you have to align those two interests." A number of companies in the NXTP portfolio exemplified this alignment of interests by demonstrating strong financial performance while creating high quality jobs, building new markets, or providing new goods and services to populations that could not previously access them.

Table IV-3 below offers a brief snapshot of NXTP Labs' contributions to the region. The NXTP team created a network of over 200 professionals across 14 countries to serve as mentors to their

[267] See http://manifiesto.martacruz.com.ar/, accessed Feb. 29, 2016.
[268] Dave McLaughlin (Scott Kirsner, "Common Pathway to Success: Failure," *The Boston Globe*, October 2, 2015, http://www.betaboston.com/news/2015/10/02/common-pathway-to-success-failure/.)
[269] Many founders of failed businesses, for example, publish "post-mortem" blog posts on Medium (Erin Griffith, "Why Startups Fail, According to their Founders," *Fortune.Com*, September 25, 2014, http://fortune.com/2014/09/25/why-startups-fail-according-to-their-founders/.) or share their stories at events like FailCon (FailCon, "About FailCon," accessed October 15, 2015, http://thefailcon.com/about.html.).
[270] Monica Pina, "We Need Help!" *Multilateral Investment Fund*, November 14, 2012, http://www.fomin.org/en-us/Home/FOMINblog/Blogs/DetailsBlog/ArtMID/13858/ArticleID/2047/NoTitleLink.aspx.

entrepreneurs. With the help of this network, the firm supported nearly 400 Latin American entrepreneurs as they developed their business models. Those companies, in turn, generated over $35.5 million in revenue and employed 1,164 people. Arguably, NXTP's companies also had an impact on many of their customers and suppliers, indirectly contributing to growth and job creation within those companies. While it is challenging to estimate the total number of indirect jobs created by NXTP's portfolio companies, NXTP collected data from a group of 16 start-ups that the firm believes to be particularly impactful in terms of generating indirect jobs, and estimated that these 16 companies contributed to the creation of nearly 84,000 jobs as of September 2015.[271]

Table IV-3: NXTP Portfolio Impact as of March 30, 2015

Entrepreneurs Graduated	Female Entrepreneurs Graduated	Portfolio Mentors	Portfolio Company Revenue Growth[272]	Direct Jobs Supported	Cumulative Capital Raised by Companies[273]
397	**38**	**210**	**$35.5 million**	**1,164**	**$120+ million**

As of mid-2015, NXTP's portfolio companies had raised over $120 million from a variety of sources, including reputable angel investors, accelerators, and VC firms from around the globe. This is a rare and impressive accomplishment for Latin American start-ups. One such company, Auth0, an identity-as-a-service platform for app developers that NXTP accelerated in early 2014, raised a $9.3 million round in June 2015 led by Bessemer Venture Partners, with participation by other investors such as K9 Ventures.[274] In October 2014, Properati, an online real estate marketplace that graduated from the accelerator in 2013, raised a $2 million Series A round led by NEVEQ, a European seed- and early-stage VC firm.[275] Of the 14 investments made by Cygnus Capital, a Buenos Aires-based VC firm, 12 are in NXTP portfolio companies.[276] One such investment was in Gone!, an app that enables users to easily sell, recycle, and discard their possessions. Gone! also participated in the Techstars accelerator, and received an angel investment from Techstars' founder David Cohen and his personal investment fund, Bullet Time Ventures. Tienda Nube, an ecommerce platform for small retailers that graduated in NXTP's first class, has similarly attracted attention from investors. In 2013 it received a $1 million

[271] As of September 2015, NXTP identified 30 portfolio companies that it estimates have had the highest impact in terms of indirect job creation. NXTP was able to collect indirect job creation data from 16 of these companies, which in aggregate indirectly supported 83, 843 jobs. While one cannot reasonably assume that each of NXTP's 164 portfolio companies generated on average over 5,000 indirect jobs as demonstrated by this sample, this figure provides an important snapshot of the indirect job creation that NXTP has helped support.
[272] The figure for NXTP's portfolio company revenue growth is as of June 30, 2015.
[273] The figure for cumulative capital raised by NXTP's portfolio companies is as of June 30, 2015.
[274] "Auth0 Raises Series A Led by Bessemer to Take the Pain Out of Identity Security," *Business Wire,* June 24, 2015, http://www.businesswire.com/news/home/20150624005699/en/Auth0-Raises-Series-Led-Bessemer-Pain-Identity.
[275] LAVCA, "Properati Receives New Round of Investments (Em Português)," *LAVCA,* October 17, 2014, http://lavca.org/2014/10/17/portal-receives-new-round-of-real-estate-investments-em-portugues.
[276] Cygnus Capital, "Portfolio," accessed November 23, 2015, http://www.cygnusvc.com/portfolio.html.

investment from Trindade Investimentos,[277] a Brazilian VC firm, and in 2015 it raised a Series A round led by Kaszek Ventures, an Argentina-based VC firm.[278]

As discussed in the Analytical Approach Section in the Introduction, accurately determining an investment fund's developmental impact is very difficult. Impact data is often sparse and difficult to obtain, and even when such data is available it is often based on small samples and best estimates, as illustrated in the indirect jobs figure presented above. Moreover, should good descriptive data be available, the structure of the PEVC industry (among other factors) generally makes it very difficult to implement research methodologies which can rigorously address the question of attribution of any observed impact, i.e., whether the fund manager truly caused the observed impact.

The discussion below reflects insights gathered through interviewing NXTP's team, portfolio company entrepreneurs, mentors, and investors, as well as from numerical data when such data was available. The research team examined both the direct impact that NXTP has had on its portfolio companies, as well as the impact that the portfolio companies have had on the region.

Please note that due to the size of NXTP's portfolio, the impact discussion is focused around the 23 portfolio companies which were interviewed. A brief description of each of the interviewed firms can be found in Appendix I. A diverse group of companies was selected, representing different industries, stages of business development, and levels of performance across various editions of NXTP's accelerator program.[279]

Direct Impact

NXTP's financing and guidance had a direct impact on its portfolio companies in a number of ways. Table IV-4 below examines this impact across four broad categories. The categories are meant to facilitate a discussion of NXTP's impact, and are not exhaustive. In the table, NXTP's direct involvement with specific portfolio companies is rated on a scale from zero to four, using the criteria described below:

- Effectiveness of committed capital: How important was NXTP's funding to the company? Was the company barred from accessing alternative financing? A rating of 0 would indicate that NXTP's capital investment was deemed not important and the company was not constrained in any way from accessing other sources of financing. A

[277] Emily Stewart, "Trindade Investimentos Invests US$1 Million in Tienda Nube," *PulsoSocial,* May 17, 2013, http://pulsosocial.com/en/2013/05/17/trindade-investimentos-invests-us1-million-in-tienda-nube/.
[278] Maximiliano Fanelli, "Tienda Nube Mostró Sus Novedades En Argentina," *Tecnopymes,* November 17, 2015, http://www.tecnopymes.com.ar/2015/11/17/tienda-nube-mostro-sus-novedades-en-argentina/.
[279] The 23 portfolio company interviews were scheduled by the NXTP team, in communication with the MIF and the authors of this report. The primary goal, as stated in the text of the report, was to select a diverse group of companies across different editions of the accelerator, different levels of performance, and different industries. While the researchers initially planned to interview three companies from each edition of the accelerator (a high-performer, mid-performer, and low-performer), the final sample did not perfectly reflect this distribution due to scheduling dynamics. Ultimately, the interviewee firms represent a diverse group of companies, within the constrained group of founders who were available to speak with the researchers at the time of the interviews.

rating of 4 would indicate that NXTP's capital investment was considered to be critically important and the company's access to other sources of financing was assessed as severely limited or non-existent. Because NXTP's accelerator model revolves around providing important business training and networking assistance to young companies coupled with small initial investments, one would expect low average scores for this criterion.

- Effectiveness of business training: Did NXTP provide useful business training? Was similar business training otherwise unavailable to the company? A rating of 0 would indicate that NXTP provided no business training to the company, that the business training was deemed unhelpful, or that the company and its founders had easy access to other sources of business training. A rating of 4 would indicate that NXTP provided business training services that were viewed as vitally important and available only from that source. Given NXTP's model, location, and target market, one would expect average scores for this criterion to be high.

- Effectiveness of ESG training: In the case of NXTP's portfolio, which comprises primarily young companies with minimal environmental impact, the ratings and discussion focus on the governance component of ESG. Did NXTP provide useful governance training/guidance? Did it improve the company's governance practices? Was similar governance training otherwise unavailable to the company? A rating of 0 would indicate that NXTP provided no ESG training. A rating of 4 would indicate that NXTP provided ESG training services that were considered to be critically important and greatly improved the company's governance practices. Given the early stage of NXTP's investees, one would not expect them to adopt complex ESG practices; thus one would expect fairly low average scores for this criterion.

- Effectiveness of networking opportunities: Did NXTP assist the firm with introductions or referrals to other businesses, professionals, mentors, government agencies, etc.? Were these activities useful to the company? A rating of 0 would indicate that NXTP provided no networking assistance to the company. A rating of 4 would indicate that NXTP provided ample networking assistance to the company and that it was considered to have a strong beneficial impact on one or more aspects of the company's business. One would expect average scores for this criterion to be high given NXTP's model.

In the discussion below, the general trends of NXTP's direct impact on the 23 portfolio companies under study are considered. However, please note that due to space constraints, not all companies are discussed in light of each criterion, but rather the most illustrative examples are singled out.

Table IV-4: Direct Impact of NXTP on a Sample of Its Portfolio Companies

Company	Committed Capital	Business Training	ESG	Networking
ComentaTV	◑	◑	◔	●
Cookapp	◑	◔	◔	●
Emporio Compras	◔	◔	◔	◕
EveryPost	◑	◑	○	◕
GroovinAds	◔	●	◔	◑
GuiaLocal	◔	◔	○	◑
iBillionaire	◔	◑	○	●
IncreaseCard	◑	◕	◔	◕
Jampp	○	○	○	◕
Las Partes	◔	●	◑	◕
LookUp	◑	●	◑	●
MiCarga	◕	◕	◑	●
Mural.ly	◔	●	○	◑
Pactanda	◔	◑	○	◕
Pago Rural	○	◔	○	◕
Properati	◕	◕	◔	●
Real Trends	●	●	◕	◑
Satellogic	◔	○	○	●
Sinimanes	◑	●	◑	◕
Tienda Nube	◑	●	◑	◑
Widow Games	◕	●	◕	◕
WinAd	●	●	◑	●
Zolvers	◑	●	◑	●

Direct Impact: Committed Capital

NXTP's initial capital investment of $25,000 was helpful for its young start-ups and often aided in supporting the founders' expenses during the acceleration process. Considered alone, however, the initial capital was not significant to the majority of its companies. Most founders interviewed explicitly stated that they did not come to NXTP for the $25,000 investment, but for the business expertise and network it could share. This is consistent with NXTP's investment model in which the firm adds value through training, mentoring, and providing access to a wide network, rather than through providing large capital injections.

In some cases, such as Jampp and Pago Rural, the entrepreneurs had an ample supply of funding before encountering NXTP, and accepted NXTP's investment simply to access its network and advice. In many cases, such as Mural.ly, the founders said that the investment was not vital, but that every bit of capital was helpful in a company's early stages. For companies that received sizable follow-on investments, like Emporio Compras, founders stated that the initial investment was not significant, but the larger follow-on investments substantially contributed to the firm's growth. The small minority of founders that were attracted to the program for the money said that they quickly learned that the other services NXTP provided were far more valuable.

It is important to note that while NXTP's capital investment was sometimes relatively minor, the firm often played a central role in mobilizing capital from other investors in its network. As previously mentioned, several of NXTP's portfolio companies secured funding from large, reputable, global investors, such as Bessemer Venture Partners and Techstars, an uncommon feat for Latin American start-ups and one that provides another level of certification for the companies. Several interviewees said that NXTP's investment offered their company credibility to other investors. This topic is discussed further in the networking subsection below.

Direct Impact: Business Training

According to the portfolio company founders, business training and strategic advice were among the most helpful resources that they received from NXTP. In many cases NXTP's founders played a central role in shaping or redesigning the companies' business models. For example, the founders of Real Trends said that their initial conversation with Mr. Arrieta caused them to completely alter their business plan from a high priced, low volume strategy to a low priced, high volume strategy. Over two weeks, they developed an entirely new product and presented it to NXTP. In several cases, entrepreneurs had specific technical skills but little or no experience in starting and running a company. The founders of Sinimanes and Widow Games, for instance, had never started companies before and said that they knew very little about forming and funding a start-up. The support of NXTP's team and mentors throughout the acceleration program were invaluable to them.

For some start-up teams, NXTP's advice did not fundamentally shape their businesses, but was quite helpful in specific areas. One founder said that the workshops throughout the accelerator program helped him to learn and implement marketing strategies much more quickly than he would have been able to on his own. In one example, an expert on Facebook marketing strategies led a workshop, and by the end of the day the founder had designed, implemented, and begun measuring the effectiveness of his Facebook advertising campaign. He said that it likely would have taken him a week to learn on his own, a substantial amount of time for a growing start-up.

NXTP often helped its founders with regional expansion. For several companies, the firm played a central role in their growth into new geographies, from initially urging the founders to expand through navigating the legal hurdles of running a business across national borders and arranging meetings with local investors and potential customers. As of the beginning of 2015, NXTP had operations in Argentina, Brazil, Chile, Colombia, Mexico, Uruguay, and the United States, and sought to leverage its presence and mentors throughout the Americas to facilitate "soft landings" for its portfolio companies in new countries.[280]

In the case of a few companies, like Satellogic, the founders were already experienced entrepreneurs with strong backgrounds in starting and growing a company. In such cases, the founders did not participate in the accelerator programs, but benefitted from NXTP's regional network.

The experience and expertise of NXTP's four founders is one of the fund's greatest assets. Many interviewees noted the value of the strategic advice provided directly by the founders. Given the large size of NXTP's portfolio and the many demands on the founders' time, entrepreneurs in the later editions of the accelerator often reported less face-to-face contact with the founders than had earlier entrepreneurs. One interviewee, for instance, said that he likely had no more than 60 minutes of Mr. Arrieta's time over the course of the program. He stressed, however, that every minute of that time was valuable, and that he received many important insights through those few brief conversations. Acknowledging the fact that they can no longer spend substantial time with each start-up due to the portfolio's growth, NXTP's founders are intentionally re-engineering some aspects of the program to shift the emphasis from their own knowledge and expertise to the collective expertise of NXTP's sizable network. This transition is discussed in the networking subsection.

While direct time and attention from NXTP's founders is increasingly infrequent, interviewees reported that the founders could always be reached by email and would make themselves available upon request. In some ways, this pattern seems to extend to the entire NXTP program. The majority of the interviewees noted that the burden of asking for help lay on the entrepreneurs. While the accelerator program ran workshops on a number of useful topics, most companies also required specific help with particular challenges. According to many entrepreneurs, if they did not ask for help, they would not receive it. The entrepreneurs saw this as reasonable, and in some cases even beneficial because it taught entrepreneurs to be proactive. As mentioned in the After Acceleration section above, the entrepreneur-initiated support system is an important feature in NXTP's investment model that allows the firm to efficiently allocate its time across its large portfolio of start-ups.

[280] NXTP Labs, NXTP Labs Investors Report, Q4 2014: NXTP Labs, 2015.

