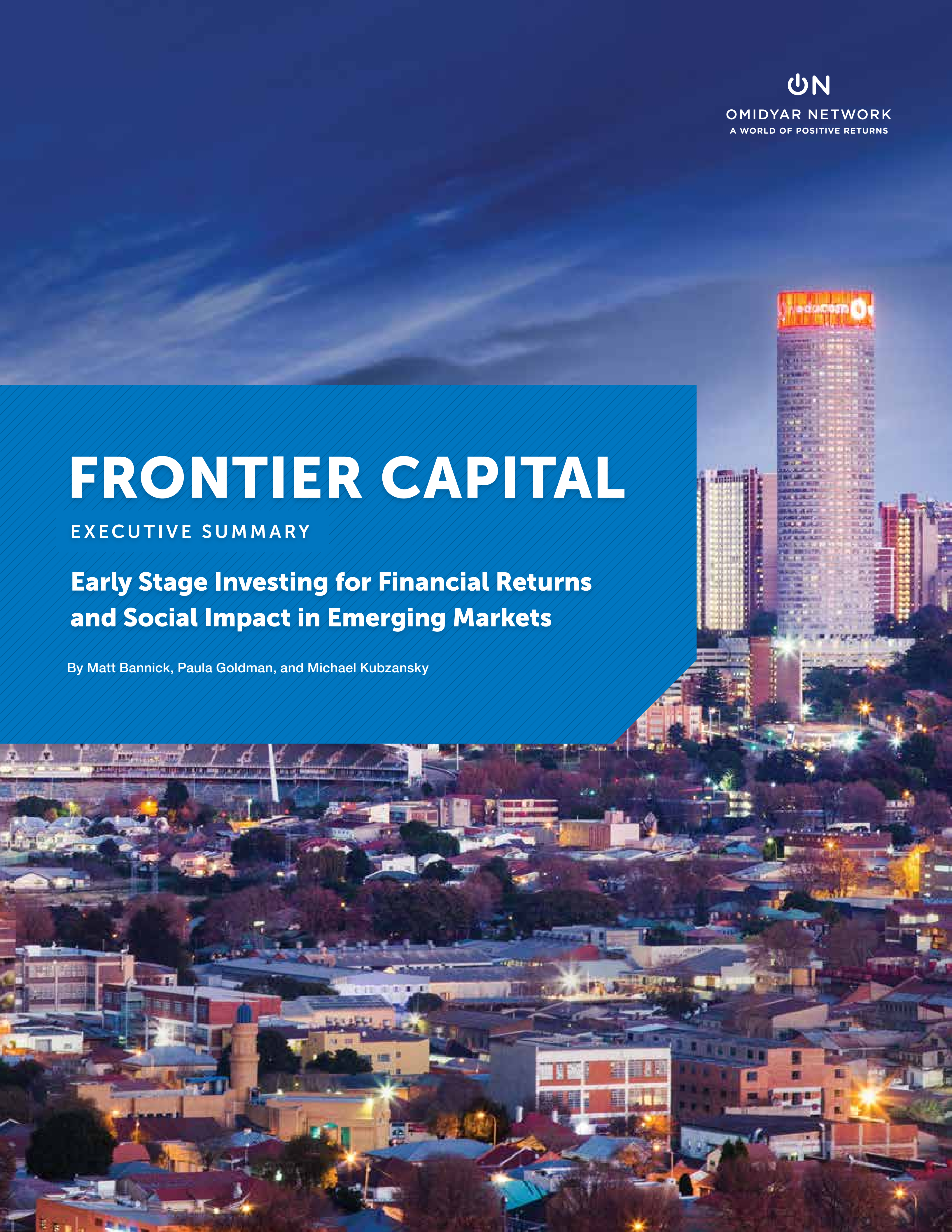


OMIDYAR NETWORK
A WORLD OF POSITIVE RETURNS

FRONTIER CAPITAL

EXECUTIVE SUMMARY

Early Stage Investing for Financial Returns and Social Impact in Emerging Markets

By Matt Bannick, Paula Goldman, and Michael Kubzansky

OMIDYAR NETWORK

A WORLD OF POSITIVE RETURNS

Much has been written about the importance of supporting people at the very bottom of the economic pyramid. This report outlines a compelling approach toward directing more early stage funding to entrepreneurs who are serving low- and lower-middle-income (LMI) populations in emerging markets; people between the very bottom of the pyramid and the existing middle class.

