

Opportunities and Challenges for Global Health Impact Investors in India and East Africa

Lessons from the Global Health Investment Landscaping Project (GHILP)

January 2015



Executive summary

- The purpose of this work was to understand the landscape of global health impact investors in India and East Africa; to do so, we reviewed the activities of ~85 organizations and interviewed ~30 capital providers
- During these conversations we heard candid assessments of the challenges in the sector as well as perspectives on the broader trends that are leading to increased interest in the private healthcare marketplace
 - Main challenges for investors included a lack of coordination and collaboration among parties in the sector (public & private, different investor types, etc.) and a mismatch between available capital and the needs of enterprises on the ground
 - Other challenges stated were lack of adequate health insurance schemes, need for an enabling policy environment, and a stronger pipeline of human capital (with medical and business training)
 - Major trends spurring private sector activity were the growth of the middle class, increased access to information and technology, increased mobility and urbanization, and peaked interest from large corporations that see growth potential in these markets
- To address the main challenges for investors, we developed a two step framework for evaluating health sector opportunities:
 - First, investors should assess and understand the typical market failures associated with the segment of the value chain and the consumer population targeted by the organization to determine if the capital can be flexible or patient enough to deal with the market challenges
 - Next, investors should understand the stage of the organization to fit capital to their true needs (instead
 of organizations reshaping to serve investor needs)
- The framework highlights the different areas where grant capital may be more appropriate than investment capital and vice versa. Additionally, it underscores that the intention and characteristics of the capital are important for greater alignment between the investor and investee(s)

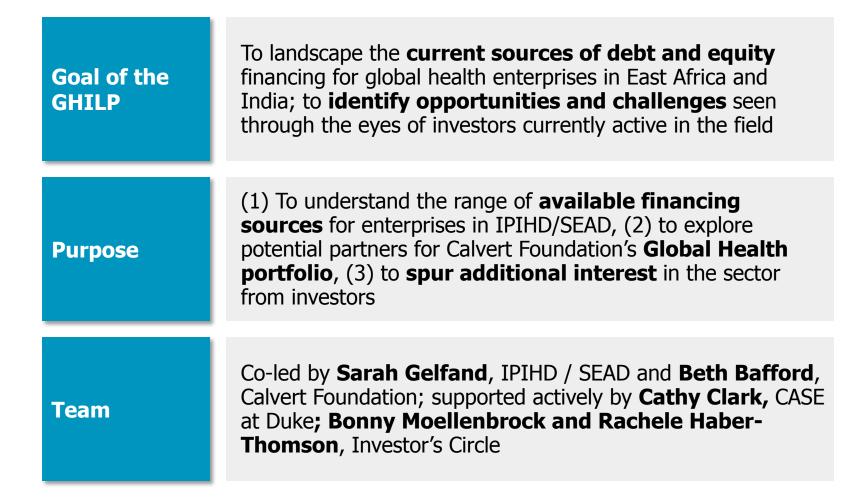
Agenda

• What we set out to do

- Who we talked to
- What we learned
- What we propose might help
- Contact & Acknowledgements



The GHILP was launched to understand the current sources of financing for global health enterprises





We focused primarily on the most relevant segments of the market for impact investors

Geography	Focused on East Africa and India , but global investment funds or organizations investing in broader Sub-Saharan Africa and South Asia were also included
Type of investment	Debt and equity only, preferably \$250K - \$5M average deal size; looked at organizations with multiple products at their disposal, but none that were solely philanthropic
Sector	Focused on health-only or health-as-a-vertical funds , but also included sector-agnostic organizations to understand if and how they view the health sector from an SME lens
Impact orientation	Focused on funds with an explicit impact orientation , but also included those that provide financing for SMEs or growing businesses even if impact was not their primary goal

We spent six months gathering information and talking to investors

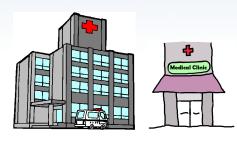
March – April `14	May — July `14	August – November `14	
Phase 1	Phase 2	Phase 3	
Initial research and landscaping	In-depth Interviews	Synthesis and Recommendations	
 Compiled existing data sources Reached out to major players in the field to leverage existing research and work Conducted a literature and data review Created an interview framework based on initial hypotheses 	 Conducted structured interviews with funders, infrastructure builders, and intermediaries identified in phase one 	 Synthesized major themes and posited potential set of solutions Shared findings with other investors to get feedback / build on research 	