Direct Impact: ESG

Environmental, social, and governance (ESG) concerns are important when considering NXTP's impact on its companies, but in a way that differs from the other funds studied in this paper. NXTP's typical portfolio company is a web-enabled tech company that rarely has a substantial environmental impact. Thus, environmental training was not a relevant topic between the fund managers and the start-up entrepreneurs. Many of the companies did not employ large numbers of people during the accelerator process, when their teams typically consisted of only the founders and perhaps one or two key employees. Therefore, social concerns like complex hiring and labor practices were also less relevant for the companies at this stage of development. Similarly, few of these young growing businesses had active corporate social responsibility (CSR) programs due to capital constraints. Socially, it was more important that the start-ups' value creation was aligned with the general positive development of the region and its economy, rather than using CSR to "pay for companies' sins," as one founder described it. Thus, governance was the primary facet of ESG that NXTP developed within its portfolio. Even this, however, had to reflect the early stage of NXTP's portfolio companies, and the flexibility that entrepreneurs need when launching a start-up, and thus one would expect low average scores for this criterion.

Appropriate governance for a start-up needs to be lean enough to allow flexibility for its founders. In the early stages of a company's development, it must be able to move quickly, and overly burdensome controls and reporting standards can hamper its growth. According to interviewees, NXTP was adept at adjusting its approach to meet the development stage of each company. NXTP's initial due diligence was rarely arduous for its start-ups; in many cases the companies consisted of little more than the founders, a minimum viable product, and perhaps a short sales history to test the business plan's viability. Recognizing this, NXTP did not request complex reporting from its young companies, preferring simple monthly reports in order to remain informed of their growth and progress. As the firms grew and became more complex, NXTP helped them implement stage-appropriate accounting and legal practices. Several entrepreneurs mentioned that NXTP's due diligence also grew more intensive in follow-on rounds reflecting the later stage of the companies, the greater amount of capital committed, and the corresponding higher standards they needed to meet.

In some cases, such as Pago Rural, NXTP invested in companies that were already firmly established with strong reporting standards, or already had other formal investors who requested such documentation. In these cases, NXTP did not change the companies' governance and reporting practices.

For start-ups that were earlier in development, interviewees frequently reported that NXTP did more than help them develop reporting practices; it helped them select the best structure for their companies. Many of NXTP's entrepreneurs had never started a business, and deciding where to legally establish the company and how to launch operations in new countries was uncharted territory. NXTP helped its entrepreneurs to navigate the process, along with structuring their companies to be capital efficient and legally compliant.

Direct Impact: Networking

Alongside business advice, the entrepreneurs believed that access to NXTP's strong network of entrepreneurs, mentors, and investors in the region was NXTP's most valuable service. According to NXTP founder Gonzalo Costa, NXTP tried to "democratize access" to this network, connecting entrepreneurs with useful individuals and companies that would otherwise have been challenging to meet.

Individuals in NXTP's network often played multiple roles. For example, the mentors were frequently investors in NXTP's fund, and often also invested directly in the companies they mentored. This helped to align the mentors' incentives with the success of the portfolio companies. Additionally, in some cases, founders from earlier editions of NXTP became mentors to founders in later editions of the accelerator. The strong, interrelated network provided start-ups with increased access to capital, business advice, and sometimes, important partners, customers, and suppliers.

For many companies, NXTP's connections were most useful when raising new rounds of capital for their businesses. For example, NXTP played a central role in Properati's first and second rounds of financing by helping the founders develop their pitch, and providing contacts and arranging meetings for the firm. The power of NXTP's network to connect its investees with additional financing is highlighted by the amounts of capital since raised by its portfolio companies. (This topic is also discussed earlier in the Impact section.) As of mid-2015, NXTP's portfolio companies had raised over $120 million from various investors, including Bessemer Venture Partners, Kaszek Ventures, Techstars, Alta Ventures Mexico, NEVEQ, and many others. Some entrepreneurs said that NXTP's ability to help them find investors and to do so quickly was important to their companies. This topic is highlighted in the Satellogic mini-case below.

In its efforts to arrange soft landings when its portfolio companies expanded across the region or internationally, NXTP helped its entrepreneurs make important local contacts. When EveryPost entered the U.S. market, NXTP connected it with Venture Hive, a Miami-based incubator and accelerator that provided it with a $25,000 grant and access to a strong U.S. network. Similarly, when the founders of WinAd moved to Buenos Aires to participate in the accelerator and launch operations in Argentina, they had very few contacts in the region. With NXTP's introductions, the founders quickly assembled a host of useful business contacts, often having two or three meetings per day.

In notable cases, NXTP's network brought together the cofounders of a business. The case of iBillionaire is a notable example. When one of NXTP's portfolio entrepreneurs, Raul Moreno, was struggling with his original business plan, NXTP connected him with one of its investors and mentors, Alejandro Estrada. Abandoning the earlier concept, the two created iBillionaire, an innovative financial platform through which users track the investment strategies of Wall Street billionaires and invest in an exchange-traded fund that mirrors the billionaires' portfolios. This company is featured in a mini-case below.

In NXTP Labs' early years, its four founders were the nexus of its large network. When portfolio company entrepreneurs needed specific advice or required meetings with particular industry players, NXTP's founders would connect them with the proper contact.

With the growth of NXTP's portfolio and network, the founders fear that they will become a bottleneck in the organization. To address this concern, they intend to begin removing themselves from the center of NXTP's network and operations to strengthen the ability of NXTP's network to directly connect entrepreneurs with the advice from peers, mentors, and investors that they need. As of August 2015, the firm was trying to develop new tools and programs to facilitate this transition. For instance, NXTP has developed monthly forums at which its entrepreneurs from different editions can meet about a specific topic of concern to their companies. In mid-2015, NXTP was testing this model with a group of 12 companies that had expressed interest in enhancing their mobile app distribution. The group gathers for monthly sessions to hear a speaker on the central topic and the entrepreneurs add their own experiences. Despite this pilot, it is still unclear how NXTP will adapt to a model that relies less heavily on its four founding partners.

Indirect Impact

As shown in the section above, tracking even the direct impact that NXTP had on its companies is complicated. Each company and its experience is distinct, and clear common metrics are hard to discern and collect. NXTP's indirect impact, i.e., the impact that NXTP and its portfolio companies had on the wider region, is even more challenging to quantify. Indirect impact includes, for example, the economic growth of the company's customers, partners, and suppliers; increased access of the population to previously scarce goods or services, or enhanced quality of the same; and contributions to the national or regional entrepreneurial and business ecosystem.

Therefore, it is difficult to determine with any certainty the indirect impact of a given fund's investment in a portfolio company on the broader market in which the company operates, as myriad endogenous and exogenous factors affect an enterprise's performance, and a single investment fund may only have full control over one or two of them.

Moreover, as already mentioned in the previous section about direct impact, the structure of the PEVC industry (among other factors) generally makes it very difficult to implement research methodologies capable of rigorously addressing the question of attribution of any observed impact, i.e., whether the fund manager truly caused the observed impact. Therefore, for the purposes of this report, it is assumed that investment is the causal link between the fund's actions and a company's indirect impact.

To supplement this discussion, Table IV-5 below rates the fund's indirect impact using three criteria on a scale of 0-4. The criteria are as follows:

- Created ancillary economic growth and job creation: To what extent did the portfolio company promote economic growth and/or job creation outside of the firm, e.g., in its peer firms, vendors, suppliers, or greater community? A rating of 0 would indicate that the company was not deemed to have a demonstrable effect on economic and job growth outside the firm. A rating of 4 would indicate that it appeared to have an extraordinarily beneficial economic and employment impact outside the company.

- Promoted innovation: To what extent did the portfolio company exhibit innovation? Specifically, did the company employ a novel business model, develop new technologies or products, use existing technology in an innovative way, and/or pioneer a new market? A rating of 0 would indicate that the company did not seem to develop any innovation. A rating of 4 would indicate that the company was deemed to exhibit extraordinary innovation. Here it is worth noting that despite our effort to formulate a categorical test for innovation, it is difficult to precisely define this quality. Therefore, when deciding between two different ratings, a holistic view of the given company's innovation level determined our judgement.
- Improved entrepreneurial and start-up ecosystem: To what extent did NXTP's overall involvement across all of its portfolio companies improve the ecosystem in the region for entrepreneurial and early-stage investment activities? A rating of 0 would indicate that there did not seem to be any effect on the ecosystem, while a rating of 4 would indicate an apparent outsized and extraordinarily beneficial impact.

As stated above, NXTP believes that successful companies should align the interests of their businesses with interests of society at large, but the firm does not specifically target companies that serve the BoP. Thus, in this case BoP impact is not considered as a separate criterion. However, some companies in NXTP's portfolio, such as the household services firm Zolvers, have BoP impacts, and they are discussed in the subsections below.

Table IV-5 summarizes the research team's assessment of NXTP Labs' indirect impact through its investment in the 23 companies that were interviewed. Each aspect is then discussed in greater depth, using examples of particularly notable companies (in an analogous manner to the direct impact section above, not all companies are discussed in light of each criterion, but rather the most illuminating examples are singled out.).

Table IV-5: Indirect Impact of NXTP's Investments in a Sample of Its Portfolio Companies

<table>
<tr><th>Company</th><th>Ancillary growth and job creation</th><th>Innovation</th><th>Entrepreneurial and start-up ecosystem</th></tr>
<tr><td>ComentaTV</td><td>◔</td><td>◑</td><td rowspan="23">●</td></tr>
<tr><td>Cookapp</td><td>◕</td><td>◔</td></tr>
<tr><td>Emporio Compras</td><td>◑</td><td>◑</td></tr>
<tr><td>EveryPost</td><td>○</td><td>◔</td></tr>
<tr><td>GroovinAds</td><td>◔</td><td>◔</td></tr>
<tr><td>GuiaLocal</td><td>◑</td><td>◔</td></tr>
<tr><td>iBillionaire</td><td>◑</td><td>●</td></tr>
<tr><td>IncreaseCard</td><td>◕</td><td>◕</td></tr>
<tr><td>Jampp</td><td>○</td><td>◕</td></tr>
<tr><td>Las Partes</td><td>◔</td><td>◔</td></tr>
<tr><td>LookUp</td><td>◔</td><td>◔</td></tr>
<tr><td>MiCarga</td><td>○</td><td>◔</td></tr>
<tr><td>Mural.ly</td><td>◔</td><td>●</td></tr>
<tr><td>Pactanda</td><td>◔</td><td>◔</td></tr>
<tr><td>Pago Rural</td><td>○</td><td>◕</td></tr>
<tr><td>Properati</td><td>◑</td><td>◑</td></tr>
<tr><td>Real Trends</td><td>◔</td><td>◔</td></tr>
<tr><td>Satellogic</td><td>○</td><td>●</td></tr>
<tr><td>Sinimanes</td><td>◕</td><td>◔</td></tr>
<tr><td>Tienda Nube</td><td>◕</td><td>◔</td></tr>
<tr><td>Widow Games</td><td>◔</td><td>◔</td></tr>
<tr><td>WinAd</td><td>○</td><td>◑</td></tr>
<tr><td>Zolvers</td><td>●</td><td>◑</td></tr>
</table>

Indirect Impact: Ancillary Growth and Job Creation

In terms of indirect growth and job creation, the research team found great variety across NXTP's portfolio. Some companies seemed to have a sizable indirect impact and spurred great economic activity in the region, while others did not appear to have a noticeable impact. The latter occurs, for instance, when portfolio companies serve large corporate clients. While the services that these portfolio companies provide are useful to their clients, it is unlikely that those clients generated significantly more revenue or created more jobs as a result. Other companies with low ratings contributed to some degree of ancillary growth outside of their firms by hiring developers or freelancers for various tasks.

Companies with mid-range scores in this category include Properati and Emporio Compras. Such companies provide direct services which seemed to contribute to economic activity in the region. Properati, for example, helps property owners connect with potential renters and buyers. Emporio Compras operates brands' online sales across multiple channels by managing integrated warehousing, logistics, customer service, and IT services. By partnering with multiple logistics providers in the region, it provides imported consumer goods at affordable prices to customers throughout four countries. In some cases, it has provided products to rural consumers at lower costs. Both of these companies appear to have some indirect impacts on economic growth and job creation, but probably not very large ones.

IncreaseCard, a credit card payments facilitator, has had more impact in terms of economic growth. Its product allows businesses to accurately track their receivable payments from credit card companies, which can take between a month and a year to clear in different Latin American countries. According to the company, mismanagement of credit card payments costs small businesses an estimated 8% of revenues annually, due to factors like missed chargebacks and unredeemed tax discounts. IncreaseCard estimates that its product can reduce this number to 2%, saving small business owners 6% annually and potentially spur business growth and job creation.

Zolvers, an online marketplace for hiring pre-screened home cleaning and home repair professionals, is the standout company in terms of indirect job creation, and NXTP played an important role in the company's formation. Cecilia Retegui, one of Zolver's founders, originally met NXTP co-founder Marta Cruz at an event and later presented an idea for a different business, an online store. The NXTP team saw potential in Celia and her co-founders but did not think the original business plan was scalable. Encouraged by NXTP, Celia and her co-founders developed a new business model that grew into Zolvers.

As of August 2015, Zolvers served approximately 40,000 customers, and had approximately 10,000 individual service providers in its database, approximately 3,000 of whom received work through the site within the last two months. Around 75% of its service providers are cleaners, and the remaining 25% plumbers, electricians, and "handymen." All of its providers must pass an application process that includes a criminal background check, references, a face-to-face interview, and psychological and technical tests. Because of its convenient platform and thorough screening process, Zolvers enables its service providers, many of whom already worked as cleaners, to find work at higher hourly rates than they can find elsewhere. Zolvers' centrally determined pay scale has helped some of its service providers double their monthly income. The platform also helped many providers find work closer to their homes, saving them time and money on their commutes.

Zolvers strives to ensure that its service providers see value in its platform, and that their interests align with the company's success. For instance, cleaners receive a 30% commission when they refer customers to Zolvers. The company even works with the Buenos Aires government to provide technical training for service providers wishing to expand their skills. As a result of this mutually beneficial relationship, many of the company's service provides had recommended that their friends and family apply to be service providers for the company. As of mid-2015, Zolvers had approximately 10,000 applications from individuals seeking to be service providers on its platform.

Indirect Impact: Innovation

NXTP's portfolio companies varied greatly in terms of innovation. In Table IV-5: Indirect Impact of NXTP's Investments in a Sample of Its Portfolio Companies5, this attribute is rated on a scale from zero to four, considering innovativeness along several different dimensions, including the novelty of the business model, the innovative use of existing technology, development of new technologies or products, and market innovation. Despite all efforts to pin down a clear-cut, categorical definition of innovativeness, it is difficult to precisely define this quality. Therefore, when deciding between two different ratings, a holistic view of the innovativeness of a company determined our decision.

Innovative companies are typically risky investments because they introduce new products or enter new markets, often disrupting market incumbents. The large size of NXTP's portfolio and the small size of its initial investment allows it to invest in innovative companies despite these risks. As NXTP's original projections illustrate, the high returns generated from successful companies can offset a high proportion of write-offs and still provide healthy returns for investors.

iBillionaire, the financial products company, and Satellogic, a provider of Earth surface imagery data, are among the portfolio's most innovative companies. Both companies create products meant to compete on a global scale. Such companies are important in Latin America, not only for the direct and indirect economic growth that they spur in the region, but also as role models—examples of the region's success in conceiving and operating global companies. This demonstration effect motivated the MIF in its decision to invest in NXTP, as it stated that the fund would "indirectly contribute to moving more countries in the region towards the path of becoming innovation-driven economies."[281] Both iBillionaire and Satellogic are featured in mini-cases below.