Serving this population is both important from an impact perspective and attractive from a business lens. LMI populations have greater purchasing power and steadier income streams than those at the bottom of the economic pyramid, and also stand to benefit greatly from innovations that can improve their lives.[1]

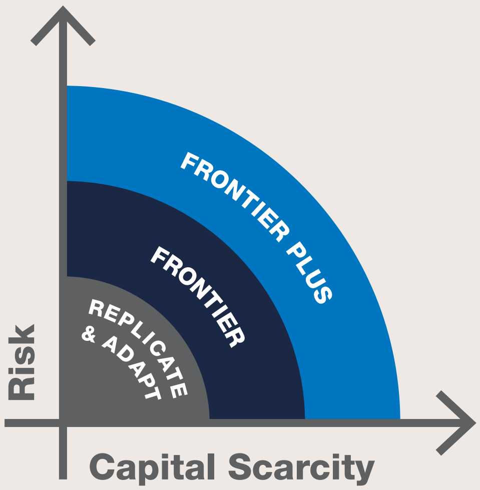
This is a powerful moment for such innovation. Major shifts—from the rapid spread of mobile phones to the increased flow of capital toward developing economies, to rising levels of entrepreneurship in countries like India and Colombia—have given rise to a new wave of companies specifically focused on populations once excluded from market access. Early successes in the field are demonstrating the real potential of these enterprises, but are the tip of the iceberg.

For these companies to scale and succeed, they need access to early stage risk capital, or **frontier capital**. Investors have an unprecedented opportunity to both achieve financial returns and effect positive change through the use of frontier capital, which can open up opportunities for hundreds of millions of underserved people in emerging markets.

The frontier capital movement stands at the convergence of impact investing and venture capital. It is gaining interest and excitement from a diverse group of players, including impact investors, emerging market venture capitalists, high net worth individuals, development finance institutions, and some of the world's most successful entrepreneurs. This paper draws from extensive interviews with field leaders as well as 10 years and over $850 million of Omidyar Network's experience—including roughly $400 million concentrated in early stage investing in emerging markets.[3]

Low- and Lower-Middle-Income Populations in Emerging Markets

This report defines LMI populations as those earning roughly between $2 and $8/day (whereas those at the bottom of the pyramid earn less than $2/day). Much has been written about the bottom of the pyramid, where the needs remain great and worthy of continued attention. The focus of this paper, however, is on the less-explored and still underserved LMIs. This segment represents a major market opportunity. For example, in Latin America and the Caribbean, the purchasing power of the LMI population is estimated at $405B. In South Asia, it is estimated at $483B.[2]



The frontier capital movement has already seen tremendous early momentum, but it is important to segment the opportunity to make sure that the right expectations are paired with the right investments. Segments outlined in this report each present a different set of opportunities for investors, and therefore need a different set of tools to unlock their potential.

DEFINING THE OPPORTUNITY

Entrepreneurs serving LMI populations face a unique set of challenges. The frontier capital movement has already seen tremendous early momentum, but it is important to segment the opportunity to make sure that the right expectations are paired with the right investments. Segments outlined below ("replicate and adapt," the "frontier," and "frontier plus") each present a different set of opportunities for investors, and therefore require a different set of tools to unlock their potential.

REPLICATE AND ADAPT: Proven business models, where the bulk of existing emerging market VC money already flows.

Replicate and adapt includes business models that have been de-risked and proven elsewhere, and then replicated and adapted to an emerging markets context. Such businesses constitute the bulk of emerging market venture capital to date. Proven models often focus on middle-income populations and above. However, a growing number serve low- and lower-middle-income populations. This includes well-known examples such as microcredit, which produced several notable exits delivering strong returns to investors.[4] There is untapped potential to extend more proven models to serve LMI populations. However, focusing exclusively on companies in the "replicate and adapt" segment would be shortsighted.