When assessing investments in global health, we considered opportunities across the value chain

Physical delivery systems

The places people go for healthcare services



Medical devices & supplies The goods medical professionals use to provide services





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Payment systems The products that enable money flows to pay for healthcare



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Mobile & other technology

The tools and apps that make healthcare goods and services more efficient



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Logistics & distribution

Pharmaceuticals

The drugs used to treat disease,

from research to reality

The services used to get products and services to populations



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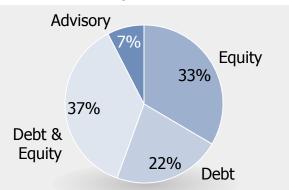
After creating a database of ~85 orgs, we conducted ~30 interviews with active investors in the field



Investors we interviewed varied in their approach to healthcare investment

Interviews by type of capital

100% = 27 interviews, % of organizations



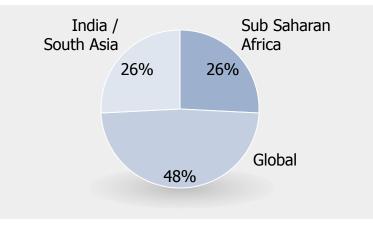
Interviews by region / focus area

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Foundation

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100% = 27 interviews, % of organizations



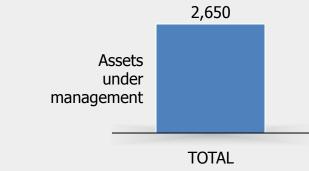
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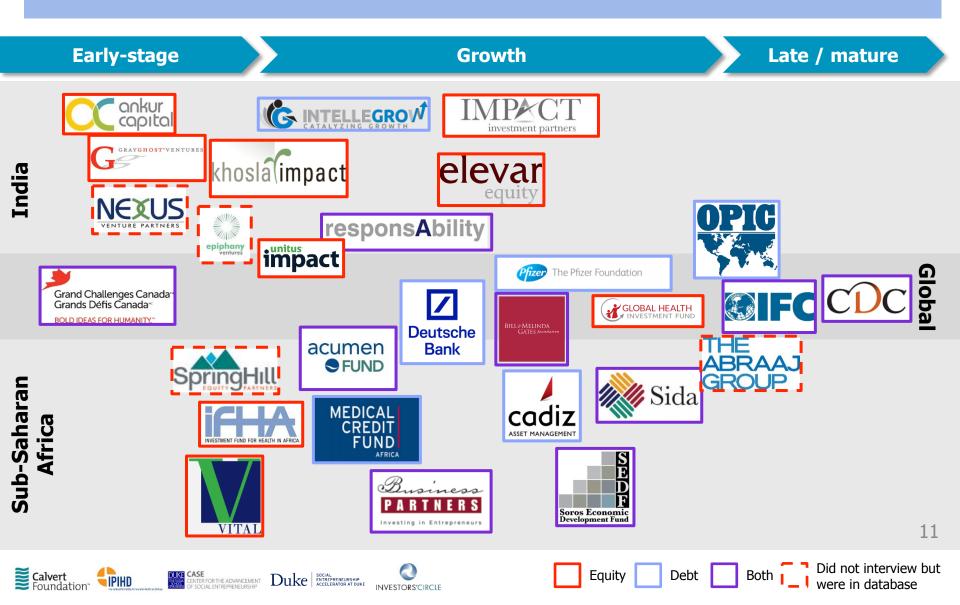
Interviews by health focus

100%= 27 interviews





Stage and type also varied, with most looking to provide growth capital to take scaling risk, not seed risk



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Investors had mixed views about how to balance the opportunity and risks in the sector

Some are extremely bullish on the market...

It is a buyer's market, there is more opportunity than capital so we can wait for deals to come to us and pick the ones that are best suited. – Equity investor

We wish we were 80% invested in health because of the huge overlap in financial viability and social impact. - Debt & equity investor

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...while others are more bearish, given the stage of market development