[281] Multilateral Investment Fund, NXTP Labs - A Framework to Consolidate a Seed-Accelerator Model for Technology Start-Ups: Donors Memorandum, Multilateral Investment Fund, 2013.

Similarly, Mural.ly created an innovative online collaboration tool that enables design teams to work effectively, even when geographically dispersed. The business addresses a problem that its founders experienced firsthand when working for Disney. Now, its product is used by Disney and many other global companies, including IBM and PayPal.

Some of NXTP's entrepreneurs have created innovative products for a local market. For example, IncreaseCard, mentioned in the Growth and Job Creation subsection above, addresses a particular problem in Latin America: the challenge of managing company cash flows due to the long lead time for receiving credit card payments, and the complexity of the information provided on that dimension by credit card companies. Because it addresses a Latin American problem, its current product is less likely to be relevant in global markets. Nevertheless, it is an innovative solution to an important problem facing small merchants across the region.

Finally, some companies are developing new ideas and technology to compete globally in more conventional businesses. Jampp, a data-driven mobile app marketing platform, is a prime example of this category. While there are other agencies and products that help large advertisers drive engaged users to their apps, Jampp's innovative technology has allowed it to win notable clients across the globe, including MercadoLibre, Despegar, OLX, WeChat, and a top global transportation app.

A number of NXTP's portfolio companies did not invent new business models but rather introduced existing models to new markets. Starting and propagating a business anywhere requires a certain level of resourcefulness, and the unique challenges that entrepreneurs face in LatAm likely require greater resourcefulness than in many other markets. Often even copycat business models require inventiveness from their founders to surmount issues such as navigating the region's logistical and regulatory challenges. For example, Emporio Compras operates an ecommerce and online sales platform that is much like other ecommerce platforms in many ways. However, its ability to navigate the logistical roadblocks in many of the areas in which it operates has allowed it to win contracts with a number of large global brands.

By supporting innovative start-ups, NXTP has helped create important role models for entrepreneurs in the region. NXTP distinguishes itself from other investors in this regard by promoting these companies and their lofty global ambitions throughout the region. This is further discussed in the next subsection on ecosystem development.

Indirect Impact: Entrepreneurial and Start-up Ecosystem

One of the MIF's goals when investing in NXTP was "supporting the strengthening of an entrepreneurial ecosystem and the creation of a culture that can foster serial entrepreneurship."[282] NXTP also realized the importance of this mission, not only for the positive social and economic impact it would have regionally, but also as an important factor in its own success. To invest in so many start-ups and achieve a healthy financial return, NXTP needed a deep pipeline of

[282] Multilateral Investment Fund, NXTP Labs - A Framework to Consolidate a Seed-Accelerator Model for Technology Start-Ups: Donors Memorandum, Multilateral Investment Fund, 2013.

promising entrepreneurs, a strong community of mentors able and willing to guide them, and sufficient capital from investors excited to invest the region's next generation of innovative businesses. Recognizing the importance of supporting, not one, but all of these parts of the ecosystem simultaneously, NXTP's founders consciously nurtured the region's start-up ecosystem. Among the 23 entrepreneurs interviewed, they almost unanimously rated NXTP's importance to the entrepreneurial ecosystem to be eight out of ten.

NXTP supported this ecosystem in five distinct ways:

- Encouraging entrepreneurship through the demonstration effect;
- Fostering female entrepreneurship;
- Encouraging entrepreneurs to set ambitious goals;
- Building networks;
- Providing emotional support.

Encouraging entrepreneurship through the demonstration effect

Many of NXTP's initiatives contribute to the region's supply of entrepreneurial talent. In addition to the capital and advice provided to a start-up's founders, NXTP also supports its entrepreneurs by bringing publicity to their companies and the work that they do. The firm often utilizes its marketing expertise to promote not just its own activities, but also the achievements of its start-ups. For instance, NXTP's YouTube page (https://www.youtube.com/user/NXTPLabs) posts numerous company profiles and other relevant content, and has been viewed tens of thousands of times. This exposure brings NXTP's current portfolio companies to the attention of potential investors, customers, and partners. Publicizing these companies also demonstrates to other would-be entrepreneurs in the region that there are opportunities to launch and fund companies in Latin America, encouraging them to pursue their own business plans. This phenomenon is sometimes referred to as the demonstration or role model effect.[283] One indicator of NXTP's success in this regard is the number of applications it has received to the accelerator program in recent years. In 2014 it evaluated over 3,300 entrepreneurs for the accelerator. In the first quarter of 2015 alone, it interviewed 1,100.

Fostering female entrepreneurship

NXTP makes particular efforts to support female entrepreneurs. While the entire NXTP team is acutely aware of the region's need for more female entrepreneurs, Marta Cruz, a female entrepreneur herself, has been particularly influential in this regard. As a mentor for Vital Voices, a non-profit that aims to "invest in women leaders who improve the world,"[284] Ms. Cruz promotes the role of women entrepreneurs through her work at NXTP. With the enthusiastic support of her co-founders, Ms. Cruz led NXTP to place particular emphasis on encouraging female entrepreneurs. For example, when the MIF founded WeXchange, the first Latin American

[283] David B. Audretsch, Max C. Keilbach, and Erik E. Lehmann, *Entrepreneurship and Economic Growth*, illustrated ed. USA: Oxford University Press, 2006: pg. 175.
[284] "Vital Voices Global Partnership," accessed November 2, 2015, http://www.vitalvoices.org/.

forum focused on connecting and empowering female entrepreneurs, NXTP partnered with the organization from the very beginning. NXTP organizes the WeXchange pitch competitions, which showcase promising female-founded start-ups before an audience of key players in the Latin American entrepreneurial ecosystem. Ms. Cruz also helped create the "Day of the Latin American and Caribbean Woman Entrepreneur" on the 12^{th} of December each year. In addition to promoting the event and its message through her personal blog and NXTP's website and network, Ms. Cruz coordinates with the Colombian Ministry of Production and the government of the city of Buenos Aires to promote the role of women in Latin America's entrepreneurial ecosystem.

Many of NXTP's female entrepreneurs also serve as important role models for women who dream of founding companies. For example, two of the three founders of Zolvers (highlighted in the growth and job creation subsection above) are women. With NXTP's support, the company grew quickly in Argentina, and expanded into Chile, Mexico, and Colombia. One of the founders said that NXTP often asked her to speak to aspiring female entrepreneurs. She was often asked whether it is possible to have both a growing business and a family. In response, she pointed to her co-founder who had a baby while co-founding Zolvers. Such examples are powerful, not only in Latin America, but in the global technology community, which is notoriously deficient of female participants.[285]

Encouraging entrepreneurs to set ambitious goals

NXTP helps improve not only the quantity and competencies of the region's entrepreneurs, but also the boldness of their objectives. NXTP pushes its start-ups to set ambitious goals. As mentioned elsewhere in this case, NXTP encourages its entrepreneurs to seek regional, and sometimes global, expansion, and supports them through that process. NXTP also urges its entrepreneurs to pursue innovative products and business models, as highlighted in the previous subsection on innovation. NXTP itself models this brand of ambition by publicizing its intentions to support the region's next unicorns, privately held companies valued at over $1 billion. In so doing, NXTP makes it clear to its entrepreneurs that it expects big things from them. Coupled with NXTP's coaching and strong network, a number of its entrepreneurs therefore aimed higher than they otherwise would have.

Building networks

NXTP further supports the ecosystem's development by helping to construct a strong network that connects its various stakeholders. NXTP's founders expanded the size and scope of their network through sponsoring, speaking at, and attending numerous ecosystem-building events around the region and globally. In 2014, they participated in 65 such events, reaching over 4,550

[285] A study conducted by the American Association of University Women found that just 26% of computing jobs in the U.S. in 2013 were held by women (Catherine Hill, *Solving the Equation: The Variables for Women's Success in Engineering and Computing*: American Association of University Women, 2013, http://www.aauw.org/research/solving-the-equation/.). Additionally, a Harvard Business Review article from 2008 found that as many as 50% of women working in science, technology, and engineering positions will eventually leave the industry due to hostile work environments (Tracey Lien, "Why are Women Leaving the Tech Industry in Droves?" *Los Angeles Times,* February 22, 2015, http://www.latimes.com/business/la-fi-women-tech-20150222-story.html.).

participants, including investors, current and potential entrepreneurs, and important players in the tech industry. They also worked to link these stakeholders in various ways.

An important component of connecting the ecosystem was bringing together entrepreneurs and investors. Recognizing from the start that the size of its fund did not allow it to singlehandedly finance its start-ups, NXTP sought to activate other investors in the region. Limiting the fund's original investors to the relatively small $25,000 sum encouraged them to invest directly in the portfolio companies, a practice that became common among NXTP's mentors. In some cases mentors not only invested in the portfolio companies they counselled, but also encouraged their personal contacts to invest in the companies, sometimes leading to the formation of angel investor clubs. NXTP often helped new investors by setting standards about how to structure seed investments and the importance of taking small equity stakes in early rounds. As of June 2015, NXTP's portfolio companies had raised over $120 million cumulatively, indicating that the accelerator and its companies have been effective in encouraging investors to capitalize the region's start-ups. The investors in NXTP's portfolio companies include Bessemer Venture Partners, Kaszek Ventures, Techstars, Cygnus Capital, Krillion Ventures, NEXEQ, Trindade Investimentos, Kima Ventures, South Ventures, Enzyme Venture Capital, and many others.

NXTP also helped connect the ecosystem's stakeholders by fostering a culture of sharing. Francisco Coronel described this goal as, "We try to evangelize the concept of collaboration." NXTP demonstrated its focus on collaboration in many ways, such as its events that brought together different founders to share and discuss their experiences. One Colombian entrepreneur said that the entrepreneurial ecosystem in his country was not yet so cooperative, and his time at NXTP opened his eyes to the merits of sharing contacts and lessons with other entrepreneurs. Since returning to his country, he had tried to encourage the same camaraderie among entrepreneurs there, a lesson he also shared with students through classes he taught at a local university.

<u>Providing emotional support</u>

Many interviewees also mentioned NXTP's emotional support, which can be overlooked when discussing entrepreneurship. Some spoke of the loneliness of being a founder, and the importance of the NXTP community in overcoming that solitude. One entrepreneur even described NXTP's events as "crowd-sourced therapy sessions," where he could see that other founders were struggling with the same business and personal challenges that he was.

The research team believes that NXTP has supported the development of an increasingly vibrant entrepreneurial ecosystem in the region, and that the firm seeks to continue this mission moving forward. According to Ariel Arrieta, NXTP planned on "continuing to build local ecosystems and the Latin American region in general."[286] For these reasons NXTP obtained the highest rating for the criterion "Improved entrepreneurial and VC ecosystem."

[286] NXTP Labs, "NXTP Labs at Harvard's Classrooms," *NXTP Labs,* June 29, 2015, http://www.nxtplabs.com/nxtp-labs-at-harvards-classrooms/.

Mini-cases

In the section below two of NXTP's most innovative companies, iBillionaire and Satellogic, are profiled in more detail. They were chosen because, although neither of them came through the typical NXTP Labs acceleration process, NXTP's team had an important impact on both. In addition, they are important examples of Latin American innovation competing in global markets, and contributing to the region's entrepreneurial and innovation ecosystems.

iBillionaire

Summary

In February 2012, NXTP Labs invested in Kinetik, a company cofounded by Raul Moreno. When the company failed, NXTP connected Mr. Moreno with Alejandro Estrada, a mentor and investor in NXTP, and suggested that the two entrepreneurs work together on a new endeavor. Together they conceived iBillionaire, an app that allows users to monitor billionaires' public market portfolios. They quickly identified a demand among users for an investible product that tracked billionaires' portfolios and launched an exchange-traded fund (ETF) on the New York Stock Exchange (NYSE: IBLN) in August 2014 with an initial market capitalization of $40 million. In mid-2015, iBillionaire launched a $40 million vehicle based in Thailand. Over this time, NXTP made three follow-on investments, for a total of $242,100. In the future, iBillionaire aims to increase its user base and launch its new investment product, iBillionaire Capital, which would allow users on their mobile devices to invest directly in the same equities and in the same proportions as the billionaires it tracks.

Company Background

In early 2013, NXTP introduced the two founders of iBillionaire, Raul Moreno and Alejandro Estrada. At the time, Mr. Estrada was an investor in NXTP and a mentor in its accelerator program. He had previously cofounded DineroMail, a leading Latin American internet payment platform that was acquired by Naspers in 2011.[287] Mr. Moreno had previously cofounded Kinetik, a social mobile app discovery website backed by NXTP's accelerator. Although Kinetik ultimately failed, NXTP's team believed in Mr. Moreno's potential as an entrepreneur. Encouraged by NXTP's Ariel Arrieta to collaborate on a new endeavor, the two quickly found a mutual interest in finance.

Together, the two entrepreneurs conceived the idea for an app that would track and provide information on the investment strategies of Wall Street billionaire investors and hedge fund managers such as Warren Buffet, Carl Icahn, Daniel Loeb, and Bill Ackman. The founders selected over 20 billionaires based on their net worth, source of wealth, turnover, and the ability to replicate their publicly-disclosed positions.[288] Utilizing the mandatory public records filed

[287] Patricia Guerra, "Naspers Acquires DineroMail," *BNamericas*, June 17, 2011. http://www.bnamericas.com/en/news/technology/naspers-acquires-dineromail.
[288] iBillionaire, "Frequently Asked Questions," accessed November 15, 2015, http://www.ibillionaire.me/faq/.

with the Securities and Exchange Commission, the platform tracks each billionaire's equity holdings.[289] The filings are required by law within a certain timeframe of the purchase or sale of a public asset, which means that iBillionaire's platform slightly lags the billionaire investors' movements. Because the selected billionaires are typically long-term investors, however, the lag does not appear to have a significant negative impact on the returns to investors using the filings to track the billionaires' movements. According to iBillionaire's founders, the stock prices are approximately equally likely to rise as to fall in the lag between investment and disclosure.

One of the founders' primary goals was to help level the playing field between regular investors and sophisticated investment professionals. The latter group had the technical and human resources to monitor the movements of the industry's heavyweights, but the average family investing its savings lacked the ability to access and understand this information. "This information is public," Mr. Moreno explained, "but not everybody has the time to analyze these portfolios. Our mission aims at making this information more easily comprehensible and democratic, thus helping people be better investors."[290]

The app was originally launched for iOS in April 2013 and later for the web using a "freemium" model. Users could access much of the platform's content for free, while additional capabilities and more in-depth information were provided for a price. Within its app, iBillionaire also constructed indices that followed the billionaires' investments in particular sectors, like energy and technology. One such index tracks billionaires' investments in S&P 500 companies. The long-only index comprises the 30 large-cap equities listened on the S&P 500 in which the billionaires invested the highest proportion of their portfolios. The companies are equally weighted and rebalanced quarterly. Using the historical filings and pricing information, iBillionaire constructed a ten-year history for its index and found that it consistently outperformed the S&P 500.[291] The fact that its passively managed index provided such strong returns was especially impressive considering that at the time less than 30% of actively-managed funds had beaten the S&P 500 over the preceding three years.[292]

Originally, iBillionaire's founders had envisioned creating an informational app to help inform average investors. Users, however, soon began requesting a product that would allow them to invest directly in the iBillionaire S&P 500 index. Responding to this demand, the company partnered with the American mutual fund provider Direxion Investments to launch an ETF based

[289] Specifically, iBillionaire looks at SEC Form 13F, SEC Schedule 13D, and SEC Form 4. (iBillionaire, "Frequently Asked Questions," accessed November 15, 2015, http://www.ibillionaire.me/faq/.)

