WORKING PAPER

SEPTEMBER 2017

BUSINESS LEADERSHIP FOR AN INCLUSIVE ECONOMY

Innovative Finance to Expand Access to Healthcare

Opportunities for Business

Guiding Principles on Access to Healthcare

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About This Paper

Access to medicines and quality healthcare is one of the most pressing global challenges and is essential to alleviating poverty and building vibrant communities and economies. To ensure that everyone can live healthy and fulfilling lives, new and innovative partnerships are needed that channel resources into overcoming market inefficiencies and other systemic challenges that make it difficult for billions of people to meet their health needs.

This paper aims to catalyze more innovative finance partnerships that unlock new and greater sources of finance to advance access to quality healthcare around the world. It focuses on the role that healthcare companies play as investors, innovators, and advisors, and how innovative finance can not only generate financial returns for companies but also spur innovation, unlock new markets, and ultimately improve health outcomes for individuals.

This paper is an output of the Healthcare Working Group hosted by BSR, which established a work stream on innovative finance in 2016 to better understand the landscape of mechanisms and identify opportunities for innovative finance partnerships to address access barriers at each stage of the healthcare value chain. It is intended to facilitate more partnerships by demystifying the field of innovative finance for healthcare companies and providing practical recommendations on how to tap opportunities in this growing field. The research approach included two meetings with working group members and partners, a series of semi-structured interviews, and a review of literature and more than 30 active innovative finance partnerships.

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ACKNOWLEDGEMENTS

The authors wish to thank all of the working group members, interviewees, and peer reviewers for their insights and perspectives. A list of stakeholders consulted for this paper is included in the Appendix.

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Executive Summary

We are on the brink of a major change in the way the world tackles the most persistent challenges in society. New solutions are emerging that go beyond traditional aid and corporate social responsibility programs to include social enterprises, inclusive business models, strategic philanthropy, and technology innovation that offer significant potential to scale social impact.

However, for these business solutions to deliver large-scale impact they have to overcome a range of systemic challenges and market failures that increase financial risks and costs. The UN estimates that it will cost US$3.9 trillion a year to achieve the Sustainable Development Goals (SDGs) in developing countries alone. Current levels of both public and private funding cover only US$1.4 trillion, leaving an estimated US$2.5 trillion annual gap.

Having grown rapidly in scale and sophistication over the past decade, innovative finance is now recognized as a central solution to filling the funding shortfall and accelerating the deployment of business solutions to development challenges. Innovative finance mechanisms such as green bonds, of which more than US$50 billion were issued in 2016, are already considered an essential tool for mobilizing significantly more capital to strengthen climate resilience.

In healthcare, innovative finance mechanisms such as GAVI, the Global Fund, and the Affordable Medicines Fund for Malaria have played a longstanding role in leveraging diverse funding sources to overcome barriers to healthcare access. However, the current scale and diversity of mechanisms and partnerships fall far short of meeting the healthcare financing needs, and while many philanthropic and commercial financing opportunities remain untapped. Despite the considerable potential of innovative finance to catalyze and accelerate business solutions to healthcare challenges, uptake by healthcare companies to date has been relatively slow.

This is largely because healthcare companies are unaware of the opportunities or unclear of how to engage in an increasingly complex investor landscape. They may also lack the tools, knowledge, and expertise to be able to capitalize on the opportunities presented by innovative finance. At the same time, the investor and donor communities are not always aware of specific health investment needs and how to engage companies.

This paper aims to help healthcare companies and stakeholders engage more fully in innovative finance to overcome market inefficiencies and misaligned incentives along the healthcare value chain that stifle potentially transformative business solutions to expand access to healthcare.

Defining Innovative Finance and the Role for Healthcare Companies
Innovative Finance is an approach to funding enterprises, interventions, and value chains that create positive social or environmental impact. It uses available financial tools (philanthropic and commercial) to catalyze and scale solutions, and when existing tools do not work it creates new ones. Innovative finance often relies on partnerships to pool resources from a range of public and private sources to solve problems faster, more effectively, and at a larger scale than would be possible alone.

While governments, development agencies, and foundations have been spearheading innovative finance by means of impact investing and innovative financing for development, a growing number of companies across sectors are also experimenting with new financing approaches through such tools as sustainability bonds or socially-driven venture capital funds. There are three broad types of investment flows that characterize the ways in which healthcare companies can participate in innovative finance, each of which can be implemented philanthropically or commercially.

1. **Investors to companies:** In this first investment flow, third-party funders and investors fund healthcare companies to tap their core expertise and capabilities in order to, for example, catalyze product innovation or de-risk market entry for products to overcome market failures.

2. **Companies to value chain actors:** Companies can also serve as investors in beneficiaries including startups, distributors, social enterprises, and other actors along the value chain. This can be done by, for example, directly funding beneficiaries, pooling capital in third-party investment funds that invest in multiple beneficiaries, or infusing a social mission into corporate venture funds.