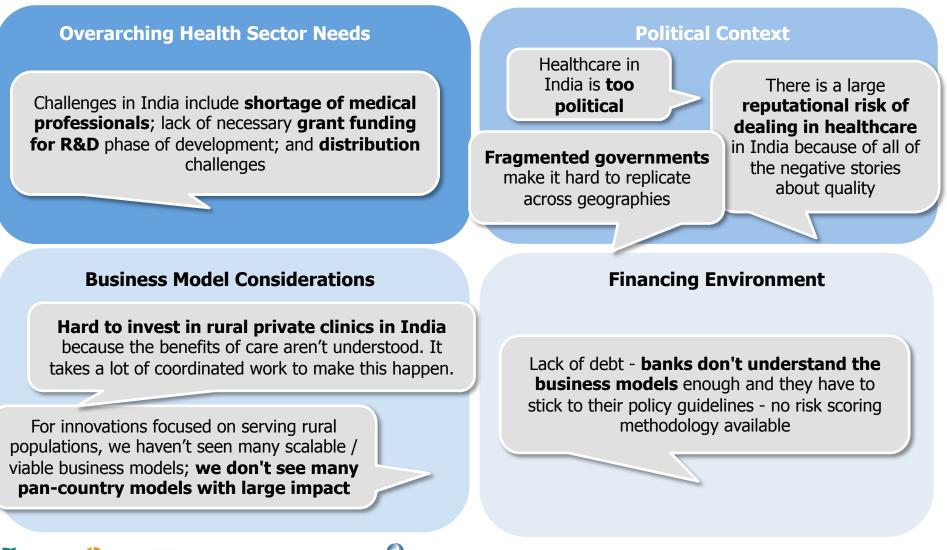
The market has been flooded with free money for early-stage proof-of-concept companies, which completely distorts the market and makes it hard for private investors to come in later in the business cycle.

- Debt investor

Government ignores the private sector but then organizations are negatively affected by policies they make.

- Debt & equity investor

We heard about the particularities of the private health market in India...

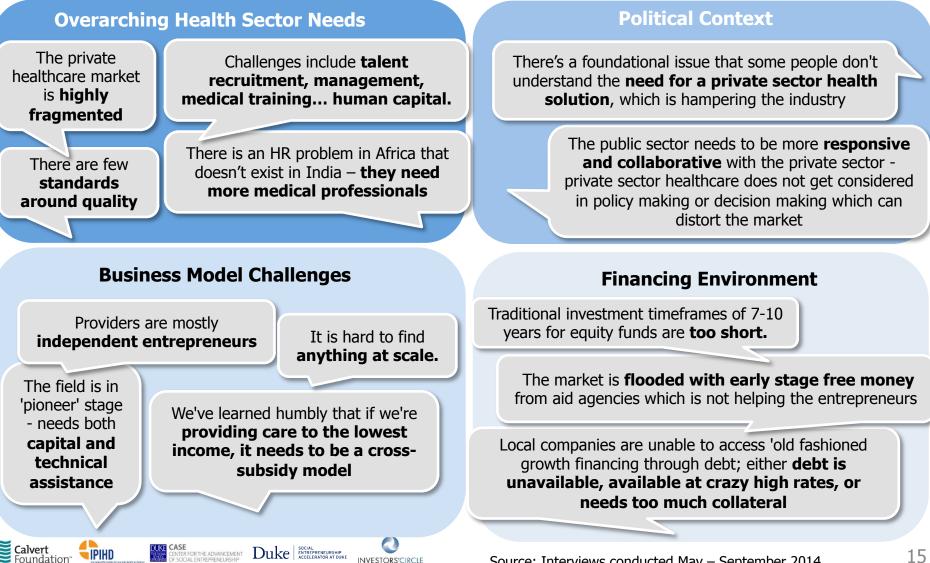


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...as well as the unique characteristics in East Africa



While some perspectives spanned geographies

Overarching Health Sector Needs

Incentives are not set up correctly for consumers to adequately demand preventative healthcare

Political Context

Hard to find **business models that work with the government as purchaser**, plus it is difficulty to manage regulatory environments across countries with **very different standards**

Business Model Challenges

It is hard to find models that are not **highly subsidized with grants** for TA

> Need to stop looking at the field from a diseasefocused lens; lots of **opportunities in crossdisease business models** like diagnostics, mHealth, health data tracking (EMR), franchise models

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Financing Environment

A lot of **silos of investors** - hard to get them to work together, funders say that they are willing to work across organizations in theory, but the **practice has yet to come true**

There hasn't been a lot of movement from the Foundation community, it has been **hard for investors to work with Foundations** so far.