[290] Clarisa Herrera, "IBillionaire: The Latin American App that Turns Investors into Millionaires," *Panamericanworld*, February 8, 2015. http://www.panamericanworld.com/en/article/ibillionaire-latin-american-app-turns-investors-millionaires.

[291] As of November 2013, the index generated year-to-date returns of 31.17%, one-year returns of 36.63%, three-year annualized returns of 20.84%, five-year annualized returns of 23.62%, and eight-year annualized returns of 12.00%, outperforming the S&P 500 by 6.93%, 8.22%, 6.94%, 7.86%, and 7.38%, respectively. (iBillionaire, "The iBillionaire Index Outperforms the S&P 500: Why and how," *iBillionaire*, November 13, 2013, http://www.ibillionaire.me/post/66893890902/the-ibillionaire-index-outperforms-the-sp-500.)

[292] According to the Dow Jones S&P Indices Versus Active Funds (SPIVA) Scorecard. (iBillionaire, "The iBillionaire Index Launches to Track Famous Investors," *Valuewalk*, November 8, 2013. http://www.valuewalk.com/2013/11/ibillionaire-index/.)

on the iBillionaire Index that listed on the New York Stock Exchange (NYSE: IBLN) in August 2014. The company and its index attracted notable media buzz. One *Forbes* article, for instance, noted, “If you are looking for a large-cap, U.S.-focused substitute for the S&P 500, then IBLN is the clear choice.”[293]

In January 2015, the company launched a new version of its app that included a larger pool of billionaires, and created the iBillionaire High Dividend Index, which tracked 50 high dividend stocks across its select group of billionaire investors. The index is calculated by the NYSE under the ticker symbols IBD and IBDTR (the latter is the total return index). In July 2015, the company launched its second fund, which was incorporated in Thailand and managed by the Siam Commercial Bank.

Investment Thesis

iBillionaire’s story in NXTP’s portfolio is unique, because NXTP did not initially invest in that company but in its predecessor, Raul Moreno’s start-up Kinetik. Because of NXTP’s key role in connecting the two co-founders, however, iBillionaire granted NXTP a small equity percentage, as a type of “finder’s fee.” As of August 2015, NXTP had made three follow-on investments in iBillionaire, which closed a $1 million Series A round in August 2014.[294] NXTP chose to invest additional capital in the firm for several reasons:

1. The quality of its team,
2. Its ability to innovate, and
3. Its importance as a role model and outward signal to the world that Latin America was capable of producing global companies.

Regarding the first reason, NXTP believed in the vision and compatibility of the two founders and their ability to build a valuable enterprise together. When evaluating potential investments, NXTP examines the business model and its potential scalability, but also emphasizes the quality of the entrepreneurs and their ability to execute the business plan. For many companies, like Zolvers (described in the Indirect Impact section above), NXTP’s team might have a positive opinion of the entrepreneurs but a negative opinion of their original business plan. In such cases, NXTP often encouraged entrepreneurs to adapt or develop completely new business plans. In iBillionaire’s case, NXTP had such confidence in the founders that it encouraged them to develop a new start-up that it could help support.

NXTP also believed that the founding team had a remarkable ability to innovate, identifying market opportunities and designing solutions to address them. This was not only evident in the novel concept of the original iBillionaire app, but also in the company’s rapid development of an

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[293] Charles Sizemore, "Investing Like A Billionaire with the iBillionaire ETF," *Forbes*, August 2, 2014. http://www.forbes.com/sites/moneybuilder/2014/08/02/investing-like-a-billionaire-with-the-ibillionaire-etf/.

[294] "Ibillionaire," Crunchbase, accessed November 15, 2015. https://www.crunchbase.com/organization/ibillionaire#/entity.

ETF to respond to its users' demands for an investible product. The company's ability to quickly identify and execute the new strategy speaks to the firm's innovative capabilities, and also the strong likelihood of a profitable exit for NXTP and its investors.

Finally, NXTP saw iBillionaire's importance as a role model for the Latin American entrepreneurial ecosystem. The innovative, LatAm-conceived business model quickly developed a global footprint. As of February 2015, 50% of its users were located in the United States, 10% lived in Latin America, and 40% were spread across the rest of the world.[295] Additionally, the company continued to garner press attention. The young, high-profile, international firm demonstrated to the world that Latin American entrepreneurs could create world-class financial products. It was an example for NXTP's other financial technology entrepreneurs that the world would accept innovative, Latin American financial apps and products. iBillionaire also emphasized NXTP's abilities to find and guide innovative businesses, an example that would be helpful in recruiting new investors, mentors, and entrepreneurs to its program.

Value Creation

NXTP's support was fundamental to the creation of iBillionaire; the company would not exist without NXTP's introduction of its two founders and its encouragement of their entrepreneurial endeavor. This was undoubtedly NXTP's largest contribution to the firm.

Mr. Estrada also spoke very favorably of NXTP's willingness to support founders and their start-ups. "The limit is the entrepreneur," he explained. "If you are proactive, you will get a lot… When I need something, I write to them and they immediately respond." NXTP also connected him to the entrepreneurial ecosystem. Through events and meetups, he met other founders and was exposed to their new ideas. In this way, NXTP's network was an asset to iBillionaire's founders.

Lessons Learned

- **Bet on the jockey:** A common debate in the risk capital industry is whether it is more important to invest in a good technology/product, an attractive market, or a good team. In other words, should you bet on the "horse" (the technology or product), the "race course" (the market), or the "jockey" (the team)? While it is important to evaluate all three, NXTP's Francisco Coronel says that the firm focuses on selecting high-quality entrepreneurs. Products or technologies can fail and markets can shift. Even the most well-conceived business plans can be derailed by unexpected changes. Resourceful entrepreneurs respond to such challenges with innovative solutions, adjusting as necessary to adapt to new conditions.
- **Failure is part of the innovation process:** As described in the impact section above, many entrepreneurs fail on their journeys to founding successful endeavors. Innovative

[295] Clarisa Herrera, "IBillionaire: The Latin American App that Turns Investors into Millionaires," *Panamericanworld*, February 8, 2015. http://www.panamericanworld.com/en/article/ibillionaire-latin-american-app-turns-investors-millionaires.

> ideas are often disruptive and carry the inherent risk of failure. Mr. Moreno, supported by NXTP, turned the failure of his first company into an opportunity to start a new, more promising company: iBillionaire. Founders must be resilient to convert set-backs into opportunities for future success. Fund managers should seek entrepreneurs who exhibit this brand of resiliency.

Current Status

As of August 2015, iBillionaire's app had 250,000 users around the world and was gaining new users at a rate of about 10,000 to 15,000 each month. Its growth to that point had been driven by favorable press coverage and through word-of-mouth marketing. In the future, the company planned to implement a formal marketing campaign to expand its user base.

In November 2015, the company also launched a new investment product, iBillionaire Capital.[296] The new product allows users to replicate the investment strategies of specific billionaires easily and cheaply. For example, users can select the billionaire (or billionaires) whose investment strategies most closely match their own, and invest in the same equities according to the same weights that the billionaire used. (Additionally, the app will soon include an investment strategy created and sponsored by JP Morgan.) Unlike ETFs, iBillionaire Capital allows users to invest directly in public stocks, rather than in a fund, and all the users' assets are held in their names at Apex Clearing, a U.S.-based clearing house. Users can register from their smartphones in less than five minutes, link the application directly to their bank accounts, and invest amounts as low as $100. Their portfolios are rebalanced each quarter to match their selected billionaires' portfolios. At a price of 0.90% per year, (or $1 per month for accounts under $1,000) the technology-enabled service costs far less than custom accounts at traditional hedge funds or brokerages. Its new product again represents iBillionaire's efforts to create solutions addressing users' demands.

Satellogic

Summary

In August 2013, NXTP Labs invested $25,000 in Satellogic, a company that was developing a constellation of nano-satellites to provide real-time, high resolution satellite imaging of the entire globe. The live, global data had the potential to inform and improve the efficiency of key decisions in industries such as oil and gas, agriculture, and infrastructure. Later that month, NXTP made a second investment of $350,000, for a total commitment of $375,000. Because the company was already at a later stage of development, it did not formally participate in NXTP's accelerator program. By mid-2015, the company had launched its first three satellites, closed a Series A round of financing (in which NXTP invested an additional $100,000), and scheduled

[296] "iBillionaire," iBillionaire, accessed November 15, 2015, http://www.ibillionaire.com/.

the launch of a 16-satellite constellation in 2016. NXTP believes that the innovative company could become its first "unicorn."[297]

Company Background

Satellogic was founded by Emiliano Kargieman, a serial entrepreneur. Although formally educated in mathematics and philosophy, Mr. Kargieman has been involved in technology since his youth. He founded his first software company at the age of 15, and later founded Core Security Technologies, an Internet security company, which grew to generate over $40 million in annual revenues and employ 200 R&D workers in Buenos Aires. In 2007, Mr. Kargieman started an Argentine venture capital firm called Aconcagua Ventures that focused on early-stage technology companies, but quickly discovered that he preferred the role of entrepreneur. At the time, he became particularly interested in sensor technologies and the role they could play in solving the world's pressing problems such as the growing global demand for food and energy. He explained, "We have to transform the decision-making process for these kinds of decisions if we want to feed 10 billion people and give energy to 10 billion people, and do it in a way that will be sustainable." Believing that a global sensor network could help governments, companies, and individuals make better, data-driven decisions, he founded Satellogic in 2010.

Mr. Kargieman envisioned that Satellogic could develop a constellation of 300 nano-satellites capable of collecting live data on the entire surface of Earth every five minutes. This would be a major improvement compared to existing satellites, which typically take two or three days to get a consecutive photo of the same spot on the planet.[298]

Looking critically at the satellite industry, he saw that most satellites were astronomically expensive because they were designed using a 40-year-old methodology that aimed to maximize reliability due to the difficulty of replacement or repair ("Because unless you're in a movie you can't really send George Clooney with a wrench to fix things"). A large portion of satellite development costs came from achieving those last tenths of a percent of reliability, which meant that Satellogic could sharply reduce its costs by developing a large constellation of satellites that were slightly less—but still highly—reliable. For example, the company's third satellite, affectionately named Tita,[299] cost less than $300,000 in materials. Modern, comparable large

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[297] A unicorn is a privately-owned, typically venture-backed software or tech company valued at over $1 billion.

[298] The European Space Agency's 2013 Proba-V satellite, for example, can map the entire Earth every two days. Because of cloud coverage, it requires about ten days to capture a full image of the Earth's landmass. (Victoria Turk, "This Satellite Maps the Whole Earth Every Two Days," *Motherboard,* December 4, 2014, http://motherboard.vice.com/read/this-satellite-maps-the-whole-earth-every-two-days.) The U.S. Geologic Survey's sister satellites, Landsat 8 and Landsat 7, take longer; working in tandem they can capture images of the entire Earth's surface every eight days. (Jon Campbell, "A Landsat 8 Yearbook: Earth Images for Everyone," *USGS.Gov*, May 29, 2014, http://www.usgs.gov/blogs/features/usgs_top_story/a-landsat-8-yearbook-earth-images-for-everyone/.)

[299] A term for a fierce, strong, and independent woman in some cultures.

satellites are designed to last longer than Tita, but cost 1,000 times more to build and launch.[300] The company's product costs were extraordinarily low, even in comparison to its competitors' in the small satellite industry. For example, Skybox, a company that developed micro-satellites for high resolution photography of the Earth's surface and was acquired by Google in 2014, produced satellites at nearly 100 times the cost of Satellogic.[301]

Due to stringent U.S. government regulations on satellites, Mr. Kargieman turned to his home country of Argentina to found his company. He originally partnered with the Argentine-government-owned Invap, the first Latin American company certified by NASA to supply space technologies. While working closely with the experienced satellite makers at Invap, Mr. Kargieman made a conscious decision to hire scientists and specialists from outside of the satellite industry to ensure that Satellogic would not be encumbered by the old, high-cost methodology of satellite development.

The company was originally funded by Mr. Kargieman's close friends and family, and grew quickly. In 2013, it launched its first two satellites, and raised a new seed round of capital, in which NXTP participated.

Investment Thesis

In 2008, when Mr. Kargieman was actively investing his VC fund, he became acquainted with Ariel Arrieta, who was beginning to have discussions with industry players about starting a regional accelerator. In 2013, when Mr. Kargieman was raising seed capital for Satellogic, he reached out to Mr. Arrieta who suggested that NXTP Labs would be a useful investor due to its strong regional network. NXTP initially invested $375,000 in August 2013 in a two-tranche structure: its traditional $25,000 sum followed by $350,000 as a follow-on. At that point, Satellogic was already at a later stage of development than NXTP's typical investments, so it did not participate in the formal accelerator program. NXTP invested an additional $100,000 in early 2015.

For Mr. Arrieta and the NXTP team, investing in Satellogic was as much strategic as it was financially promising. The company's disruptive technology and the data it would produce offered potential applications across numerous industries around the globe. If the innovative young company successfully executed its plans, it could become NXTP's first unicorn, and the potential exit could generate impressive returns for the firm's investors—and publicity for NXTP.

[300] For example, DigitalGlobe's high-resolution Earth observation satellite WorldView-4, scheduled to launch in 2016, is estimated to cost approximately $800 million to build and launch. (Satellite Imaging Corporation, "GeoEye-2 Satellite Sensor," Satellite Imaging Corporation, accessed November 15, 2015. http://www.satimagingcorp.com/satellite-sensors/geoeye-2/.
And Stephen Clark, "Government Imaging Contract Will Hasten New Satellites," *Spaceflightnow.Com*, August 10, 2010. http://spaceflightnow.com/news/n1008/10ngacontract/.)

[301] Skybox's satellites cost between $2 million and $5 million to build. (Liz Gannes and James Temple, "Everything You Need to Know about Skybox, Google's Big Satellite Play," *Recode.Net*, June 11, 2014. http://recode.net/2014/06/11/everything-you-need-to-know-about-skybox-googles-big-satellite-play/.)

The NXTP team further recognized that simply backing Satellogic would signal to global investors that Latin American startups were at the forefront of high-impact global technologies. This message, they hoped, would entice such groups to consider investing more in the region. Satellogic could also serve as a role model for the region's entrepreneurs by showing that Latin American companies can reach worldwide markets. As an entrepreneur that publicly and unabashedly aims to turn Satellogic into a multibillion-dollar company, Mr. Kargieman can help Latin American founders to look beyond copycat business models or incremental technological change when creating their companies.

NXTP's founders were also compelled by Satellogic's potential for social impact. At its core, Satellogic seeks to facilitate data-driven solutions to the world's current and future problems. Satellogic's earth observation data will be able to increase efficiency across many different industries. Global cash crop producers, for instance, would be able to time and target pesticide and herbicide applications on their fields, saving money and reducing adverse environmental impacts. Government agencies would be able to monitor development to ensure that environmentally sensitive areas were not being encroached upon.