THE FRONTIER: Where traditional venture capital financing tools work, and investors should do more.

Concentrating on the replicate and adapt subset puts investors at risk of missing significant opportunities to unearth the next promising wave of investment opportunities, targeted specifically at LMI populations and their needs. The question is which types of frontier businesses hold clear promise for investors, including VCs that have the traditional "2 and 20" closed-end fund. As a general rule, early stage investors look at size of market and margins as two key factors that determine the suitability of a business for funding. The analysis conducted for this report compared hundreds of companies in emerging markets to assess the needs of traditional VC investors. It underscored two additional business model factors that correlate well to scaling quickly and profitably:

- A "mixed-income" model serving both middle- and lower-income populations.
- An asset light model.

It is also important to consider the maturity of the capital market in which the company is being funded. Notably, companies in the frontier tend to operate in the more developed capital markets in the global south—such as Brazil, Mexico, and India.

THE FRONTIER CAPITAL MOVEMENT

The Frontier Capital movement is attracting champions from a diverse set of players. Influential business leaders, traditional venture capitalists, impact investors, development finance institutions, and government policy all play a role in helping direct risk capital toward innovations in a wide array of sectors.

VCs: A growing number of conventional venture capitalists are backing new business opportunities in emerging markets created by expanding low- and lower-middle-income populations and rapid technology adoption and innovation. Investors such as Sequoia, Matrix, and KaszeK have invested in businesses in regions such as India, Latin America, and China.

Impact investors: Committed to both financial and social returns, impact investors have been at the forefront of proving new business models in emerging markets with the explicit goal of creating massive social impact. Groups such as Bamboo Finance, Accion's Frontier Investments Group, Elevar, and LGT Venture Philanthropy are supporting entrepreneurs in over 30 emerging markets, from Colombia to South Africa. In Mexico, IGNIA supports enterprises serving base of the pyramid customers. In India, funds such as Lok Capital and Unitus Seed Fund are funding innovations in areas such as healthcare, education, e-commerce, and financial services. Fund managers, such as those listed above, are backed by a diverse set of limited partners (LPs), including major financial institutions, foundations, religious groups, and DFIs (per below).

HNWs: Increasingly, high net worth individuals are looking to apply their business acumen to solving some of the world's toughest problems. Highly successful business leaders such as Michael Bloomberg, Stephen Brenninkmeijer, Desh Deshpande, Tony Elumelu, Bill Gates, Vinod Khosla, Pierre Omidyar, and Mark Zuckerberg have invested in frontier companies and funds in sectors such as healthcare, education, and solar energy.

DFIs: Development finance institutions have played a key role in providing debt and equity financing to enterprises in emerging markets for development purposes. In recent years, we have seen organizations such as the Overseas Private Investment Corporation (OPIC), CDC, IFC, FMO, and the Inter-American Development Bank explore new ways to direct early stage capital to businesses serving low-income populations in emerging markets. With the backing of the US, UK, Swedish, and Australian governments, the Global Innovation Fund was launched in 2014 to support innovations in emerging markets that have a strong potential for social impact using a venture capital-like approach. The UK Department for International Development (DFID) launched a £75m fund to support businesses in sub-Saharan Africa and South Asia that have a positive impact on poorer populations.

Governments: In emerging markets, there has been an uptick in government programs and policies aimed at fostering entrepreneurial ecosystems and early stage investing. The government of India has been particularly active in this regard; it recently launched a number of measures including the India Aspiration Fund (a fund of funds for early stage companies), which also encourages investors to pursue new investment theses. Longer-standing programs include the likes of Colombia's iNNpulsa, Brazil's FINAR and Criatec Fund, and Mexico's INADEM and NAFIN.