Despite these challenges, there is a trend towards more robust private sector health marketplaces

DEMAND: A growing private health sector

- A **growing middle class** has greatly increased the consumer base and ability to pay for all parts of the health system
- Greater **mobility** of populations and increasing **urbanization** allows for greater access to services
- Increased access to technology and information allows consumers to understand the benefits of healthcare services
- Greatly peaked interest from multinational corporations that see emerging markets as key future source of growth

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 Growing realization that the **public** sector is insufficient to serve the needs of the population

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SUPPLY: More capital looking for deals

- Development finance institutions and asset managers with a footprint in Sub-Saharan Africa and/or India are increasingly looking at health as a sector of focus
- Private capital is seeking more investments that consider – if not explicitly seek – social and environmental returns
- Governments in collaboration with finance professionals - are exploring new ways to **deploy capital to solve social problems**, as evidenced by the G8 Impact Investing Taskforce



We heard a lot of interesting commentary on these macro trends and the interest of capital providers

A growing middle class has greatly increased the consumer base and ability to pay for all parts of the system



There is an interesting opportunity in middle class healthcare [in East Africa], because you can create higher quality alternatives, which is a lot less expensive than traveling abroad. This population is growing rapidly and starting to have more access to insurance so we're starting to see differentiated pricing by payor.

Increased access to technology and information allows consumers to understand the benefits of healthcare services



Computing power of mobiles has increased exponentially and that has allowed for micro-innovation based on macro-innovation; most new technology doesn't get adopted by BoP first but trickles down

There are lots of opportunities in cross-disease business models like diagnostics, mHealth, health data tracking (EMR), franchise models

Greatly peaked interest from multi-national corporations that see emerging markets as future source of growth



A lot of corporates are getting more active in the financing space so they can sell equipment to smaller clinics. General Electric used to have one account manager in Africa, now they have full teams across Africa."

Growing realization that the public sector is insufficient to serve the needs of the population



Some of the top performing companies on the South African stock exchange are in the health sector. People are starting to pay a lot more attention to the field.

In India, healthcare has been a consistently strong sector for private equity. Every reasonable mid-market private equity fund will have a partner who is at least 50% dedicated to health

What we heard can be validated by a quick literature review on private investment and health sector growth...

India

- Over USD 1.6B invested in impact investing in India from 2000 – 2014 across impact funds, foundations, DFIs, and angel investors
- Healthcare spending has grown at a 10.3% CAGR since 2008 and is projected to grow to \$158B in 2017, annual growth of more than 15%
- The share of healthcare provided by the private sector is projected to raise from 66% in 2005 to 81% in 2015; currently 74% of hospitals and 40% of beds are run by the private sector

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East Africa

- The impact investing market in Africa is between USD 300-400M per year; Sub-Saharan Africa, especially in Kenya and South Africa, represent large areas of interest and growth
- Healthcare spending has grown at a 9.6% CAGR since 2000, largely focused on infrastructure, capacity building, and specialized services and is expected to continue this growth
- Private sector investing in healthcare in Africa is expanding, expected to grow from USD 11B to USD 20B from 2007 to 2016 with 50% in healthcare provision

...understanding that there is still considerable unmet demand for private health investment in both regions

India

- Population confronting double disease burden of communicable and non-communicable diseases, as well as poor sanitation, nutrition, and mental health
- Current infrastructure and funding inadequate to meet these needs; \$20 per capita government expenditure on healthcare, less than 1 bed per 1,000 people