Value Creation

At the time of NXTP's investment, Satellogic was at a later stage than most of NXTP's portfolio companies. Moreover, Mr. Kargieman had far more entrepreneurial experience than NXTP's average company founder and therefore had less need for NXTP's standard business training and guidance. Mr. Kargieman's strong web of professional contacts also meant that even NXTP's network of business professionals was less important to Satellogic than it was to other start-ups in the accelerator's portfolio. Nevertheless, NXTP was an important partner to Satellogic in several ways. NXTP Labs, for instance, played an important role in Satellogic's 2013 capital round. The company had been in talks with a strategic investor about providing growth capital, but the negotiations ultimately broke down. The management team needed to find an alternate source of capital quickly, and NXTP was among the first to commit to the round. That firm commitment, along with participation by NXTP's network of angel investors, made it easier for the Satellogic team to secure additional capital. With NXTP's support, Satellogic ultimately raised $3.8 million in only 15 days. Overall, NXTP's involvement in the round was, in Mr. Kargieman's words, "probably company-saving."

Satellogic also benefitted from Mr. Arrieta's counsel. Even 18 months after NXTP's initial investment, Mr. Kargieman and Mr. Arrieta still speak regularly, particularly about Satellogic's strategic direction. Mr. Kargieman found Mr. Arrieta's insights to be particularly valuable in assessing an early acquisition offer. Mr. Arrieta understood the incentives at play when entrepreneurs involved in young companies receive acquisition interest from third parties. Founders often sell their firms prematurely to avoid the risks and challenges of the Latin American business landscape, even though these sales may undervalue the firm since even a modest price can significantly increase the entrepreneur's quality of life. Furthermore, risk-averse founders often fear that they will never receive another offer.

In the specific case of Satellogic, Mr. Kargieman also had important strategic questions regarding the direction and momentum of the industry, especially in the immediate wake of Google's acquisition of Skybox. With such concerns in mind, Mr. Kargieman consulted Mr. Arrieta and ultimately rebuffed the buyer's offer, deciding that there was still a great amount of value to be generated in Satellogic.

Lessons Learned

- **Innovative, world-class companies can be built in Latin America:** While copycat business models can be successful in the region, companies like Satellogic remind the world that Latin America can also pioneer new business models with groundbreaking technology, and compete on a global playing field. Such companies can have economic and social impacts in the region and world, inspiring both entrepreneurs and investors to look at the region more closely for business and investment opportunities.
- **Entrepreneurs should consider specific advantages that different Latin American countries offer when founding and growing their businesses:** Argentina was a wise location to start Satellogic because it offered a wealth of tech and satellite expertise, without the burdensome satellite regulatory restrictions in the United States.
- **Being able to mobilize other investors quickly is a significant asset to an accelerator:** Ensuring a sufficient supply of capital is important for growing start-ups. As it becomes necessary to raise additional rounds of financing, an accelerator's ability to find suitable investors for its portfolio companies can be critical to its success—and that of its companies. Fund managers must be prudent when recommending investments to its network of angels and other investors, but in the case of promising companies, being able to quickly assemble a consortium of potential investors can be "company-saving."
- **Early exits can be very tempting.** The difficult business environment in much of Latin America makes it a particularly risky place to start and grow a company. The opportunity to sell at the earliest opportunity can be enticing to an entrepreneur, who may be rich in equity but poor in liquid assets. Fund managers must develop creative approaches to resolving this tension when entrepreneurs receive acquisition offers that undervalue the company's long-term potential.

Current Status

As of September 2015, Satellogic employed 60 people across Argentina, Uruguay, and the United States. R&D activity took place in Argentina, while manufacturing, assembly, and testing was based in a free trade zone in Uruguay. Satellogic's office in California's Bay Area handled business development. In total, the company had raised $30 million across three seed rounds and its 2015 Series A, which was led by Tencent Holdings, a Chinese internet company, and Pitanga Fund, a Brazilian venture capital fund. These investors in effect create local partners as Satellogic expands into these regions.

While Satellogic had no revenues in 2015, it scheduled the 2016 launch dates for a 16 satellite constellation that will collect imagery data of the entire planet every two hours. The company plans to sell this data, initially targeting three industries: (1) oil and gas, (2) agriculture, and (3) infrastructure/land use monitoring.[302] Subsequently, Satellogic hopes to launch 30 additional satellites in 2017 and 100 satellites annually by the end of the decade.

A number of important challenges remain, the largest of which is execution. Satellogic owns every step of its value chain: it develops its own sensor and actuator technology, builds and operates its satellites, and processes the imagery to derive commercially valuable information for clients. While this vertical model affords Satellogic a cost advantage over competitors, it also introduces added operational and managerial complexities. According to Mr. Kargieman, Satellogic thus far had been “like running five different companies.” It will be challenging to efficiently balance the needs of each of these “companies” as the business continues to grow. The other looming test for Satellogic is setting sustainable, realistic, and financially sound growth goals. Launching 100 satellites per year will require approximately $50 million annually. Timing will be crucial in the approaching years to ensure that the company raises the necessary funds and generates the needed revenue to support its growth.

Conclusions and Next Steps

Recently, NXTP has embarked upon a number of new initiatives. It is implementing a new model for the accelerator that more closely involves corporations and exploring the feasibility of raising a traditional VC fund. These changes invariably present questions that the team must confront. In this section, the future for NXTP and its interaction with the MIF are discussed, and a description of the overall impact to date of its operations in Latin America is provided.

The New Accelerator Model

In 2015, NXTP significantly redesigned its accelerator. Instead of accelerating technology companies across numerous different subindustries, NXTP began accelerating companies in batches that focused on specific subsectors. The first such batch was its ninth edition, announced in October 2015, which will accelerate 11 financial technology (fintech) start-ups, culminating with a pitch competition in December of that year.[303]

NXTP implemented this strategy shift to attract greater corporate participation in its accelerator program. The firm appears to have been successful in that regard, as sponsorship for the ninth edition includes Microsoft, Fibercorp, Banco Ciudad, Banco Galicia, CAF, and Softlayer, along with new mentors from companies such as Deloitte, Silicon Valley Bank, Citi, Xapo, Afluenta, MasterCard Labs, PwC, and PayPal.[304] The involvement of these corporate partners provides the

[302] Products in the third target industry would be sold directly to governments.
[303] NXTP Labs, "NXTP Labs Presents 11 Startups Selected for the Fintech Accelerator Program 2015," *NXTP Labs*, October 7, 2015, http://www.nxtplabs.com/nxtp-labs-presents-12-startups-selected-for-the-fintech-accelerator-program-2015/.
[304] NXTP Labs, "NXTP Labs Presents 11 Startups Selected for the Fintech Accelerator Program 2015," *NXTP Labs*, October 7, 2015, http://www.nxtplabs.com/nxtp-labs-presents-12-startups-selected-for-the-fintech-accelerator-program-2015/.

start-ups with an expanded pool of potential investors, as well as potential acquirers. According to Pablo Ruiz, NXTP's Program Director, "We hope that the program generates awareness about the opportunities that exist when entrepreneurs and corporations come together for the development of their industry."[305]

With the new strategy came a fundamental shift in NXTP's accelerator model: entrepreneurs will not receive NXTP's initial $25,000 investment until *after* they graduate from the accelerator. Moreover, NXTP will only invest in companies it deems promising at that time. According to NXTP's founders, this change occurred because the firm had to ensure a certain number of companies in each edition of the accelerator to attract corporate participation. To achieve this while limiting its focus to a particular subindustry, the NXTP team realized that it might need to lower its relatively high standard for program acceptance. By investing at the end of the program in only those companies that have validated their business models, NXTP can accept more companies to its accelerator without degrading the high level of performance it expects from its portfolio—or excessively depleting its funds.

Potential Challenges of the New Model

By departing from some elements of its previous model, and introducing changes to its accelerator program, NXTP may face several challenges. Its previous model had been refined over eight editions to produce apparently strong results. The recent changes to the program add a level of uncertainty to NXTP's operation. The team must proceed carefully to ensure that the new model is properly executed to maintain a high level of performance.

One possibility is that the new model may fundamentally shift the relationship between entrepreneurs and the NXTP team. Founders may be less willing to approach the NXTP team for help with business challenges if they feel that doing so will draw attention to weaknesses that might dissuade NXTP from investing in their start-ups. Additionally, the start-ups may be less willing to collaborate if they feel that they are competing against one another for NXTP's limited investment resources. As of November 2015, NXTP's founders report that they have not seen evidence of any such negative effects from this change. It is still too early, however, to conclude how the new model will affect NXTP's acceleration program.

Furthermore, making initial capital investments only in select firms at the end of the program could threaten the integrity of the accelerator. It is unclear the extent to which investors will be willing to capitalize graduates that were not selected for NXTP's portfolio. NXTP's decision not to invest in an accelerator graduate might send a red flag to other would-be investors, and negatively affect that start-up. This signal could hurt the accelerator's reputation as a helpful ally to LatAm's entrepreneurs and negatively affect the quality and quantity of applications to the program. Yet this situation could have different outcomes. The involvement of the corporate partners will expand the pool of potential investors, and these investors may choose to invest in some of the graduates that did not meet NXTP's investment criteria. VC investors routinely

[305] LAVCA, "NXTP Labs Selects 12 Startups for Fintech Accelerator Program (En Español)," *LAVCA,* October 7, 2015, http://lavca.org/2015/10/07/nxtp-labs-selects-12-startups-for-its-pioneer-fintech-accelerator-program/.

decline investments in companies that then succeed with other groups.[306] Additionally, graduates that do not receive investment at the end of the program may still benefit from the training and mentoring the accelerator provided, allowing the entrepreneur to improve, and then return to the market in the future.[307] Such scenarios must be considered and actively managed to ensure that the new acceleration model is beneficial to NXTP, its seed fund, and its investors.

The Venture Capital Fund

As illustrated by the firm's recent exit of Tutum, which generated a 60x return on its $25,000 investment, the capital constraints of NXTP's seed fund may be preventing it from reaping the full value of its portfolio. Without sufficient capital to make sizable follow-on investments in its promising companies, NXTP could be said to be "leaving money on the table." To better capture some of this value, NXTP's founders are planning to raise a larger second fund that would make more traditional, later stage VC investments. Approximately 70% of this fund's capital would be invested in companies from NXTP's seed portfolio. The idea was first presented in a recently published Harvard Business School case on the accelerator firm.[308] Initially, the founders planned to structure the fund as a VC partnership, targeting a $200 million pool to fund 20 early-stage, primarily Latin American, technology companies, with an average investment of $10 million per company. The firm has since decided to reduce its fund target to $120 million, with an average investment size of approximately $3 million to better fit the average Series A VC investment in Latin America, which typically ranges from $500,000 to $3 million. The revised target investment size reflects the opportunity presented by the firm's promising pipeline of companies in its accelerator portfolio. As of late 2015, NXTP's four founders were enthusiastic about the prospective VC fund and were beginning to speak with potential investors about the opportunity.

The firm's proposed expansion into the later stage investment space mirrors a recently announced move by Y Combinator, which raised a $700 million VC fund in September 2015.[309] The new fund, called the Y Combinator Continuity Fund I, will invest in each round raised by all

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[306] An entertaining example of such mis-identification is found in the Bessemer Venture Partners' Antiportfolio (https://www.bvp.com/portfolio/anti-portfolio); academic studies provide theoretical basis for the difficulty of judging future outcomes (the top 10% of VC investments yield 5x their cost basis or more; all other return less, according to William R. Kerr, Ramana Nanda, and Matthew Rhodes-Kropf, "Entrepreneurship as Experimentation," *The Journal of Economic Perspectives* 28, no. 3 (2014): 25-48.)

[307] A similar approach was used by INOVAR, the Brazilian group backed by the MIF and the innovation agency FINEP, in which GPs who were not chosen for investment were provided a letter of feedback, and could demonstrate their passion for improvement by addressing the concerns therein. These letters became highly prized as an indicator of the group's dedication to improvement. (For more detail, see Ann Leamon and Josh Lerner, "Creating a Venture Ecosystem in Brazil: FINEP's INOVAR Project," *HBS Working Paper 12-099* (May 8, 2012).)

[308] Josh Lerner, Maria Fernanda Miguel, and Laura Urdapilleta, "NXTP Labs: An Innovative Accelerator Model," *Harvard Business School Case 815-110*, 2015.

[309] Douglas Macmillan "Tech Incubator Y Combinator Takes New Tack with Venture Capital Fund," *The Wall Street Journal*, October 15, 2015, http://www.wsj.com/articles/tech-incubator-y-combinator-takes-new-tack-with-venture-capital-fund-1444938590.

of the companies that participate in the accelerator and are valued below $300 million. It will only invest selectively in the later rounds of accelerated companies valued above $300 million.[310] Other accelerators, such as Techstars and AngelList, have also raised similar, but smaller, follow-on funds.[311] While some believe these funds allow Y Combinator and the other accelerators to reap the gains of their early risk-taking, others worry about potential conflicts of interest.[312] These would include competition with the independent VC firms, which can provide wider networks and greater credentialing power for those that receive funding, and the possible negative signaling effect if an accelerator were to decline the opportunity to invest in one of its graduates. NXTP may wish to consider potential conflicts, and the possible effects of the new fund on the accelerator portfolio.

Potential Challenges of the VC Fund

Along with the possible conflicts of interest, launching a VC fund will present other challenges for NXTP. Fundraising is a difficult process, and while NXTP has a strong track record and a promising pipeline of companies, the new strategy represents a major shift from its seed investment model. To raise the capital it has targeted, the firm will need to address new types of investors, such as large institutions and funds-of-funds. It remains unclear whether the firm has the contacts and track record to reach large, global limited partners.

If the firm is able to meet with such investors, it must also convince them that its team is capable of executing a more traditional VC strategy. NXTP has begun to establish a strong track record in the seed investment space, with nine exits producing a combined multiple of invested capital of 4.74x, but the new fund represents a later stage of financing that calls for a different investment strategy and set of skills. It is yet unknown whether global investors will consider NXTP a first-time VC fund manager despite its four years of experience. Institutional investors are often less willing to invest in first-time fund managers, posing a challenge for NXTP.

At the same time, despite the travel and distraction of fundraising, NXTP cannot ignore the seed fund. It must continue realizing strong exits to bolster its promising track record and win the confidence of potential future investors, and it will need to maintain the accelerator. Its relatively small team of 19 people, including the founding partners, is already monitoring a portfolio of over 160 companies, and actively accelerating new companies that require attention and guidance. It is unclear how the founding partners' time will be divided between the two efforts. A two-fund model also raises questions regarding the division of compensation, especially carried interest. If two partners manage the seed fund while the others manage the VC fund, they

[310] Jeff Engel, "Y Combinator, AngelList, Techstars Shake Up VC World with Big Funds," *Xconomy*, October 19, 2015, http://www.xconomy.com/san-francisco/2015/10/19/y-combinator-angellist-techstars-shake-up-vc-world-with-big-funds/.
[311] Jeff Engel, "Y Combinator, AngelList, Techstars Shake Up VC World with Big Funds," *Xconomy*, October 19, 2015, http://www.xconomy.com/san-francisco/2015/10/19/y-combinator-angellist-techstars-shake-up-vc-world-with-big-funds/.
[312] Jeff Engel, "Y Combinator, AngelList, Techstars Shake Up VC World with Big Funds," *Xconomy*, October 19, 2015, http://www.xconomy.com/san-francisco/2015/10/19/y-combinator-angellist-techstars-shake-up-vc-world-with-big-funds/.

must decide if carry will be shared across the funds, since it can be argued that the accelerator plays a large role in generating the valuable pipeline for the later-stage fund. The firm will also need to manage conflicts of interest, since the valuations determined by the VC fund will have financial repercussions for the seed fund as well.