Entrepreneurs: At the heart of the frontier capital movement are the entrepreneurs creating products and services to improve the lives of lower-income customers. While these entrepreneurs operate in environments that pose a unique set of risks, many are successfully overcoming these barriers to serve millions of people. Examples include Dailyhunt (founded by Virendra Gupta), which enables non-English speakers in India to access critical news and information via the mobile Internet and MicroEnsure (founded by Richard Leftley), which offers affordable life and health insurance to low-income customers in Africa and Asia.

Scale Is Rare in Serving the Poor Exclusively

Studies by Monitor Inclusive Markets of (collectively) 700+ ventures in more than a dozen sectors in India and nine countries in Africa found the most successful enterprises—i.e., those that had achieved some level of commercial viability and scale (whether in education, health, agriculture, financial services, water, and beyond)—buffered the risk and volatility of serving the poor by expanding their customer base to include adjacent and modestly higher income brackets.[5] Doing so, one study found, "proved to be a powerful risk mitigation tool" against high default rates or the periodic inability to purchase that can severely impact revenue, financial reserves, and the speed of scale.[6] Notably, of all the ventures in these studies serving low-income segments at scale in India and Africa, nearly every single VC-backed company targeted mixed-income markets. Examples included Vaatsalya Hospitals (India), Servals Automation (India), Livewell Clinics (now Viva Afya, Kenya), SKS Microfinance (India), Spandana (India), and d.light (India and Africa).

The Frontier Factor One: "Mixed-Income" Models

The larger your target market, the easier it is to achieve the classic "J-curve" growth that enables more rapid scale and the possibility of a 10x or better "home run" VC return. When applied to businesses targeting LMI populations, this has important implications. Specifically, it may be far easier to achieve scale and reach more lower-income customers when you also serve middle-income customers. While the needs of LMI populations may not be as dramatic as those of lower-income groups, addressing them may also provide means to develop commercially viable channels that ultimately reach those with the most need.

The Mixed-Income Opportunity: Economies of Scale

Mixed-income businesses generally target significantly larger markets. Compared to businesses that only serve low-income populations, mixed-income businesses can often achieve greater volume, which in turn drives down costs and, usually, prices. Ver de Verdad (funded by IGNIA) identified a massive, underserved market in Mexico: those who need eye exams and high-quality, affordable eyeglasses. Ver de Verdad aggressively targeted a mass market with both middle-class and low-income customers. The high volume of customers created economies of scale that drove down the price. Ver de Verdad currently has 23 clinics open, with the expectation of reaching over 300 by 2020.

The second major factor for a company to achieve the speed and magnitude of scale for businesses targeting lower-income customers is the level of assets required, especially at startup stage. "Asset light" companies require relatively little capital expenditure or working capital to prove their model and expand.

The Mixed-Income Opportunity: Economies of Scope

Mixed-income businesses are also often able to utilize existing infrastructure to add lower-price products onto existing lines, thus increasing overall profits. An example of this is the South African healthcare company CareCross. In its first decade, CareCross grew to serve more than 1 million middle- and upper-income South Africans. To expand to low-income customers, CareCross designed a new, lower-priced product and in four years proved it could serve this new segment profitably without subsidy by leveraging existing business units. This growth, along with help from like-minded investors such as Bamboo Finance, contributed to a successful acquisition by MMI, a South African Insurance Group, in 2014.

The Frontier Factor Two: Asset Light

The second major factor for a company to achieve the speed and magnitude of scale for businesses targeting lower-income customers is the level of assets required, especially at startup stage. "Asset light" companies require relatively little capital expenditure (for example, for physical infrastructure or equipment) or working capital to prove their model and expand. This is especially important in emerging markets because debt, in particular, is both scarce and expensive. An asset light model is also appealing to investors because it is less likely to require as many additional rounds of dilutive financing to reach breakeven.

A decade ago it was impossible to penetrate low-income market segments in emerging markets via asset light technology platforms. Today, the deep penetration of mobile networks has already sparked transformative new sectors and business models serving LMI populations, as outlined on page 8.