3. **Investors to value chain actors:** Companies can also facilitate and support flows from third-party investors to actors that strengthen the value chain and improve the operating environment. This can include investments in strengthening health systems or financial inclusion.

Applying Innovative Finance in the Healthcare Value Chain
There are already a growing number of innovative finance examples at each stage of the value chain. These mechanisms aim to leverage partnerships to shift incentives and reduce the investment risks of catalyzing and scaling otherwise costly solutions. This paper highlights existing mechanisms and offers some thoughts on future opportunities across the value chain including:

» **Research and Development:** Mechanisms to fill investment gaps in R&D include Advanced Market Commitments, Product Development Partnerships, Investment Funds, and Challenges. These tend to use incentives and collaborative platforms to mobilize corporations and other partners to develop new healthcare products and solutions.

» **Core Operations:** Volume guarantees, third-party co-financing, and corporate investment including via program-related investments are being applied to core operations to facilitate market entry, increase production/manufacturing capacity, pilot or strengthen new business models, and improve distribution networks that expand access to healthcare. One successful example is a volume guarantee scheme to improve availability and affordability of contraceptive implants supported by a coalition of funders. This guarantee successfully de-risked the expanded manufacturing and supply of these contraceptives by two manufacturers, resulting in significant sales growth and market expansion.

» **Health Systems:** The field of innovative finance mechanisms to strengthen health systems is rapidly growing. This includes small-scale enterprise and trade finance, credit guarantees, social impact bonds, and both corporate and third-party investment funds. These mechanisms often seek to strengthen local capacity to deliver medicines and health services as well as address challenges that go beyond the point of care, including distribution, patient education, and the socio-economic determinants of health.

» **Patients and Customers:** This includes mechanisms such as micro-savings, micro-credit, and insurance services that aim to stimulate demand and improve affordability of health services and products. There are a growing number of opportunities for healthcare companies to partner with the microfinance and insurance sectors.

To harness the potential of innovative finance in healthcare, increased corporate engagement is needed, together with greater collaboration across sectors to address the mismatch between available capital and the unmet needs of health systems, communities, and patients. This paper offers practical recommendations for building more effective partnerships to unlock more funding for sustainable, scalable business solutions to some the world’s greatest societal challenges.

1 Introduction

Every day millions of people struggle to access the healthcare they need and many more slip into poverty as a result of medical care payments.[1] This is not a developing or developed world challenge—it is a global challenge that affects the majority of the world's population at some point in their lives. To ensure healthy lives and promote well-being for people of all ages, as set out in the 2030 Sustainable Development Agenda, there needs to be a major shift in the way sectors work together to finance potentially scalable solutions to the development and delivery of quality healthcare and medicines.

The healthcare industry, including pharmaceuticals, medical devices, insurance, and private healthcare providers, has an essential role to play in achieving the ambitious 2030 Sustainable Development Agenda. Over the last decade, more companies have acknowledged their role and strengthened commitments to expand access to healthcare. Thirteen CEOs have signed the BSR Guiding Principles on Access to Healthcare, acknowledging their shared responsibility and new opportunities to address system-wide changes to enable and expand access to healthcare and committing, as independent companies and as a collective body of signatories, to reduce the global burden of disease while sustaining and growing their businesses.[2]

While important, traditional philanthropy and corporate social responsibility are simply not enough to fulfill these commitments. Real sustainable progress will only happen through scalable business solutions that generate value for business and create opportunities for those who lack access to healthcare.

To build viable business solutions, however, healthcare companies, distributors, healthcare providers, and other actors must overcome an array of challenges. Market inefficiencies and misaligned incentives along the value chain stifle the development, growth, and impact of many potentially transformative business solutions. The first report of the UN High Level Panel on Access to Medicines found that millions of people cannot meet their health needs for a range of reasons including "under-resourced health systems, a lack of sufficiently qualified and skilled healthcare workers, inequalities between and within countries, regulatory barriers, poor health education, unavailability of health insurance, exclusion, stigma, discrimination, and exclusive marketing rights."[3]

Despite companies' recognition of their role in expanding access to healthcare in markets around the world, the costs, barriers, risks, and uncertain financial returns of overcoming the above challenges have impeded the ability of companies to implement sustainable models at scale in underserved market segments. New types of partnerships are needed that help overcome market inefficiencies,

[1] WHO, World Health Report, 2010.

[2] BSR Healthcare Working Group, Guiding Principles on Access to Healthcare.

[3] UN High-Level Panel on Access to Medicines, 2016.

remove barriers, share investment risks, and channel resources into unlocking private-sector innovation, inclusive business models, and supply and delivery networks to enable more people to meet their health needs.

What is innovative finance?