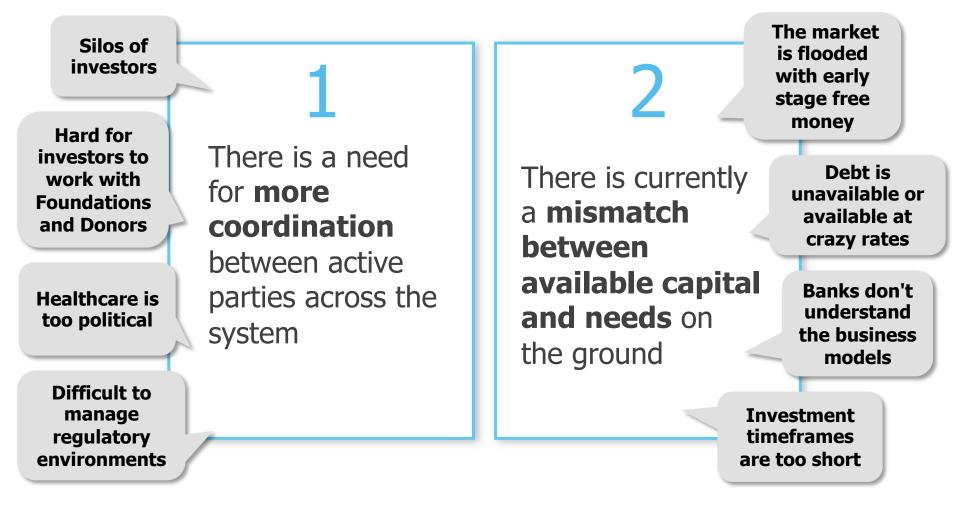
East Africa

- Sub Saharan Africa has 11% of the world's population but carries 24% of the disease burden with only 1% of global health expenditure and 3% of health workers
- Region lacks critical infrastructure to deliver health care; only \$14 per capita government expenditure on healthcare (avg), and public sector offerings tend to be of poor quality

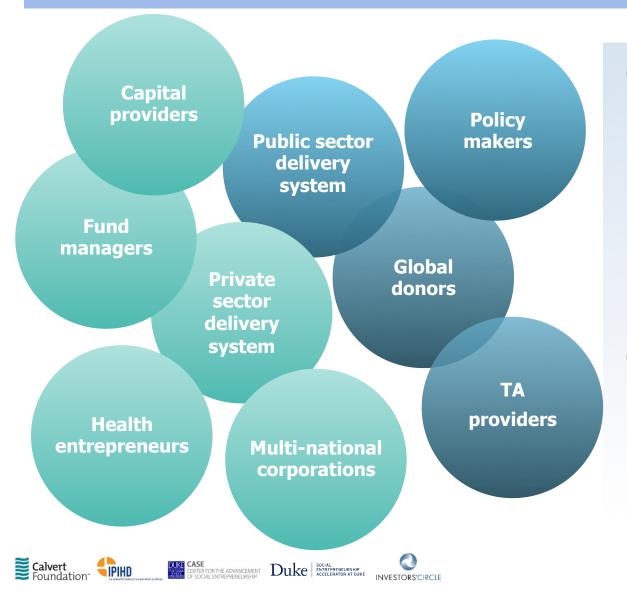
Recent Ebola outbreaks across West Africa have emphasized the role for a **more robust private sector** to support the successful delivery of essential and emergency health services



Frequently cited investor challenges can be boiled down to two main categories



There is a need for more coordination between active parties



- We heard a lot about frustrations and / or concerns with the **lack of communication between the major players in the sector**, particularly between the private (light green) and public / NFP (blue) sector actors, leading to inefficient resource allocation and unintended consequences
- To compliment the growing interest in investment, there needs to be more support to create an enabling policy and regulatory environment

2 There is currently a mismatch between available capital and needs on the ground

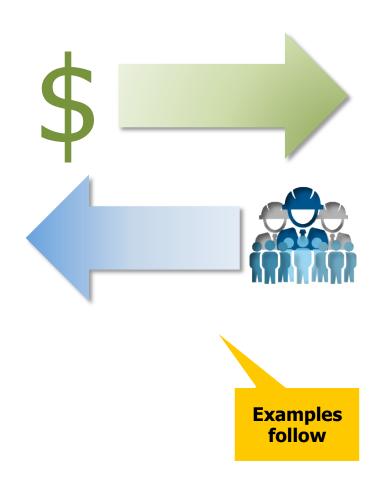
- There is capital in the global health investment space seeking deals, but the capital available is not always meeting the needs of the enterprises
- Restraints on capital include risk appetite, programmatic lens, return expectations, population requirements, among others
- Enterprises are seeking funding that fits the needs of their organizations along various stages of their development, which often does not fit neatly into predefined capital 'boxes'

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Market dynamics across the sector vary depending on sub-sector and target population

For the greatest chance of successful investing in the sector...



We learned that you have to understand the **market challenges** at the **intersection of the population and segment of the value chain**... ...before you understand how each **segment** of the market is **optimally financed**... ...and finally where the **enterprise** is in its **stage of development.**

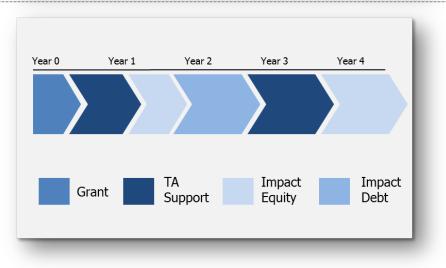


To simplify a complex sector for interested investors, we propose a two-step framework