NXTP's Challenges

In addition to the challenges posed by its new accelerator model and potential VC fund (discussed above), NXTP faces several other challenges as it moves forward, including:

- Investing the rest of the seed fund under capital constraints;
- Defining the identity of the firm;
- Monitoring its portfolio and achieving exits.

Investing the rest of the seed fund under capital constraints

As of October 2015, NXTP had only $13 million available for new and follow-on investments. In light of the fund's "Happy Problem[313]," it is unlikely that this sum will be sufficient to both accelerate as many new start-ups as the firm originally planned and also make meaningful follow-on investments in its most promising companies. Based on NXTP's estimates, the fund is $22.5 million short of the capital required to achieve its goal of accelerating 300 start-ups and making appropriate follow-on investments.[314]

NXTP's ninth exit, in which Tutum was acquired by Docker generating a 60x return on NXTP's $25,000 investment, illustrates one of the problems caused by this constraint. Without sufficient capital to make sizable follow-on investments in all of its high-potential companies, NXTP must be very selective in deploying its funds. As a result, NXTP and its investors missed an opportunity to reap the full value from the support and mentoring they provided Tutum and its team. Had NXTP made a follow-on investment in Tutum, its ninth exit could have generated far larger absolute returns. Although the NXTP team is aware that it will not be able to participate in later financing rounds for *all* of its high-performing portfolio companies, it would like to minimize the number of promising follow-on opportunities that it must forego.

NXTP must balance its desire to invest in later rounds with the need to support its accelerator and invest in new start-ups (since both new and follow-on investments draw from its pool of remaining capital). The accelerator is one of the foundations upon which NXTP built its reputation, and in many ways, it is still the center of NXTP's operations and network. If NXTP were to abandon the accelerator, it risks losing its defining characteristic—direct access to

[313] The Happy Problem—that is, the fact that NXTP's portfolio is doing better than anticipated—is discussed in The Rest of the Portfolio and the Happy Problem subsection.

[314] Josh Lerner, Maria Fernanda Miguel, and Laura Urdapilleta, "NXTP Labs: An Innovative Accelerator Model," *Harvard Business School Case 815-110*, (Boston: HBS Press, 2015).

LatAm's most promising entrepreneurs and to an impressive network of mentors and investors that want to support them.

Given the small amount of capital left in its fund, NXTP must determine how best to support new start-ups while also capturing the value of its maturing portfolio. NXTP's founders will need to decide how to prioritize new investments versus high-potential follow-on opportunities. They are considering several approaches to this issue. For instance, the team will likely reduce its 300-start-up target for this fund. Additionally, the NXTP team plans to limit follow-on investments to $500,000 rather than the previous cap of $1 million. The new accelerator model may also help preserve capital by allowing the NXTP team to observe start-up teams throughout the entire accelerator program before committing their initial capital, allowing the firm to better screen companies that might have otherwise received capital before failing. Finally, the firm hopes that it will be able to raise a VC fund from which to make larger investments in the most successful companies from its accelerator, allowing it to better realize the value it created in its portfolio of accelerated companies.

Defining the identity of the firm

NXTP is now at a crossroads in terms of the firm's identity. As of the time this report was prepared, NXTP appears to have successfully branded itself as an innovative regional tech accelerator, a useful ally to entrepreneurs, and a gatekeeper to some of the region's most promising start-ups. With the firm's proposed shift to later-stage VC investment, it is not even clear whether NXTP will continue to accelerate new companies after its seed fund is fully invested, and if so, how it will accommodate both strategies simultaneously. Should the firm abandon its seed investment and acceleration program, it might disconnect NXTP from the region's innovative start-up founders, yet such access is arguably a profound competitive advantage in NXTP's regional presence. As it charts a path for the future, NXTP will need to carefully manage its evolution to maintain its brand and its competitive advantages.

Monitoring its portfolio and achieving exits

Perhaps the most important challenge facing NXTP, and the region's early-stage and VC ecosystem at large, is to realize profitable exits from its portfolio companies. The region has benefited from large inflows of venture capital, and it is important that investors begin to see financial returns. As of November 2015, NXTP had exited nine companies and written-off 14. Of its remaining 141 companies, the team considers 40 to be "high-potential." While NXTP may be able to sell some of its equity stakes to other fund managers, the VC industry in Latin America does not yet lend itself to a robust secondaries market, making it unlikely that NXTP will achieve many exits through that route.[315] Similarly, IPOs are likely not possible for the

[315] In 2014, for example, there were only five Latin American PEVC exits through sales to financial buyers. (LAVCA, *2015 LAVCA Industry Data & Analysis*, LAVCA, 2015, pg. vii.)

majority of NXTP's portfolio.[316] Generally prized by entrepreneurs and fund managers alike, IPOs are infrequent even among top VC firms in markets with well-developed public exchanges.[317] Thus, NXTP will need to find acquirers for its portfolio companies.[318] Additionally, to achieve healthy returns for its seed fund investors, NXTP needs to encourage its most promising entrepreneurs to continue growing their companies rather than accepting early acquisition offers. Thus, guiding its portfolio companies to lucrative exits is vital to NXTP's future and must remain at the heart of its mission, even in the midst of its current phase of evolution and growth.

Interaction with the MIF

As discussed in the Raising Capital section above, NXTP pursued the MIF as an investor because of the MIF's long history investing in Latin American early stage equity funds, its track record of working with first-time fund managers, and the "certification" that the MIF's investment would convey to other investors. The MIF's reasons for investing in NXTP included contributing to the creation of innovative, high-growth companies in Latin America, developing the region's entrepreneurial ecosystem, and supporting female entrepreneurship.

According to NXTP's founders, the MIF's initial due diligence was rigorous but reasonable. As the firm's first institutional investor, the MIF requested materials that the firm's earlier investors had not needed. The NXTP team viewed the arduous process of assembling these materials as a learning experience, one that helped prepare them for the due diligence of other institutional investors and government agencies. The approval process was complicated by NXTP's atypical model, which differed from the structure of VC funds in which the MIF normally invested. At the same time, the MIF team was willing to work with NXTP and recognized that the firm's unique model required a slightly different approach from that used with standard VC funds. For example, NXTP's small initial investment size and the speed with which it planned to invest in a high number of start-ups meant that its investment committee[319] (IC) had to be more nimble than that of a VC firm. Thus it would not make sense for the MIF to take an observer seat as it did on the ICs of many of its other first-time fund managers. Similarly, the early stage of its start-ups meant that the initial reporting standards for each portfolio company needed to be less detailed, and would gradually grow with the company. One interviewee added, however, that it would have been helpful to have a clearer sense of the MIF's due diligence timeline, particularly from the moment that the MIF team originally agreed to pursue an investment in NXTP to the moment that the investment received final approval and the capital was delivered.

[316] In 2014, for example, there were only five Latin American PEVC exits that took place on stock exchanges: one IPO and four secondary offerings. (LAVCA, *2015 LAVCA Industry Data & Analysis*, LAVCA, 2015, pg. vii.)
[317] Using data from VentureXpert's database, we found that only 10% of PEVC exits in developed markets from 2005-2014 were achieved via IPO, based on a sample of 16,312 PEVC exits in developed markets.
[318] In 2014, over three quarters of PEVC exits were through sales to strategic acquirers. (LAVCA, *2015 LAVCA Industry Data & Analysis*, LAVCA, 2015, pg. vii.)
[319] NXTP's investment committee comprises the firm's four founding partners and its Program Director.

The NXTP team also proposed that the MIF should try to better connect funds and their companies to the IDB's expansive network. The IDB's strong presence throughout Latin America gives it an impressive roster of contacts and great insight into many of the region's projects and initiatives. NXTP believes that the MIF could harness the IDB's vast network to help support the region's fund managers and their companies. The MIF already serves this purpose within its community of fund managers, creating opportunities for them to network and share best practices. The NXTP team believes that the MIF can further facilitate growth of the region's early stage investing ecosystem by extending this network to include other departments of the IDB and their projects.

NXTP's Impact

As NXTP Labs confronts the challenges before it, its founders will need to consider the accomplishments the firm has already achieved and how to leverage these to chart a course for the future. One such accomplishment is the strong portfolio of companies the firm has supported in its less than five years of existence. The 164 companies have thus far exceeded the firm's initial performance expectations, with fewer write-offs and a greater number of high-potential and growing companies. Furthermore, the portfolio includes a number of important role models and examples of LatAm's ability to innovate, including companies, like iBillionaire, that would likely not exist if not for NXTP. Furthermore, the NXTP team and its investee companies have arguably impacted the region in important ways, such as directly generating over 1,100 jobs, and contributing to what seems like considerable ancillary growth and job creation in their clients and suppliers.

The research team also has found what is considered to be strong evidence of NXTP Labs' important role in mobilizing Latin America's entrepreneurial and start-up ecosystem. Importantly, NXTP's team has not focused on only one aspect of the ecosystem, but on many facets simultaneously. The accelerator program directly teaches and supports entrepreneurs, and, through the demonstration effect, inspires other would-be entrepreneurs to pursue their business ideas. At the same time, NXTP has activated numerous stakeholders in the region to support early-stage enterprises by becoming mentors and investors, and even attracted large global players like Bessemer Venture Partners to invest in its portfolio companies. From its initial fundraising scheme that helped generate NXTP's first group of mentors, to the numerous demo days and network-building events that bring together local investors, mentors, entrepreneurs, and business professionals, NXTP has helped foster a strong, collaborative community within the early-stage ecosystem. This vibrant entrepreneurial network provides a pipeline for the region's growth investors, who can support the young enterprises as they grow and contribute to Latin America's entrepreneurial future. The magnitude of this impact could likely become increasingly evident as its portfolio continues to mature in the following years.

V. Conclusion

In early 2015, the research team, in cooperation with the MIF, set out to develop detailed studies of three early stage investment funds operating in Latin America. The overarching goal of this research was twofold: to explore the micro impact of venture capital on i) invested companies (the funds' direct impacts), and ii) the broader economy (the funds' indirect impacts).

The funds profiled in this report represent three distinct approaches to investing in seed and early stage companies. Vox Capital's Fund I is the first social impact fund founded and managed by a Brazilian team to focus on the needs of Brazil's BoP population. Progresa is Colombia's first classic, domestic VC fund. NXTP Labs is an investment fund with an accelerator program for Latin American entrepreneurs modeled on Silicon Valley's Y Combinator. See Table V-1, below, for key information on each fund.

Table V-1: Fund Key Dates and Figures

Fund	Vintage	Investment Focus	Capital Raised (millions)	Total Number of Investments	Exits
Vox Fund I	2009[320]	Impact investing in Brazil	$35.5	19[321]	0
Progresa	2009	Venture capital in Colombia	$21.3	7	2 full exits; 1 partial exit
NXTP Labs	2011	Accelerator and seed fund for regional startups	$38.5	164	9

Results

The questions that guided this research are summarized below, and the findings for each of the three funds under consideration are described. When reviewing these findings, it is worth noting that the funds were still roughly in the middle of their life cycles at the time of evaluation in mid-2015. Therefore, a final, definitive assessment of each fund will not be possible for several more years.

What types of companies did the funds target?

The first question considered was:

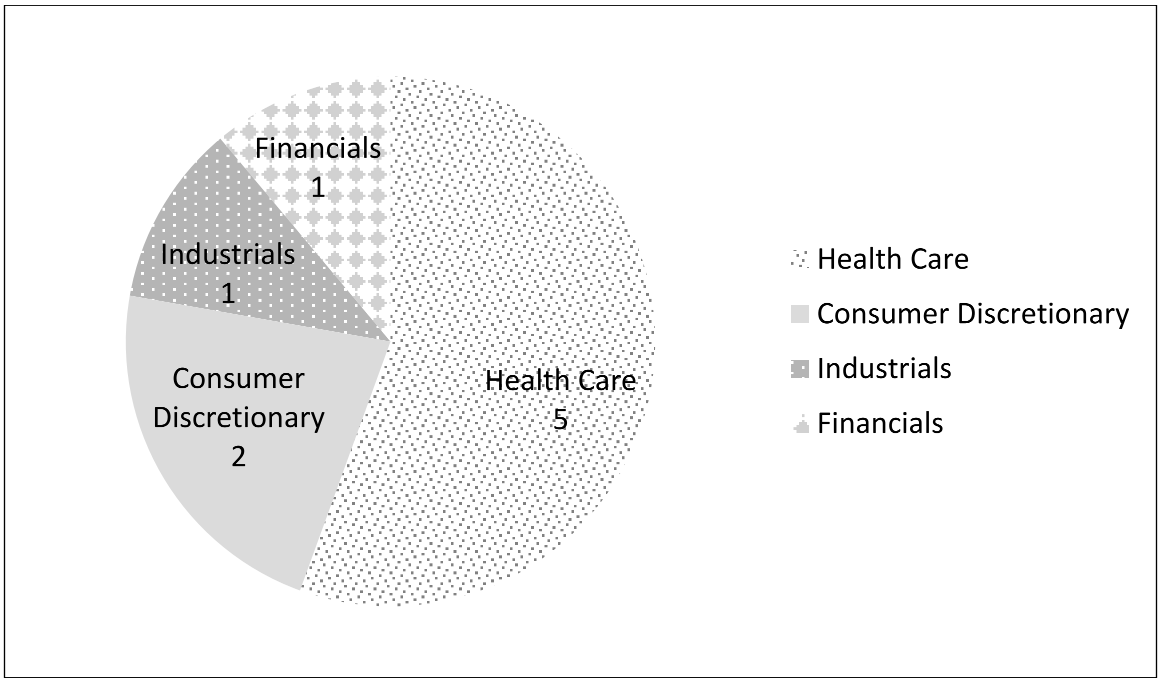
Which types of companies are more frequently targeted by the funds?

[320] Vox Capital's $3 million "proof of concept" fund, Paradox Holdings, was founded and began investing in 2009. Paradox was rolled into Vox Capital's first flagship fund, Vox Impact Investing Fund I (Vox Fund I), which had its first close in September 2012.

[321] At the time of evaluation in September 2015, Vox Capital had nine active investments, while its seed investment program, Vox Labs, had made 10 investments.