The UN estimates that it will cost US$3.9 trillion a year to achieve the Sustainable Development Goals (SDGs) in developing countries alone. Current levels of both public and private funding cover only US$1.4 trillion, leaving an estimated US$2.5 trillion annual gap.[4] Filling this gap will require tapping new and greater sources of capital from the public and private sectors, including the more than US$200 trillion in the capital markets, and effectively deploying these funds towards development efforts.[5]

Innovative Finance refers to an approach to funding enterprises, interventions, and value chains that create positive social or environmental impact. To do so, it uses available financial tools (philanthropic and commercial) to catalyze and scale solutions, and when existing tools do not work, it creates new ones.[6] Innovative finance relies on partnerships to pool resources from a range of public and private sources to solve problems faster, more effectively, and at a larger scale than would be possible alone.

Growing interest in innovative finance is being fueled by two key trends: innovative financing for development and impact investing.

Innovative Financing for Development: The World Bank uses the term "innovative financing for development" to refer to nontraditional applications of official development assistance (ODA) or joint public-private or private mechanisms and flows that (1) support fund-raising by tapping new sources and engaging investors as partners in development; or (2) deliver financial solutions to development problems on the ground.[7] It is estimated that innovative financing for development mobilized US$90 billion to US$100 billion between 2001 and 2013 and is expected to mobilize US$24 billion annually by 2020.[8]

Donor agencies, development finance institutions, and private foundations have been pioneering mechanisms that use ODA and other forms of patient capital to mitigate investor risks and mobilize more private capital.[9] The International Finance Corporation (IFC) is now the leading issuer of green bonds to help catalyze the climate finance market and unlock investment for private-sector projects that support renewable energy and energy efficiency. In March 2017, the International Bank for Reconstruction and Development (IBRD), part of the World Bank Group, issued bonds that for the first time directly link returns to the performance of companies contributing to the SDGs. The equity-index linked bonds raised a total of US$184 million from institutional investors and proceeds will be used to finance projects aligned with the SDGs.[10]

CDC Group, the U.K.'s development finance institution, has been using patient capital to support private-sector entrepreneurs in developing countries. The Multilateral Investment Fund (MIF), the innovation lab of the Inter-American Development Bank (IDB), is innovating the types of financial

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[4] UNCTAD, 2015.

[5] Madsbjerg, 2016.

[6] Bertha Institute.

[7] Girishankar, 2009.

[8] Guarnaschelli et al., 2014.

[9] IFC, Overview of Green Bonds.

[10] World Bank, 2017

instruments offered to enterprises and interventions, expanding beyond traditional grant, debt, and equity to include alternative financial products, such as contingent recovery grants and revenue-based loans, and investment approaches that catalyze additional financing from other actors.

These examples reflect a process of transforming development finance that, as the World Bank explains, moves the “discussions from ‘billions’ in ODA to ‘trillions’ in investments of all kinds: public and private, national and global, in both capital and capacity.”[11]

Impact Investing: Impact investments are investments made into companies, organizations, and funds with the intention of generating social or environmental impact alongside a financial return.[12] Impact investing has seen exponential growth in recent years and is attracting many mainstream players, including many “bulge bracket” investment banks as well as boutique investors who are developing portfolios, products, and tools to meet rising client demand. This led to the creation in 2013 of the G8 Social Impact Investing Taskforce, which helped generate more momentum for the field. There are currently more than US$77 billion in global impact investments under management and it is estimated that invested capital could reach US$1 trillion by 2020.[13,14]

The impact investing market’s growth reflects greater interest among institutional and individual investors to align investment portfolios with social and environmental goals while also generating financial returns. Regulatory changes in the United States, Europe, and elsewhere have also helped drive growth. In October, the U.S. Department of Labor issued new guidance for pension funds interested in pursuing “economically targeted investments,” a type of impact investment.[15] Other terms are often used interchangeably with impact investing, such as social finance, mission-related investing, and social impact investing.

Relevance to corporate innovation

While still at an early stage, many large companies are also experimenting with new financing approaches to address social and environmental challenges along their value chains. IDB/MIF, Big Society Capital, and various venture capital firms are pioneering approaches to what has been called “corporate impact venturing,” which seeks to better leverage corporate financial and nonfinancial resources to create value for the company and a wide range of stakeholders.[16]

There are a growing number of examples of this type of corporate innovation. For example, the corporate education publisher Pearson developed the Pearson Affordable Learning Fund to meet the growing demand for affordable education across the developing world by making significant minority equity investments in for-profit companies. These investments align with Pearson’s strategy to play a leading role in fueling innovation in the provision of high-quality, low-cost education.[17]

In 2016, Starbucks issued the first corporate sustainability bond, following in the footsteps of Unilever, Toyota, and Apple, which issued similar; more narrowly focused green bonds to fund various climate change mitigation activities. Starbucks’ sustainability bond is US$500 million in debt that will be used for several purposes, including underwriting programs for farmers that adhere to the Coffee and

[11] Development Committee, 2015.

[12] Global Impact Investing Network, https://thegiin.org/impact-investing.