Step 1: Understand the **market context** using the ecosystem grid

		Populations			
		Rural BoP	Urban/ peri-urban BoP	Urban/peri-urban middle-income	Urban/peri-urban high-income
	Delivery system	Inadequate volume Infrastructure Price sensitivity	Quality for cost Infrastructure Price sensitivity	Quality for cost Infrastructure	Infrastructure
	Medical Device & Supplies	Last mile distribution Inadequate volume Price sensitivity	Price sensitivity	Price sensitivity	
sectors	Pharma	Last mile distribution Information asymmetry Price sensitivity	Information asymmetry Price sensitivity	Information asymmetry Price sensitivity	
Sub-se	Payment Systems	Information asymmetry Price sensitivity	Information asymmetry Price sensitivity	Information asymmetry	
	Mobile & Tech	Infrastructure Access Price sensitivity	Access Price sensitivity		
	Logistics & Distribution	Last mile distribution Inadequate volume Infrastructure	Infrastructure Price sensitivity	Infrastructure	

Step 2: Assess the **enterprise needs** at their current state of growth



Market challenges differ based on the population and sub-sector of the health field addressed

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		Populations			
		Rural BoP	Urban/ peri-urban BoP	Urban/peri-urban middle-income	Urban/peri-urban high-income
	Delivery system	Inadequate volume Infrastructure Price sensitivity	Quality for cost Infrastructure Price sensitivity	Quality for cost Infrastructure	Infrastructure
	Medical Device & Supplies	Last mile distribution Inadequate volume Price sensitivity	Price sensitivity	Price sensitivity	
Sub-sectors	Pharma	Last mile distribution Information asymmetry Price sensitivity	Information asymmetry Price sensitivity	Information asymmetry Price sensitivity	
	Payment Systems	Information asymmetry Price sensitivity	Information asymmetry Price sensitivity	Information asymmetry	
	Mobile & Tech	Infrastructure Access Price sensitivity	Access Price sensitivity		
	Logistics & Distribution	Last mile distribution Inadequate volume Infrastructure	Infrastructure Price sensitivity	Infrastructure	
				N	1arket failure /



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Market failure / 27 complicating factor

To address the challenges, the intent and characteristics of the capital become important

	Populations			
	Rural BoP	Urban/ peri-urban BoP	Urban/peri-urban middle-income	Urban/peri-urban high-income
Delivery system	Inadequate volume Infrastructure Price sensitivity	Quality for cost Infrastructure Price sensitivity	Quality for cost Infrastructure	Infrastructure
Medical Device & Supplies	Last mile distribution Inadequate volume Price sensitivity	Price sensitivity	Price sensitivity	
Pharma	Last mile distribution Information asymmetry Price sensitivity	Information asymmetry Price sensitivity	Information asymmetry Price sensitivity	
Payment Systems	Information asymmetry Price sensitivity	Information asymmetry Price sensitivity	Information asymmetry	
Mobile & Tech	Infrastructure Access Price sensitivity	Access Price sensitivity		
Logistics & Distribution	Last mile distribution Inadequate volume Infrastructure	Infrastructure Price sensitivity	Infrastructure	

Grant

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Impact

capital

Sub-sectors

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Traditional

capital

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Capital characteristics vary across (and within*) types of funding

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	Characteristics of capital	Intent of capital	Best-suited target beneficiaries
 Provided through a programmatic lens (typically specific to disease type/health issue or population) Varies in flexibility (exact timeline/use of funding dependent on grant agreement) 		 To achieve a health output or outcome for target population To conduct research or business development To catalyze investment 	 Lowest-income, most disadvantaged populations and communities (typically rural or hard to reach)
	• Typically more creatively / flovibly	• To achieve a health output or	Low to middle income
Impact capital	 Typically more creatively / flexibly structured Patient, appetite for longer return timeframes in recognition of market complexities Potential for larger volumes than 	 To achieve a health output or outcome through a market- based solution To achieve a financial return, not always commensurate with risk 	 populations Lowest-income, most disadvantaged populations through cross subsidy
	grant capital	To catalyze future investment	
Traditional capital	 Structured similarly to traditional asset classes / financial instruments Much larger volumes than impact and grant capital 	 To achieve a financial return commensurate with risk (real or perceived) To track impact of investment 	 Middle to high income populations with ability to pay higher prices for quality products and services