PROMISING SECTORS FOR FRONTIER INVESTORS

Several sectors (in which business models are both mixed income and asset light) are ripe for further innovation and investment. These include: financial technology, education technology, and consumer Internet and mobile.

Financial Technology (fintech)

Technology is transforming the financial services sector and providing much quicker and cost-efficient ways to reach the unbanked. Mobile money was one of the first innovations in this domain to gain traction. By the end of 2014, 21 mobile money services had more than 1 million 90-day active accounts, and five of these services had over 5 million active accounts.[7] Building on the success of mobile money and mobile payments, startups are harnessing the same trends to disrupt a broader set of financial services. For example, MicroEnsure partners with telecom operators to sell affordable life and health insurance to 15M+ low-income consumers across 16 countries in Africa and Asia and expects to reach 26 million in 2018. The disruptive potential of MicroEnsure attracted investment from two major global insurance companies (AXA and Sanlam) with a combined market cap exceeding $55 billion.

Education Technology (edtech)

Technology is also fueling a revolution in how students learn. Digital tools are making it possible to tailor content for individual students and to increase access to many resources that have never been available to lower-income learners. Though it is still early days for this sector in emerging markets, early edtech ventures are posting impressive scale, returns, and impact. Take, for example, Geekie, an edtech startup founded in 2011 in Brazil. The company has delivered a proprietary adaptive learning platform to over 3 million low- and middle-income students in more than 7,000 schools; many of these students previously had little to no access to personalized learning tools.

Consumer Internet and Mobile

The rise of the smartphone in emerging markets has created a promising opening for mass-market platforms that connect LMI populations to needed services and products. These range from information about health topics or agriculture prices to services such as bus tickets and the like. For example, Jugnoo, an on-demand auto-rickshaw application in India, just completed series A funding—and has significant potential to make transportation more accessible to LMI populations.

FRONTIER PLUS: Where there is untapped opportunity for investors to be more creative and patient in helping entrepreneurs get to scale.

Frontier plus opportunities require risk-tolerant investors who are willing to take big bets to open up entirely new industry sectors with transformative impact. In this segment, it may not be viable for investors to rely only on the traditional VC funding structure. Experimentation with several innovations in financing can create a more appropriate form of risk capital.

The frontier described thus far focuses on the massive opportunity to use the traditional venture capital model to spur innovation for LMI consumers in emerging markets. There are, however, worthwhile early stage investments in the frontier plus segment, where business models may be more asset intensive, target exclusively lower-income customers, or operate in geographies where traditional exits might be challenging.

Frontier plus opportunities require risk-tolerant investors who are willing to take bold bets to open up entirely new industry sectors with transformative impact—from solar home solutions to rural housing finance to productivity services for farmers. The frontier plus domain has already produced companies with strong returns; companies such as Rangsutra (consumer crafts), Servals Automation (efficient cookstoves), Shree Kamdhenu Electronics (electronic milk collection services), and RuralShores (rural business process outsourcing) produced 5x or greater returns to investors. However, it may not be viable for frontier plus investors to rely only on the traditional VC funding structure. Experimentation with several innovations in financing—including longer time horizons, venture debt, and quasi-equity—can create a more appropriate form of risk capital for this segment.

Longer Time Horizons

There is in some cases an economic argument for patience—in the form of a promising return premium for not forcing an early exit. This, for example, is the thesis of the IGNIA Fund in Mexico, which has a 12-15 year fund lifecycle (as opposed to the usual 8-10). There is also experimentation with holding companies, a practice that is already mainstream in conventional investing circles for tax reasons.

Venture Debt

Frontier and frontier plus entrepreneurs often face a dearth of options for affordable debt due to their lack of collateral or track record. In mature markets such as the US, venture debt is almost 10 percent of the venture equity ecosystem. For example, one source estimated that venture debt in India in 2013 was only 3-3.5 percent of the venture equity market.[8] Promising solutions to this problem are emerging. For example, IntelleGrow, launched in 2010 in India, replaces the collateral debt model with payments tied to cash flows. The company has supported 80 businesses with $42 million of debt funding.