[13] Mudaliar, Abhilash, Hannah Schiff, and Rachel Bass, 2016.

[14] O’Donohoe, Nick et al., 2010.

[15] US Department of Labor, 2015.

[16] Love, Rebholz, and Feldman, 2016.

[17] Pearson Affordable Learning Fund, 2015.

Farmer Equity Practices, a set of guidelines Starbucks adopted roughly 15 years ago for growing and harvesting crops more sustainably.[18]

As the field evolves, there is less distinction between private-sector and public-sector financing approaches. In fact, it is precisely because of the blurring lines between sectors that there is optimism about the ability to unlock much more capital in pursuit of positive development outcomes. While individual investments are often made (e.g., grant, debt, equity), blending multiple types and sources of capital is increasingly common. As the World Economic Forum explains, blended finance is a structured approach to finance that enables development and philanthropic funding to mobilize private capital into a project or company that promotes development outcomes.[19] This blending helps mobilize greater sums of capital and tailor the aggregate expectations on social and financial returns to align with the needs of investees and the marketplace.

This paper focuses on how the corporate sector, particularly healthcare companies, can engage more effectively in innovative finance to expand access to—and the quality of—healthcare.

What does this mean for healthcare companies?

Innovative finance has the potential to transform the way healthcare is financed, managed, and delivered. In fact, what makes innovative finance so exciting is both its potential to tap the trillions of dollars available through private sources of capital and the way that it leverages private-sector expertise and business solutions to tackle development problems. This is critically important considering donors spent US$31.3 billion on global health in 2013—five times the amount spent in 1990—but progress on health access and outcomes lagged far behind.[20]

To date, most discussions on innovative finance for access to healthcare have been government or development-actor centric. Yet there is a significant business opportunity that should not be overlooked. Today, the development and business worlds are increasingly converging, in recognition that enhancing access to healthcare for underserved communities is a way to achieve social value together with profit. The Global Fund to Fight AIDS, Tuberculosis, and Malaria and GAVI, the global vaccine alliance, are some of the early pioneers that sought innovative ways to pool resources from private and public sources to improve access to effective prevention methods and life-enhancing and life-saving treatments.

Healthcare companies have played a role in these innovative finance mechanisms, but they could and should play a larger role considering the significant potential such mechanisms have to mitigate the risks of investing in new markets, market segments, or products. Only recently have healthcare companies become more proactive in seeking out innovative finance mechanisms aligned to their respective therapeutic areas, serving as, for example, investors or advisors in new funds or infusing their own corporate venture funds with social missions.

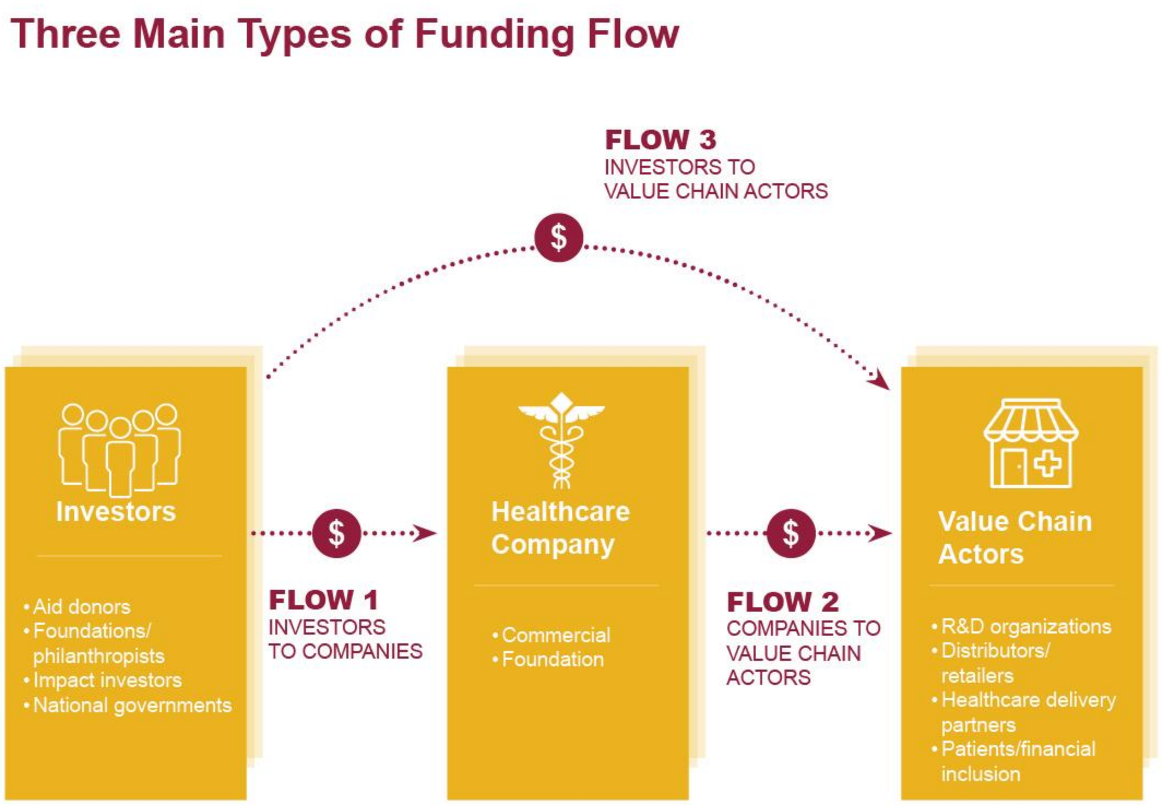
Many healthcare companies are either unaware or unclear of the opportunities to tap the growing innovative finance field, or struggle to implement partnerships that could capture the opportunity. There are three broad types of investment flows that characterize the ways in which healthcare companies can participate in innovative finance. Each of these three flows can happen individually or in combination.