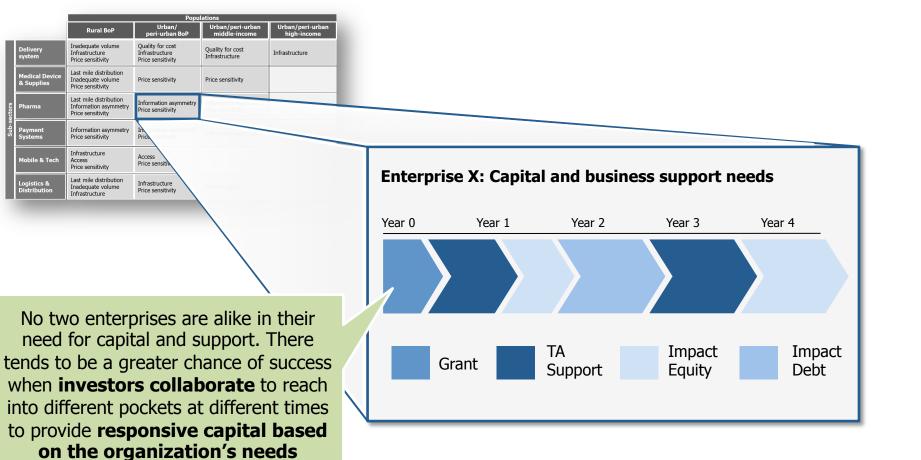
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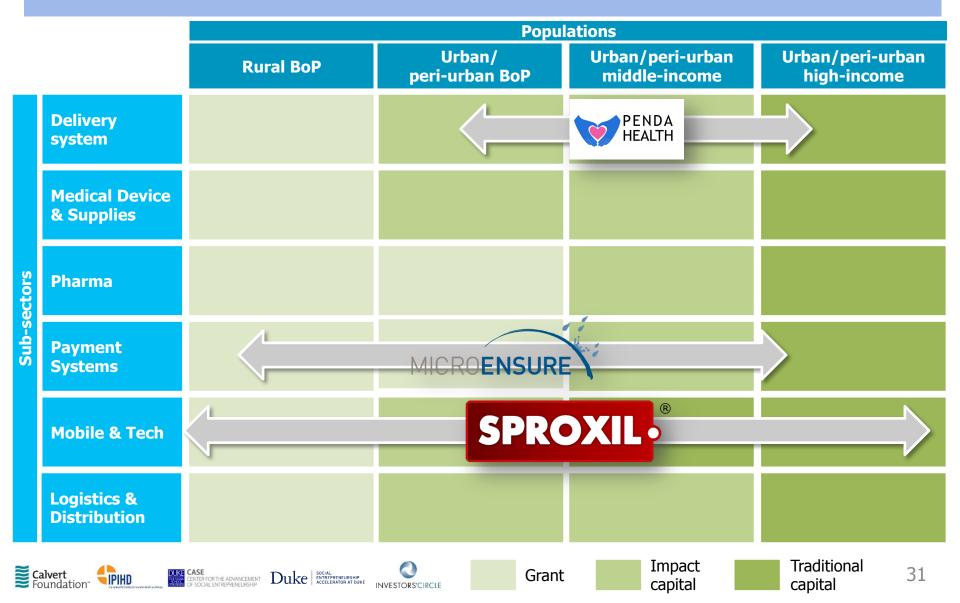
Once the ecosystem is understood, the focus can shift to the needs of the enterprise



2

1

A few examples help illustrate how to put these tools to work in the context of real opportunities



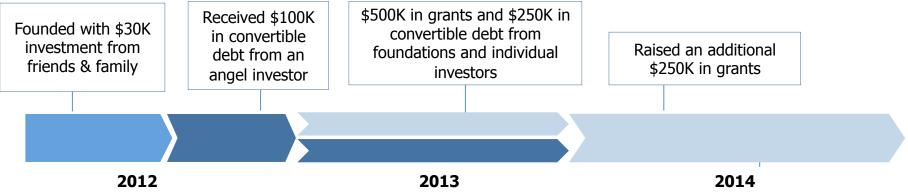
Case example: Penda Health Chain of outpatient clinics



Quality for cost Infrastructure Price sensitivity

BACKGROUND: Penda outpatient clinics offer quality affordable care to low and middle income individuals in Kenya. The Penda model leverages a unique staffing model, a patient-centric approach, and a targeted set of services to address the critical need for cost-effective primary care in Kenya and across East Africa.