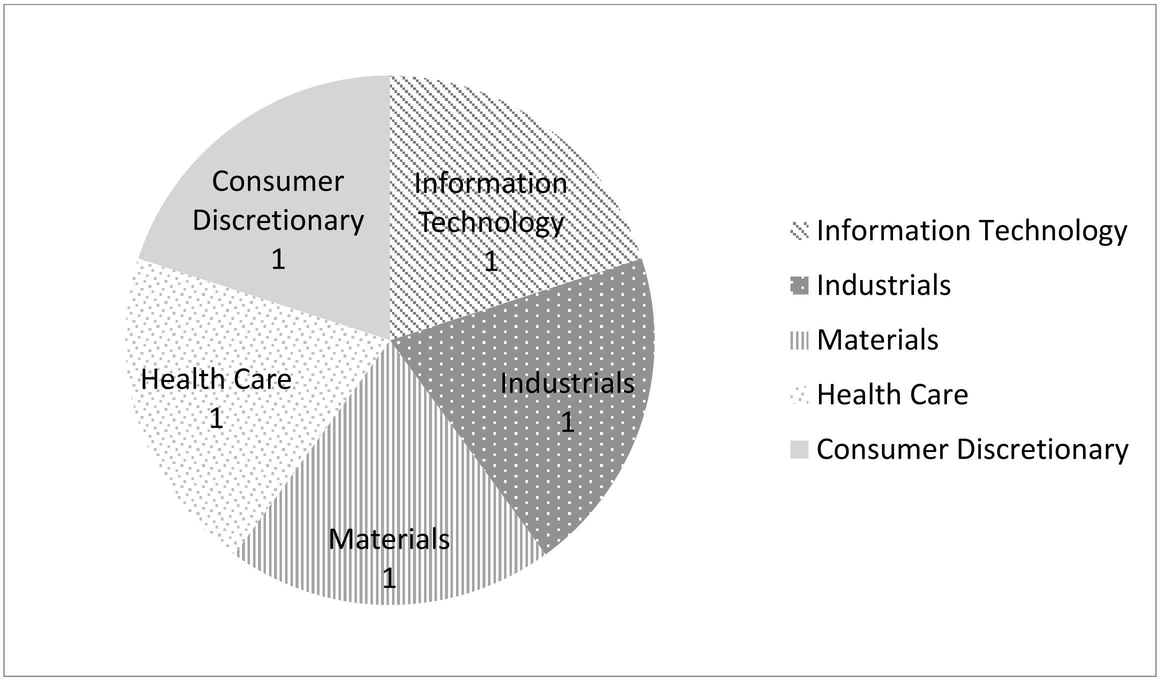
The simple answer to this question is that the funds targeted companies and/or entrepreneurs that generally aligned with their mandates. For Vox, Brazil's first VC firm dedicated to impact investing, investees needed to provide products and services to socioeconomically marginalized populations and/or create socially beneficial externalities. Examples of these companies include Tamboro, a developer of educational software designed to improve the performance of Brazil's BoP elementary school students, and Saútil, which sought to help BoP citizens navigate Brazil's complex public healthcare system. Within the confines of that mandate, however, the fund's investments spanned a surprising diversity of sectors. Please see Figure V-1, below, for a breakdown of the Vox portfolio by sector.

Figure V-1: Vox Portfolio by Sector



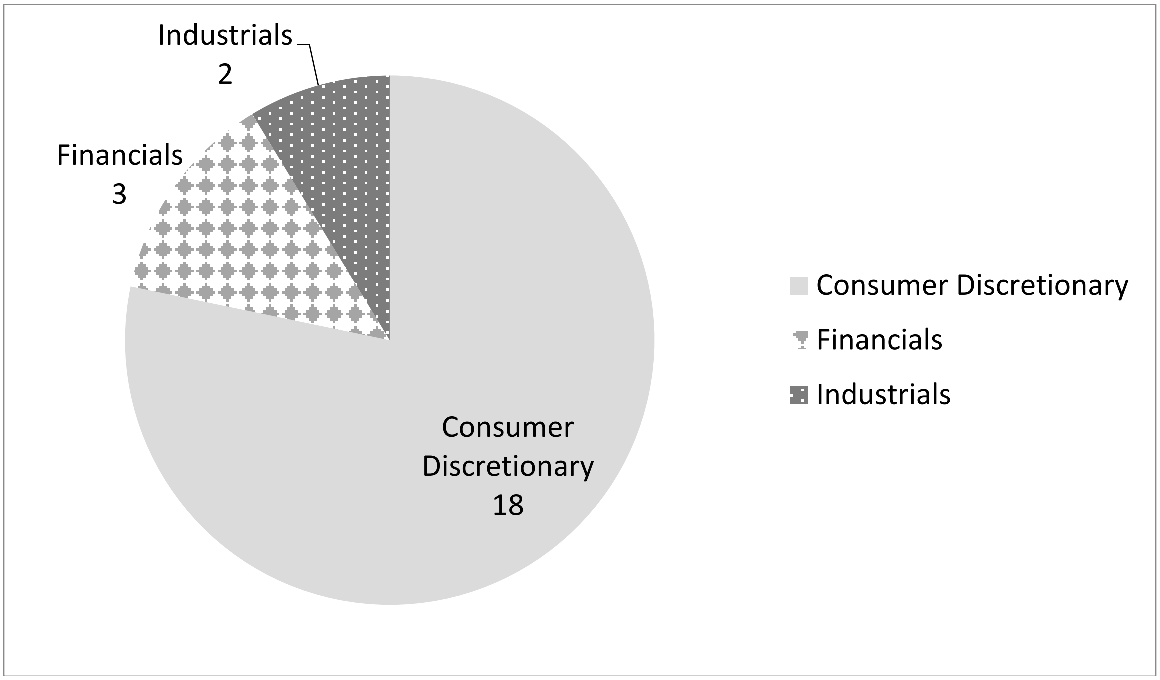
Progresa targeted companies in the information and communication technology (ICT) and life sciences sectors, areas of the Colombian economy that the investment team viewed as the most promising. Progresa's portfolio thus included a telemedicine solutions company, a manufacturer of biologically derived chemicals, and a mobile gaming developer. Please see Figure V-2, below, for a sector breakdown of the Progresa portfolio.

Figure V-2: Progresa Portfolio by Sector



Finally, NXTP largely focused on Internet startups and web-enabled tech companies. Examples include Zolvers, an app that connects people who need household services with a reliable pool of pre-screened workers, and Satellogic, which manufactures microsatellites for the rapidly growing low-Earth orbit market. While all of the companies in NXTP's portfolio utilize technology, they target various sectors and sub-industries. Because of the size of NXTP's portfolio, we include only interviewed firms in the figure below. Please see Figure V-3, below, for a breakdown of the interviewed sample of NXTP's portfolio by GCIS sector.

Figure V-3: NXTP Labs Companies Interviewed by Sector



Direct Impact: How did the funds add value to their portfolio companies?

The second question guiding this research was as follows:

> *How do the funds add value to their companies? What is the importance of the financing and advice provided by the funds relative to that which is available more broadly in the market? To what degree do the funds focus on environment, social, and governance (ESG) practices?*

The research team evaluated the funds' direct impacts using four criteria, the first and most basic of which was the commitment of capital to promising young companies operating in equity- and credit-constrained environments. In addition to financing, the funds were evaluated on their effectiveness in assisting their portfolio companies with networking opportunities—often with introductions facilitated by the MIF—and the provision of business training—again often with financial assistance from the MIF. Finally, the funds were also evaluated based on their effectiveness in improving their investees' environmental, social, and governance (ESG) practices. The research team rated the funds' investments across these four criteria on a scale of 0 (little to no impact) to 4 (considerable impact), represented by ideograms ("Harvey balls") for enhanced readability. Please see Table II-4 for Vox Fund I's scores, Table III-4 for Progresa's scores, and Table IV-4 for NXTP Labs scores.

Examining the direct impact of Vox on its portfolio companies, the research team found that the networking support that the Vox team provided was highly important to its portfolio companies, receiving the highest score for two-thirds of its interviewed portfolio. Vox's rating reflects the nearly unanimous view of its portfolio companies that the fund's large and influential network provided important advantages, particularly in terms of business development and market access. Vox's networking rating may have been especially high because many of its BoP-targeted entrepreneurs had few other options for networking support, or because Vox's founding team was particularly well connected. Vox's business training was also very helpful to its portfolio companies—ranking only behind networking in terms of importance—particularly in terms of supporting management teams as they made important strategic decisions. As an impact investor, Vox Capital also provides ESG training to its companies, and the fund's team has actively developed new methods for helping its portfolio company managers carefully consider and optimize their businesses' social impact. The Vox team is continuing to develop strategies to measure and increase its portfolio's social impact, serving as a model and testing ground for other Brazilian impact investors. Finally, the provided capital was important to its portfolio companies, as all of the companies were operating in equity- and/or credit-constrained environments. Indeed, several companies faced serious liquidity issues at the time of Vox's investment, and the committed capital was arguably key to their ongoing operation. In some cases the investees had access to capital through other channels but chose Vox as a superior partner to execute their business plans and achieve rapid growth.

Progresa scored highest in the committed capital category, reflecting the importance of the invested capital to its portfolio companies, and the scarcity of other sources of risk capital for early stage companies in Colombia. Progresa also scored well in the networking category, having helped its portfolio companies, for example, secure additional funding for key projects and form relationships with key partners and customers. The Progresa team's network is strengthened by its close relationship with Grupo Sura and Grupo Argos, two large Colombian conglomerates with wide and deep networks across the region. Progresa's business training on topics such as financial analysis, strategy, marketing, sales, corporate finance, and basic negotiations was also valuable to its portfolio. . The classes, taught by third-party consultants, were partially funded by the MIF from its technical assistance program and were highly regarded by the portfolio company attendees. Progresa's lowest score was in the ESG category, though it still received a score of three out of four from more than half of the interviewed companies. Progresa assisted its companies with ESG and has invested in several companies with strong ESG results (particularly Ecoflora Cares, as described in Chapter III). Moreover, Progresa's parent, Promotora, has incorporated an express ESG mandate into Progresa's successor fund, the Early Growth Fund II.

NXTP Labs' seed investment and accelerator model centers on providing intensive training and networking support to its portfolio companies alongside modest initial investments, with larger follow-on investments in the most promising companies. Accordingly, NXTP scored strongest in the networking and business training categories. Interviewees said that NXTP's founding partners were particularly valuable in this regard, providing invaluable advice and helpful contacts. The partners' prior entrepreneurial experience allowed them to speak with authority when offering guidance to entrepreneurs. NXTP's scores in the committed capital category were somewhat lower, reflecting the small size of its $25,000 initial investments and the smaller number of companies that received more sizable follow-on investments. (It should be noted that the small initial investments are integral to NXTP's model and have allowed it to support 160+

companies in its relatively short history.) These investments, however, were often still important to NXTP's portfolio, due to the early stage of its investee start-ups and the difficulty of finding alternate sources of early stage financing in Latin America. Many of NXTP's graduates also received capital from other investors including notable investors such as Bessemer Venture Partners, Kaszek Ventures, Techstars, Cygnus Capital, Krillion Ventures, NEXEQ, Trindade Investimentos, Kima Ventures, South Ventures, Enzyme Venture Capital, and others. Because these investments reflect, in part, the power of NXTP's network rather than the importance of the capital directly provided by NXTP Labs, they are reflected in NXTP's networking score rather than its committed capital score. NXTP received more modest ESG scores, again reflecting the early stage of its typical portfolio companies and the fact that most early stage companies focus their efforts and resources on rapid growth. NXTP nevertheless supported the work of female entrepreneurs and created other important socially beneficial impacts, as discussed in Chapter IV.

As the research team pursued answers to the second research question, a related question emerged: whether there is a relationship between a company's success and its stage of development. If "success" is taken to mean revenue, profit, and—importantly for LPs such as the MIF with a development mandate—job growth at the portfolio company, the research for this report does show some relatively later-stage companies that seem poised for successful outcomes.

Although the research team could not arrive at a definitive answer, several of the more mature companies certainly seem to be doing well. For instance, PrimeStone, the Progresa investee that develops smart metering solutions for the utility industry, was relatively well established at the time of investment in 2013, with large customers in Mexico and the United States. In October 2014, PrimeStone opened its U.S. headquarters in Atlanta, and the investment team expects revenue to grow by approximately 40% in 2016.[322] Satellogic, the Argentinian microsatellite manufacturer, was also more mature than the majority of the start-ups in the firm's portfolio at the time of NXTP's initial investment, and is well on its way to becoming an established player in the international microsatellite market. Vox's Magnamed, the Brazilian manufacturer of portable ventilator equipment for the medical market, is another example of significant growth from later-stage companies. Yet other companies in earlier stages of development—Tutum, NXTP's recent 60x exit; and Tamboro, the educational software developer in Vox Fund I's portfolio—have also achieved successful exits and/or promising growth. Similarly, Ecoflora Cares, Progresa's eco-friendly colorant manufacturer, though spun-off from an older company, represents a repositioned and partially re-staffed organization in a relatively early stage of execution of its business plan.

The sample considered in this study may ultimately be too small—and it is almost certainly too early—to offer a definitive conclusion about the relationship between portfolio company success

[322] PrimeStone, "PrimeStone Announces Major Expansion into North American Market," *PRNewswire.com,* October 28, 2014. http://www.prnewswire.com/news-releases/primestone-announces-major-expansion-into-north-american-market-280627132.html.

and the investment cycle. In a far wider-ranging study of its own emerging market fund investments, however, the International Finance Corporation (IFC) found that companies at the growth equity stage did produce better results in terms of job creation than did early stage companies.[323] Nevertheless, the authors of the IFC study noted that investments in small and medium enterprises (SMEs), which comprise the majority of the portfolio companies examined in this report, were more effective in accessing the poorest nations where growth equity opportunities were rare.

Investments in early stage companies, as the IFC study showed, may thus extend the reach of an organization's developmental impact and also enhance its effectiveness, even in more advanced economies such as Brazil's. VC funds play an important role in creating the healthy PEVC pipeline for later stage investors by identifying and nurturing the most promising SMEs. Indeed, this is the principal reason NXTP Labs is planning to raise a $120 million growth equity fund: to participate in the value its VC investments have created. Furthermore, in emerging markets where the entrepreneurial ecosystem is still nascent, VC investment in early stage companies creates important follow-on effects, even when those investments are not financially successful. As Kovner and Lerner established in their study of Community Development Venture Capital funds, there appears to be a type of positive demonstration effect simply from creating a group of entrepreneurs and an environment familiar with the expectations of VC investors.[324]

Indirect Impact: How did the funds contribute to improvements in their broader markets?

The third and final overarching question explored by the research team was:

> *What are the funds' contributions to promoting growth, innovation, job creation, and improvements in the broader market? How have they contributed to the local and regional VC ecosystem?*

Before reviewing the indirect impact results, it is necessary to once again caution the reader on the question of attribution. As mentioned throughout this paper, it is difficult to determine with any certainty the indirect impact of a given fund's investment in a portfolio company on the broader market in which the company operates, because myriad endogenous and exogenous factors affect an enterprise's performance, and a single investment fund may only have full control over one or two of them. The structure of the PEVC industry (among other factors) generally makes it very difficult to implement research methodologies (e.g., experimental or quasi-experimental impact evaluation) that can rigorously address the question of attribution of any observed impact, i.e., whether the fund manager truly caused the observed impact.

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[323] David Wilton and Wilmot Allen, "Implications for Job Creation and Achieving Good Financial Returns in Emerging Markets: An Analysis of Private Equity Funds Backed by IFC (Vintage 2000-2011)," *EMPEA Emerging Markets Private Equity Review* 8, no. 4 (2012): 12.

[323] David Wilton, *Why Emerging Markets Private Equity*, Washington, D.C.: International Finance Corporation, 2012.
http://www.ifc.org/wps/wcm/connect/c22c86004d2ceddb9a9fdff81ee631cc/Why+EMs+PE.pdf?MOD=AJPERES.

[324] Anna Kovner and Josh Lerner, "Doing Well by Doing Good? Community Development Venture Capital," *Journal of Economics & Management Strategy* 24, no. 3 (2015): 643-663.

Therefore, for the purposes of this report, it is assumed that investment is the causal link between the fund's actions and a company's indirect impact.

Similarly, it is important to remember that, as discussed more in detail in the Final Thoughts section below, impact is assessed *to date* throughout the study, i.e., without anticipating any future impact if the companies succeed as planned. In an analogous manner to the other research questions discussed above, the research team rated each examined portfolio company using a number of criteria measuring both direct and indirect impact on a scale of 0 (little to no impact) to 4 (considerable impact), represented by Harvey balls.