[18] Starbucks, 2016.

[19] World Economic Forum, Blended Finance, 2015.

[20] Dieleman, Murray, and Haakenstad, 2013.

Figure 1: Innovative Finance Investment Flows



FLOW 1: INVESTORS TO COMPANIES *(Companies as Fund Recipients)*

In this first investment flow, funds are channeled from third-party funders and investors to healthcare companies to tap the core expertise and capabilities of healthcare companies, in order to, for example:

» **Fund R&D of new or improved medical products**: examples include the US$108 million Global Health Investment Fund (GHIF), the £1 billion Ross Fund, and the US$100 million Dementia Discovery Fund, which all support the development of new or improved drugs, vaccines, or other interventions in neglected or underfunded diseases. In some cases, companies are both fund recipients (flow 1) and investors (flow 2.) For example, Merck & Co., Inc. and Pfizer, among other companies, are investors in GHIF, which has provided financing to companies such as BD and Access Bio.

» **De-risk large-scale market entry and expansion**: for example, the US$400 million volume guarantees provided by the Swedish International Development Cooperation Agency (SIDA), the Bill & Melinda Gates Foundation, and other partners that aims to halve the price and dramatically increase the volume of Merck & Co., Inc. and Bayer products sold in low-income market segments.

» **Incentivize the piloting of inclusive business models**: for example, the Inter-American Development Bank's Multilateral Investment Fund offers grants, co-investments and partial credit guarantees to help the private sector test new partnership and business models in low-income settings.

FLOW 2: COMPANIES TO VALUE CHAIN ACTORS *(Companies as Investors)*

Companies can also serve as funders and investors in startups, social enterprises, distributors, and other actors along the value chain. Funding is often coupled with mentorship and access to company systems and know-how to incubate ideas. This applies internal sources of capital, including:

» **Philanthropic grants and loans via program-related investments**: such as the Pfizer Foundation's investment in the StartHealth Investment Fund in partnership with the Unitus Seed Fund. Philanthropic funding can be used to generate returns or as first loss capital, to absorb investment risk and crowd in capital from investors with lower risk tolerances. Philanthropy can also be used to develop the broader investment ecosystem, including funding NGOs or research institutions that provide market insights and technical assistance.

» **Corporate venture funds**: examples include the US$50 million Pearson Affordable Learning Fund, Centrica's £10 million "Ignite" impact investment fund, Unilever's £10 million Transform initiative and its £10 million Enhancing Livelihoods Investment Initiative (launched jointly with Acumen and Clinton Giustra Enterprise Partnership). These all infuse corporate venture funds with social goals to identify and scale promising innovations, oftentimes using incubators or accelerator programs that also provide corporate mentorship and training to entrepreneurs.

» **Investments by commercial functions**: such as brand teams, business franchises, or country affiliates that catalyze and scale innovative solutions aligned with corporate goals. For example, Bayer Healthcare sponsors the EyeFocus Accelerator, a for-profit social enterprise that supports innovation by companies making products for preventing, curing, and living with eye disease and blindness.[21]

FLOW 3: INVESTORS TO VALUE CHAIN ACTORS *(Companies as Advisors, Facilitators, or Indirect Beneficiaries)*

Companies can also support flows from third-party investors to actors that strengthen the value chain and improve the operating environment. This is increasingly important as more companies implement inclusive business models for lower-income market segments where market inefficiencies and health system weaknesses represent significant challenges. Third-party financing—with or without corporate co-financing—can help drive larger-scale and more effective strengthening of health systems than companies can drive unilaterally in areas such as:

» **Improving distribution and storage of medical products:** for example, Project Last Mile, supported by The Coca-Cola Company, The Coca-Cola Africa Foundation, The Global Fund, U.S. Agency for International Development (USAID), and the Bill & Melinda Gates Foundation, applies Coca-Cola system's logistical, supply chain, and marketing expertise to help strengthen health systems across Africa. In 2014, the partners committed to investing more than US$21 million and significant in-kind resources to reach 10 African countries by 2020.[22]

» **Enhancing diagnostic and treatment capabilities of health workers and facilities:** for example, Abraaj Capital, a leading emerging market investor, acquired a majority stake in CARE Hospitals to expand CARE's integrated healthcare delivery system, especially in the

[21] EyeFocus Accelerator, www.eyefocus.co.