INVESTMENT TIMELINE:



REFLECTIONS: Mismatch of capital and business needs early on can hinder growth longer-term

- Early on, Penda found it difficult to raise grants from foundations and easier to raise capital from angel investors
- In year 2, the organization realized it needed more time and money to refine its business model
- They successfully raised grant funding and, over the past two years, have focused on testing what works
- As the organization prepares to raise scale-up equity, the existing debt on its balance sheet makes it harder to reach terms that are palatable for everyone
- A strong base of grant capital early on would have allowed the organization to safely experiment with different approaches to be poised for an equity investment a few years down the road



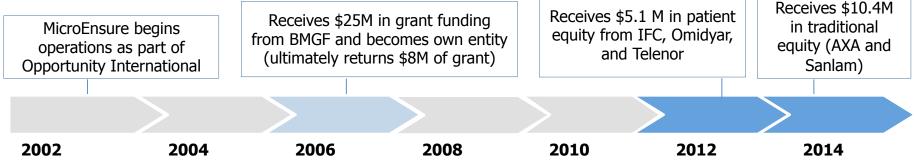


Case example: MicroEnsure Micro-insurance intermediary

Payments Systems Information Asymmetry Price sensitivity

BACKGROUND: MicroEnsure was founded to bring insurance coverage to the base of the pyramid. MicroEnsure acts as an insurance broker, packaging affordable insurance products and offering back-office support (e.g. claims processing and reporting) to MFIs and other sales partners. MicroEnsure's primary health offering is a hospital cash product.

INVESTMENT TIMELINE:



REFLECTIONS: Mix of flexible grants and equity can be more effective than grants alone

- MicroEnsure received a very large grant in its "start-up" phase in recognition of the significant need for insurance for the BoP and the lack of products, systems, and consumer education for this market
- The large grant pushed the organization to expand extremely quickly and the funder was wedded to the original grant objectives, making it difficult for the organization to adapt its business model
- Having grown to a sizeable scale with solely grant dollars, the organization did not have the discipline to create a sustainable business model in order to raise capital to scale its operations
- A diversified capital mix during the scale-up phase would have helped the organization manage its growth more effectively







Debt

Case example: Sproxil® Anti-counterfeiting technology

Mobile & Tech

Debt

Equity

Grant

Infrastructure Access

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BACKGROUND: Sproxil uses mobile technology to combat counterfeiting, a critical challenge in emerging markets where $\sim 25 - 30\%$ of medicines are counterfeit. The Sproxil Mobile Product AuthenticationTM (MPATM) solution is purchased by pharmaceutical companies and used for free by end-consumers who can verify the authenticity of a drug by sending a code via text message. The market for MPA is quite large and the potential adjacent applications in other industries and supply chain management are also significant.

INVESTMENT TIMELINE:



REFLECTIONS: Scalable business models still need flexible capital.

- Sproxil's solution addresses a significant need in markets with insufficient infrastructure and resources to ensure medicine safety. However, Sproxil's sales process is complex and lengthy, in large part due to the lack of global standards related to anti-counterfeiting
- Each time Sproxil enters a new market, the upfront set-up costs are significant. Patient equity and debt has been key for the organization since it requires longer time frames to achieve break-even goals
- Despite the scalability of the model, the upfront costs of entering new markets makes one-time set-up grant funding another important funding mechanism



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Contact

Beth Bafford

Calvert Foundation <u>beth.bafford@calvertfoundation.org</u>



Sarah Gelfand

IPIHD sarah.gelfand@duke.edu





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Definitions

Inadequate volume: Most business models serving Bottom of the Pyramid populations are low margin and thus require significant volume to breakeven. These requisite levels of volume for products and services can be hard to reach in rural, sparsely populated areas. For insurance companies, this makes data collection and risk pooling even more difficult.

Infrastructure: Areas where significant infrastructure improvements are needed for businesses to operate effectively , e.g., real estate, roads, electricity, communications tools, etc.

Price sensitivity: For business models that depend on low-income clientele, price is a key driver of consumer decision making. This is nuanced as low prices also influence consumer perception of value.

Last mile distribution: The act of getting products or services to remote rural areas, which is often very costly and time-intensive.

Information asymmetry: Where consumers do not have access to the information or data they would need to understand the value of a product or service (e.g., the value of insurance). This typically requires additional consumer education, which can be difficult and costly.

Access: Products or services that require or depend on the use and availability of specific technologies like mobile / smart phones, computers, etc.

Quality for cost: For healthcare delivery, consumers do not always make rational tradeoffs between quality and cost