Vox's ancillary growth and job creation scores were mixed. Much of this result stems from the relatively early development stage of the observed portfolio companies, which thus would not yet have inspired much job growth in suppliers or contractors. Magnamed, a company with substantial operations and a large roster of suppliers, had one of the higher ancillary growth and job creation scores. In terms of innovation, most of Vox's portfolio companies relied to some extent on innovative products or processes, but they did not constitute technical breakthroughs. Indeed, in most cases they made use of technology and/or solutions that had been pioneered in other geographies, e.g., Biva's P2P lending platform. There were two notable exceptions: ProRadis, a provider of medical imaging diagnostics IT solutions; and Avante, a microfinance lender with an innovative tablet-based app. In keeping with Vox Capital's overarching mission as an impact investor, most of Vox's portfolio companies had a substantial focus on BoP populations and the alleviation of poverty, and this is where the fund received some of its highest indirect impact scores. In terms of impact on Brazil's VC ecosystem, all interviewees agreed that Vox, the nation's first home-grown impact investor, has played and continues to play a crucial role.

Progresa's portfolio companies also earned a variety of scores in terms of ancillary growth and job creation. Ecoflora, with its labor-intensive supply chain that reaches into some of the poorest areas of Colombia, earned the highest score of 4, while Brainz, a mobile gaming company with a few large outside suppliers, received a score of 2. Innovation—from smart metering technology to a potentially revolutionary new food colorant—was an important aspect of each portfolio company's business, and Progresa's high average innovation score reflects this. The developer of the new food colorant, Ecoflora, received the highest score, while companies with technology that had been developed and used in other geographies received the lower scores. Progresa's portfolio companies sit at both ends of the range in terms of their beneficial effect on BoP populations. Two companies, Ecoflora and Ubiquo, a provider of remote telemedicine solutions, received scores of 4. Finally, as the first homegrown Colombian VC fund to achieve successful exits, Progresa's effect on Colombia's VC ecosystem has been profound. Through its two full exits and one partial divestiture, Progresa proves that the broader Colombian entrepreneurial and VC ecosystem could function across the investment cycle of fundraising, investing, and exiting.

In terms of ancillary growth and job creation, the research team similarly found great variety across NXTP's portfolio. Some companies seemed to have a sizable indirect impact and spurred great economic activity in the region, while others did not appear to have a noticeable impact. The latter occurs, for instance, when portfolio companies serve large corporate clients. While the services that these portfolio companies provide are useful to their clients, it is unlikely that those clients generated substantially more revenue or created more jobs as a result. Other portfolio companies, however, such as the household services firm Zolvers and the credit card payment analytics company IncreaseCard, had greater impact in terms of indirect job creation and ancillary growth, respectively. NXTP's portfolio companies also varied greatly in terms of innovation. iBillionaire, a financial products company, and Satellogic, a provider of Earth surface imagery data, are among the portfolio's most innovative companies. Both companies create scalable products meant to compete in the global marketplace. Such companies are important in Latin America, not only for the direct and indirect economic growth they spur, but also as role models—examples of the region's success in conceiving and operating global companies. This demonstration effect in part motivated the MIF's decision to invest in NXTP. In terms of indirect impact on BoP populations, NXTP's team believes that successful companies should align the interests of their businesses with the interests of society at large, but the firm does not specifically target companies that serve the BoP. Thus, the research team did not analyze NXTP's indirect impact on the BoP as a separate criterion. Nevertheless, some companies in NXTP's portfolio, such as Zolvers, have BoP impacts, and they are discussed in more detail in Chapter IV.

Final Thoughts

The research team undertook its study of Vox, Progresa, and NXTP Labs in the second half of 2015. The results presented in this report are thus best thought of as snapshots of each fund at a particular moment in its life cycle. The funds profiled here have made investments in some extraordinarily promising companies, but fulfilling that promise will require several more years. A follow-up review of each fund at the end of its life cycle would provide an illuminating coda to this report.

With the exception of the exits to date, the funds' financial performance was largely prospective at the time of evaluation. The life cycle of a classic VC fund in a developed market is typically 8-12 years, which means that the emerging market funds of interest to this report are just entering middle age. Currently, they are likely to continue helping their companies create value and will only start seeking exits in the next few years. While the exits to date may provide some insight into future performance, a more definitive evaluation of financial performance will not be possible for several more years, especially because fund managers frequently identify and exit under-performers early in the fund's life to free time and capital for more promising investments.

For the MIF, with its dual mandate to support economic development while achieving sound financial returns, it is reasonable to conclude that its investments in Vox, Progresa, and NXTP Labs have been successful in terms of furthering its guiding principles—providing both financing and a favorable business environment:

> Access to financing in early stages of development is crucial for the creation of dynamic businesses in Latin America and the Caribbean. In addition to capital,

> entrepreneurs need a favorable environment to launch and develop their dynamic businesses.[325]

Not only have these funds provided capital to companies that are creating jobs, increasing business competency, and modeling entrepreneurial success, but they have also created positive externalities in the greater community. Each is playing an important role in creating and strengthening an entrepreneurial ecosystem capable of producing thriving companies. Indeed, each of the funds, in its own way, represents an important milestone in the development of that ecosystem.

[325] Multilateral Investment Fund, "Early Stage Entrepreneurs: The Challenge of Entrepreneurship," Multilateral Investment Fund, accessed November 12, 2015, http://www.fomin.org/Home/Projects/AccesstoFinance/Ecosystems.aspx.

VI. Acknowledgements

A study such as the one presented in this report requires the willing participation of many actors across the Latin American VC landscape. Numerous individuals generously volunteered their time, stories, data, and insights to contribute to this endeavor. Without their support, the research team could not have investigated the many aspects of VC investments and their developmental impacts that are explored in this study.

The research team is particularly grateful to the teams of the three featured funds—Vox Fund I, Progresa, and NXTP Labs—for their willingness to participate in this research, as well as their invaluable assistance over the course of the eight-month project. We would also like to thank all of the interviewees who kindly shared their experiences with us. Finally, we extend heartfelt thanks to the team of the Multilateral Investment Fund (MIF) for their support throughout this project. We hope that this report will contribute to the continued strengthening of Latin America's VC industry, and thus, to the growth of the region's many promising small and medium enterprises.

The risk of thanking people by name is that we may miss some. We apologize in advance to any individuals inadvertently omitted, and extend our heartfelt thanks to them—and to the many people listed below:

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- Bernardo Bonjean (Avante)
- Juan Fernando Botero (EcoFlora Cares)
- Lisandro Bril (AxVentures)
- Federico Builes (MiCarga)
- Sebastian Cadenas (IncreaseCard)
- Julián David Cano Arango (Grupo Sura)
- Erik Cavalcante (Vox Capital)
- Alejandro Cavallero (GuiaLocal)
- Nicolas Cock (EcoFlora Agro)
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VII. Appendix I: Individual Company Thumbnails of Interviewed Firms

This Appendix briefly describes each of the NXTP portfolio companies interviewed for this report, providing short descriptions of each company's products or services, the relevant investment dates, and the current status of the investment.

ComentaTV

NXTP invested in ComentaTV, a company that linked social media with live television broadcasts and events, in September 2011. The company participated in the first edition of the NXTP accelerator, and later in CORFO's Start-Up Chile and Telefónica's Wayra accelerator. It also received investment from Enzyme Venture Capital, a Buenos Aires-based seed and early stage VC firm. ComentaTV was acquired by Wayin, a Denver-based social media platform, in January 2014, achieving NXTP's fourth exit and a return of 3.4x.

Cookapp

Cookapp, founded in 2013, is a company that allows users to eat dinner in pop-up restaurants in the homes of professional and hobby chefs. NXTP invested in the company in March 2014, and the company participated in the sixth edition of the accelerator program. As of August 2015, NXTP had made one follow-on investment in Cookapp, and the company remained in NXTP's portfolio.

Emporio Compras

NXTP Labs invested in Emporio Compras in September 2013. Emporio Compras, founded in early 2013, is an ecommerce firm that operates two business units: an online sales platform (www.emporiocompras.com) that offers a variety of home and consumer goods, and Emporio Commerce Solutions, which operates brands' online sales across multiple channels by managing integrated warehousing, logistics, customer service, and IT services. It operates in Argentina, Chile, Colombia, and Uruguay, and serves many regional and international brands, including Lenovo, Epson, Bianchi, and Proctor & Gamble. Its shareholders include MercadoLibre and Andreani, a major Argentine logistics company. As of September 2015, NXTP had invested over half a million dollars in Emporio Compras, the company had successfully raised a Series A round, and it remained in NXTP's portfolio.

EveryPost

NXTP invested in EveryPost, a social media platform that allows users to create content on multiple social networks in one place, in October 2012. The company has since raised two additional rounds from angel investors and Krillion Ventures, a Miami-based seed fund. As of August 2015, NXTP had made one follow-on investment, and the company remained in the NXTP portfolio.

GroovinAds

NXTP invested in GroovinAds, a digital ad campaign optimization company, in September 2011, as part of the accelerator's first edition. Since then, the company has pursued an organic growth strategy. It now boasts large clients such as MercadoLibre and Despagar.com. As of August 2015, the company was finalizing an angel financing round, and remained in the NXTP portfolio.

GuiaLocal

GuiaLocal, founded in 2010, is an online guide for local businesses. NXTP invested in the company in February 2013. As of August 2015, it operated in 21 Spanish- and Portuguese-speaking countries in the Americas and Europe, averaged over 8 million visitors to its site each month, and remained in NXTP's portfolio.

iBillionaire

iBillionaire was founded in 2013 after NXTP introduced its two founders: one of NXTP's investee entrepreneurs and one of its investor/mentors. The company tracks the investment strategies of Wall Street billionaires who consistently outperform the market in order to provide technology and financial products, including a mobile app, web platform, and market index (NYSE:BILLION). As of August 2015, NXTP had invested over $242,000 in iBillionaire, and the company remained in NXTP's portfolio.

IncreaseCard

NXTP invested in IncreaseCard in September 2013. The company's credit card payment analytics platform improves merchants' ability to track receivable payments, and, for example, manage charge-backs and tax benefits more effectively. The company estimates that merchants lose approximately 8% of their revenues due to mismanagement of receivable credit card payments and that its platform can reduce this to as little as 2%. The company also participated in Start-up Chile and Wayra. NXTP made one follow-on investment in IncreaseCard, and the company remained in the NXTP portfolio as of August 2015.

Jampp

Jampp is an app marketing platform that helps generate and engage users for mobile apps. It serves clients around the world, such as Uber, eBay, and MercadoLibre. NXTP invested in the company in April 2012, and later participated in Jampp's $7 million Series A round, led by Highland Capital Partners Europe. As of August 2015, the company remained in NXTP's portfolio.

Las Partes

NXTP invested in Las Partes, an online marketplace for auto parts, in March 2014. The company was accelerated as part of the seventh edition of NXTP's accelerator. As of August 2015, the company operated in Colombia, was planning to launch in Mexico by the end of the year, and remained in the NXTP portfolio.

LookUp

LookUp is a company that helps users choose the best mobile plan and phone for their specific needs. NXTP invested in LookUp in March 2012, and the company participated in the second edition of the accelerator. As of August 2015, the company's website was still active, but the investment was listed as a write-off in NXTP's portfolio. One of the company's founders, David Alvo, now manages NXTP's operations in Chile.

MiCarga

MiCarga was an online broker of commercial cargo transportation. NXTP invested in the company in February 2013 as part of the accelerator's fourth edition. The company has since ceased operations and has been written-off from NXTP's portfolio.

Mural.ly

Mural.ly is a company based in Buenos Aires that develops an innovative digital platform that allows creative teams to collaborate and work remotely. Its customers include global companies such as IBM, Disney, Globant, and PayPal. NXTP Labs invested in Mural.ly in March 2012. As of August 2015, NXTP Labs had made one follow-on investment in the firm, and it remains in the NXTP Labs portfolio.

Pactanda

NXTP invested in Pactanda, a company that develops online dispute resolution software for ecommerce, in September 2014 as part of the accelerator's seventh edition. In addition to the NXTP accelerator, Pactanda has participated in Start-Up Chile and Chrysalis, a Chilean incubator. The company remained in the NXTP portfolio as of August 2015.

Pago Rural

Pago Rural (formerly DTA LatAm) offers a technology solution to provide financial services to agricultural businesses. Founded in 2009, the company received investment from NXTP in September 2014 when it switched its original model to a more technology-driven model. As of September 2015, the company remained in the NXTP portfolio.

Properati

NXTP invested in Properati, an online real estate marketplace, in January 2013. Since participating in the fourth edition of NXTP's accelerator, the company has raised a Series A round, in which NXTP made a follow-on investment, led by Neveq Ventures, a Bulgarian VC fund. As of August 2015, Properati had over 40 employees across four offices, listed over a million Latin American properties on its site, and remained in the NXTP portfolio.

Real Trends

Real Trends, founded in 2014, provides a suite of tools to help online sellers manage their accounts and track their competitors. It currently serves sellers on MercadoLibre, but will soon expand to serve sellers on eBay as well. NXTP invested in Real Trends in March 2014. The company participated in the sixth round of the accelerator, and remained in the NXTP portfolio as of August 2015.

Satellogic

Satellogic, a company developing a constellation of nano-satellites to provide real-time imaging of the Earth's surface, was founded in 2010. NXTP invested in the company in October 2013 and has since made two follow-on investments. As of August 2015, the company remained in the NXTP portfolio, had launched its first three satellites, and scheduled launch dates for a 16-satellite constellation in 2016.

Sinimanes

NXTP invested in Sinimanes, an online food delivery company that connects users with local restaurants, in May 2013. The company had previously participated in the Start-Up Chile program. In September 2013, the company merged with SeMeAntoja, a Mexican food delivery company backed by 500 Startups. NXTP made a follow-on investment in November 2013, and exited the company in June 2014 when it was acquired by Delivery Hero for $2.4 million, achieving a return multiple of 1.6 and IRR of 324%.

Tienda Nube

Tienda Nube, a platform that helps users launch ecommerce sites, was launched in 2011. NXTP invested in Tienda Nube in September 2011, and the company participated in the first edition of the accelerator program. As of August 2015, the company had closed two additional rounds of financing, and remained in the NXTP portfolio.

Widow Games

NXTP invested in Widow Games, an Argentine videogame developer that specializes in bringing classic tabletop games to digital platforms, in February 2013 as part of the fourth edition of the accelerator. Widow Games' first two titles both achieved #1 rankings in their respective categories in local app stores. NXTP made a follow-on investment in the company, alongside Wayra and Cygnus Capital, a Buenos Aires-based VC firm that invests in digital companies. As of August 2015, the company remained in NXTP's portfolio, and was planning to raise a Series A round of investment.

WinAd

NXTP invested in WinAd, a social network that connects users and brands through advertising contests, in March 2014. The company participated in the sixth edition of NXTP's accelerator. As of August 2015, the company remained in the NXTP portfolio.

Zolvers

NXTP invested in Zolvers, an online marketplace for hiring home cleaning and home repair professionals, in October 2013. Zolvers' business model (in which it charges a one-time fee for connecting customers and service providers) allows it to potentially avoid some of the labor regulation issues that have plagued similar firms. After graduating from the sixth edition of NXTP's accelerator, Zolvers participated in 500 Startups in Mexico, and Start-Up Chile. In late 2014, the company closed a $500,000 seed round, in which NXTP participated, led by Jaguar

Ventures, a Mexican early-stage VC firm. As of August 2015, Zolvers worked with 10,000 service providers and 40,000 customers, operated in Argentina, Chile, Mexico, and Colombia, and remained in the NXTP portfolio.

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1300 New York Avenue, N.W., Washington, D.C. 20577

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