[22] Project Last Mile, www.coca-colacompany.com/stories/projectlastmile.

underpenetrated regions of India.[23] The Abraaj Growth Markets Health Fund, in turn, is funded by outside private and public investors, such as Medtronic, Merck & Co., Inc., and Philips (flow 2.)

» **Strengthening patient disease awareness and healthcare seeking behavior:** IFC's TechEmerge program in India supports health technology innovations that improve connections between patients and providers and facilitate portable and more efficient medical consultations.[24] GE, Medtronic, and BD are providing know-how to the program.

» **Improving ability to pay among lower-income consumers:** this includes efforts by financial institutions to improve financial inclusion including mobile money, insurance and patient financing. For example, Women's World Banking, working with Microfund for Women in Jordan and Zurich Financial Services, developed a hospital insurance program, Caregiver, that pays hospital fees and a share of lost income when a client is hospitalized.[25] Credit Suisse helped fund the implementation of Caregiver and its replication in other regions. Other innovations in mobile money such as M-Pesa are being used to help patients pay for costly travel to hospitals from rural parts of Tanzania.[26]

[23] Advent International, 2016.

[24] IFC TechEmerge, www.techemerge.org.

[25] Rhyne, 2014.

[26] Vodafone M-Pesa, www.vodafone.com/content/index/what/m-pesa.html#.

2 Innovative Finance in the Value Chain

Innovative finance is already being used to tackle many market failures and challenges along the value chain, in the healthcare sector and a number of other sectors. It does so by shifting incentives and reducing the investment risks of catalyzing and scaling otherwise costly solutions.

This chapter summarizes market challenges, innovative financing examples, and future opportunities for each stage of the value chain. Many healthcare examples are provided, as well as examples from other sectors that illustrate additional ways in which progress can be made in a healthcare context.

A value chain approach to innovative finance is important because companies implementing inclusive business models simultaneously face multiple scaling challenges at different points along the value chain. To overcome these challenges it is necessary to consider the entire system of actors and activities that play a role in the delivery of healthcare products and services to users, and to identify targeted interventions that address root causes of barriers to expanded access and business growth.

The examples featured in this chapter are innovative in the design of the financial instrument or mechanism and/or in its application. For example, grant giving in itself is not considered innovative, but when employed to de-risk investments by reducing transaction costs or strengthening the innovative finance ecosystem, it is helping catalyze and scale solutions that would not have been viable otherwise.

There are some mechanisms that could be applied to many phases of the value chain. Grand Challenges, for example, were originally used to catalyze R&D or product innovation but is increasingly applied to identify promising innovations in medicine delivery and addressing socio-economic determinants of health including girls' education. Investment funds are also being used in different phases of the value chain from corporate venture funds that channel financing into small enterprises that can facilitate market entry to third-party funds that are investing in private hospitals in development countries.

The visual below highlights the key challenges or obstacles to expanding access to healthcare at each phase of the value chain as well as example mechanisms.

Figure 2. Innovative Finance Challenges and Mechanisms Across the Value Chain

Innovative Finance Across the Value Chain

	Supply Side Value Chain			Demand Side Value Chain
	R&D	**Core Operations**	**Health Systems**	**Patients and Customers**
Challenges	• Rapidly changing health threats • High costs and failure rate for new medicines/vaccines • Low margins and uncertain market	• Entering into new low-income markets • Manufacturing scale economies and pricing • Inclusive business model innovation—risks, resourcing, capabilities • Credit terms misaligned with distributors & retailers	• Weak delivery and stock-outs • Provider and workforce constraints • Inadequate infrastructure and facilities • Weak information systems	• **Demand:** Lack of health education limits care-seeking behavior • **Affordability:** Lack of access to financial services (insurance, savings) • **Use:** Irrational use and low adherence drives drug resistance and poor health
Mechanisms	• Advanced Market Commitment (AMC) • Product Development Partnerships (PDP) • Investment funds • Challenges and prizes	• Volume guarantees • Corporate investment • Program-related investments • Third party co-financing	• SME and trade finance • Credit guarantees • Impact bonds • Investment funds	• Demand stimulation and aggregation • Financial inclusion (health insurance, micro-credit, savings, mobile money)

Research & Development

This includes using innovative finance to catalyze the development of new and adapted products such as pediatric or heat stable drug formulations, combination therapies, low-cost diagnostics, and medical devices.