Quasi-Equity

Another important tool that may ameliorate several challenges common to frontier plus startups is “quasi-equity.” Given difficulties with exits in emerging markets, quasi-equity may offer investors a less risky form of liquidity while still compensating investors for risk. For example, Lundin Foundation provided quasi-equity to MEDEEM, an early stage company that has developed an affordable land rights documentation process in Ghana. In order to align incentives with the entrepreneurs, the investment was made as a subordinate low-interest loan with a sliding-scale royalty and return capped to the earlier of the achievement of target IRR or 10 years, whichever came sooner.

CONCLUSION: A CALL FOR THE NEXT PIONEERS

Expanding opportunity for LMI populations is both an urgent need and a business opportunity. This report delineates nearer-term opportunities for “replicate and adapt” and “frontier” investors and farther-reaching “frontier plus” prospects to create strong financial returns and social impact. All three segments are important. Aligning expectations with the kinds of businesses and models that best suit different types of early stage investors is crucial to maximizing the growth and impact of this movement:

- **Impact investors** (including the development finance institutions, foundations, financial institutions, and religious groups that finance many funds as LPs) have a unique role to play in both frontier and frontier plus segments, where appetite for impact and risk tolerance is unlocking and accelerating promising new business models. Impact investors should also experiment with frontier plus financing innovations.
- For **venture capitalists**, there are under-tapped opportunities, particularly in the frontier domain, to achieve both strong financial returns and social impact with asset light, mixed-income business models.
- For **high net worth individuals**, there are opportunities across the spectrum, and particularly in the frontier plus area, where tolerance for risk and patience can open up game-changing new sectors. There are also meaningful opportunities to accelerate entrepreneurial ecosystems, which are foundational to all three frontier sectors.
- **Governments in emerging markets** should consider extending policies that channel additional capital, particularly incentives that help defray risk, as well as programs that encourage the growth of entrepreneurship.
- Finally, **entrepreneurs** should look carefully at the new opportunity set represented by lower-income populations; this is a promising domain in which new enterprises can do well financially and make significant contributions to society.

1 Research looking at the incidence of relapse into poverty found that the probability of falling below the poverty line within 3-5 years dropped to 10% at the $10/day threshold. At $5/day, that chance is as high as 40%. See for example: Lopez-Calva, Luis F., and Eduardo Ortiz-Juarez. 2011. “A Vulnerability Approach to the Definition of the Middle Class.” Policy Research Working Paper Series 5902. The World Bank.

2 Global Consumption Database, World Bank / IFC. 2010

3 As of September 2015, Omidyar Network has invested ~$850M in early stage social impact organizations; close to $400M has been invested in for-profit companies, much of which has gone to early stage businesses in emerging markets. An additional $450M has gone to nonprofits to support work in infrastructure and ecosystem building.

4 Examples of notable microfinance exits which generated 5x or greater returns to investors include MiBanco in Peru, Compartamos in Mexico, Equity Bank in Kenya and SKS, Janalakshmi and Equitas in India.

5 Michael Kubzansky, Ansulie Cooper, Victoria Barbary, “Promise and Progress: Market-Based Solutions to Poverty in Africa,” May 2011 http://web.mit.edu/idi/idi/Africa-%20PromiseAndProgress-MIM.pdf. See also Ashish Karamchandani, Michael Kubzansky, and Paul Frandano, “Emerging Markets, Emerging Models,” March 2009.http://www.beyondthepioneer.org/wp-content/uploads/2014/04/emergingmarkets_full.pdf

6 Kubzansky, et al., p. 141

7 “2014 State of the Industry Report: Mobile Financial Services for the Unbanked,” GSMA, 2014. http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/03/SOTIR_2014.pdf

8 Swaraj Dhanjal, “Indian Start-ups Warm Up to Venture Debt,” Live Mint, January 27 2015. http://www.livemint.com/Companies/TGfm0WdVvzfzPWAxfrB0jN/Indian-startups-warm-up-to-venture-debt.html

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