MARKET CHALLENGES

The last fifty years has seen major advances in science and technology that have helped fuel the development of new medicines, vaccines, medical devices, and diagnostics.[27] However, as the UN High Level Panel report highlights, "investment in R&D of health technologies does not adequately address a number of important health needs." [28] There are a few reasons for this:

» **Rapidly changing health threats—**Noncommunicable diseases, new infectious diseases, and antimicrobial resistance are all shifting the global burden of disease and presenting new and urgent R&D demands. Experts warn that drug-resistant viruses, bacteria, parasites, and fungi could cause 10 million deaths a year by 2050.[29]

» **High costs and failure rate—**Drug and vaccine development can take up to 20 years and cost from US$600 million to upwards of US$1.5 billion, including out-of-pocket costs, costs of failure, and costs of capital.[30] Some diseases such as dementia are more costly due to the complexity of the brain and the slow onset of the disease.[31]

» **Low margins and uncertain market—**The high costs of R&D mean that companies are reluctant to invest in the development of new or adapted drugs, vaccines, and medical devices where they may struggle to recoup their investment (e.g., neglected tropical diseases, which affect over 1 billion people).[32]

INNOVATIVE FINANCE TRENDS AND EXAMPLES

There are four types of innovative finance mechanisms that address the market challenges in increasing investment in R&D—Advanced Market Commitments (AMC), Product Development Partnerships (PDP), Investment Funds, and Challenges and Prizes.

Advanced Market Commitment: This is a binding contract, typically offered by a government or other financial entity, used to guarantee a viable market if a vaccine or other medicine is successfully developed. It does so by guaranteeing the availability of initial purchase funds so that vaccine makers have an incentive to invest in R&D. In addition, by contracting significant volumes over the long term,

[27] UN High-Level Panel on Access to Medicines, 2016.

[28] Ibid.

[29] Ibid.

[30] Grace, 2010.

[31] U.K. Dementia Discovery Fund, www.gov.uk/government/news/health-secretary-announces-100m-dementia-discovery-fund.

[32] WHO, Neglected Tropical Diseases. www.who.int/neglected_diseases/diseases/en/.

manufacturers can significantly reduce the cost of their vaccines by taking advantage of economies of scale.[33]

How can companies partner on this mechanism? Companies can become contractual partners of AMCs, agreeing to provide a certain number of doses at an agreed upon price. For example, GSK and Pfizer signed 10-year contracts through the Pneumococcal AMC, managed by GAVI, to provide up to 300 million doses each of their pneumococcal vaccines, at an approximate reduction of 90 percent of the cost in developed markets. In 2011, GSK expanded its agreement to provide an additional 180 million doses of its pneumococcal vaccine, Synflorix, over the next 12 years to 72 developing countries by 2023. To meet the demand, GSK invested more than US$400 million in a dedicated manufacturing plant in Singapore that will produce several hundred million doses of the vaccine annually in the coming years.[34] In 2016, both GSK and Pfizer lowered the price of the vaccine specifically for humanitarian organizations that serve refugee and crisis-affected children.[35]

For AMCs to be successful, the predetermined price for medicines needs to be calibrated so that it incentivizes providers to produce products in a way that does not earn excessive profits but ensures some level of ROI. It can be difficult for AMCs to predict the necessary capital expenditure and unit costs of scaling up production when setting the upfront subsidy and purchase price.

Product Development Partnerships: PDPs are a class of public-private partnership with mandates to research, develop, and support accessibility of new health medicines, vaccines, and diagnostics for neglected diseases. PDPs negotiate terms with partners, which could be companies or research institutions, with regard to which countries and which sectors within countries will have preferential access, and at what prices. Some PDPs set up separate entities with their own R&D labs and/or project management capabilities. PATH Vaccine Program, Medicines for Malaria Venture, the International AIDS Vaccine Initiative, and the Aeras Global TB Vaccine Foundation account for over half of all PDP funding.[36]

How can companies partner on this mechanism? Companies can partner with a PDP at different stages of the drug development process. A PDP acts as a facilitator, allocating resources to the most promising projects, coordinating partner activities for various stages of the R&D process, and managing the project portfolio and collaboration to fulfill the objectives of a PDP’s mission. As such, PDPs do not often have the capacity or infrastructure to undertake early stage R&D; instead, they rely on partners, including pharmaceutical companies and research institutions, for financing and other in-kind contributions (i.e., laboratories and expertise).[37] For example, Novartis is leading the development of antimalarial compound KAF156 with scientific and financial support from Medicines for Malaria Venture (MMV) in collaboration with the Bill & Melinda Gates Foundation. KAF156 is one of two potential antimalarial therapies in Phase II clinical trials in the Novartis portfolio.[38]

In most PDPs, such as the MMV, partners are expected to, at a minimum, match the value of the contract through in-kind contributions (for example, staff costs, laboratory space, equipment, overheads), thus maximizing the PDP’s financial resources.[39] To ensure new medicines are available at an affordable price—typically with no profit and no loss—through public-sector channels, the MMV

[33] GSK, 2011. “First African country introduces GSK pneumococcal vaccine through innovative financing mechanism.”

[34] GSK, 2011. “GSK extends pneumococcal vaccine agreement with GAVI Alliance.”

[35] Medecins Sans Frontieres, 2016.

[36] WHO, 2013. “Financing Mechanisms for Health.”

[37] Medicines for Malaria Venture, Partnering. www.mmv.org/partnering.

[38] Novartis, 2016.

[39] Novartis, 2016

retains the rights to any intellectual property rights. Healthcare companies also sit on the MMV Expert Scientific Advisory Committee, which helps to identify the best projects worthy of inclusion in the portfolio and continues to monitor progress through an annual review of all projects. [40]

Investment Funds: Impact investment funds can be venture capital funds, private equity funds, or blended funds. They can be created by investment or asset management firms such as Bamboo Finance and Abraaj Capital or they can be established by corporations themselves, either as part of Corporate Venture Funds or as standalone impact funds. They can also include bilateral or multilateral donor funds like the Ross Fund, the Dementia Discovery Fund or the Global Health Innovative Technology Fund. Public sector (including bilateral or multilateral donor funds), private sector, and philanthropic capital is often blended together to adjust risks to levels that are tolerable for commercial and for-profit impact investors. For example, in the GHIF, the Bill & Melinda Gates Foundation and SIDA provide investors with loss protection of up to 60 percent of the fund's capital, via a guarantee. The first loss up to 20 percent of invested capital is fully covered, with investors covering 50 percent of any subsequent losses. Repayment is achieved via a combination of milestones and royalties.[41]

How can companies partner on this mechanism? Companies can develop their own venture funds or integrate a social mission into existing funds to support promising innovations in underfunded diseases. Tech companies have been doing this for a number of years, but it is catching on outside the sector. Google Ventures supports startup companies in healthcare, artificial intelligence, and robotics, among other areas.[42]

Companies can also be investors and recipients of third-party funds. For example, Biogen, GSK, Johnson & Johnson, Lilly, and Pfizer committed to invest in the US$100 million Dementia Discovery Fund alongside Alzheimer's Research UK and the U.K. government. Companies are also advising fund managers on the development of the Fund. The Dementia Discovery Fund's first investment was in the antibody discovery company Alector LLC. One of the GHIF's first investments was US$10 million to Becton Dickinson for the development of early, affordable, point-of-care pre-eclampsia and gestational diabetes testing.[43]

Challenges and Prizes: Challenges and prizes harness the power of crowd sourcing, competition, and partnerships to accelerate research and identify breakthrough innovations in therapeutic areas that have lagged behind in available knowledge and tools. They typically use an open source innovation model and rewards in the form of grants to attract the brightest scientists and innovators.[44]

Today there is a broad family of Challenges guided by a shared approach and set of principles. USAID, Gates Foundation, SIDA, and the Canadian Government (Grand Challenges Canada) have been at the forefront of using this mechanism to tackle healthcare challenges. This includes issue-specific programs, such as Saving Brains and Saving Lives at Birth, as well as accelerated, small-scale grant-making programs such as Grand Challenges Explorations and Stars in Global Health, which complement the larger grants with seed funding for projects that target a range of health indicators. Several countries are also issuing country- or region-specific challenges, often in partnership with Ministries of Health or national medical research associations.

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[40] Novartis, 2016.

[41] Global Health Investment Fund, www.ghif.com.

[42] Google Ventures, www.gv.com.

[43] U.K. Dementia Discovery Fund, www.gov.uk/government/news/health-secretary-announces-100m-dementia-discovery-fund.

[44] Grand Challenges, http://grandchallenges.org/.

How can companies partner on this mechanism? Companies can compete alongside universities, government laboratories, research institutions, and nonprofit organizations in Challenges. The Grand Challenges referenced above award initial grants of US$100,000, and successful projects have the opportunity to receive additional funding of up to US$1 million. The Bill & Melinda Gates Foundation's Challenges in Global Health awarded 44 grants totaling over US$450 million for research projects involving scientists in 33 countries since it was launched more than 10 years ago.[45]

Challenges are often explicit about what they will not fund, so in many cases the request may not align with companies' own strategic priorities. For example, a new Challenge to Accelerate Development of New Therapies for Childhood *Cryptosporidium* Infection will not fund point-of-care diagnostics, clinical trials, and a range of specific therapeutic interventions.[46]

Some healthcare companies are taking a more active and visible role in Challenges, with some even launching their own challenges or competitions for social innovation. GE Sustainable Healthcare Solutions and the Consortium for Affordable Medical Technologies (CAMTech) joined forces to launch the First Mile Innovation Challenge to crowd source innovations that address clinical or community hardships in global primary care with a focus on safe surgery, cardiac health, and maternal/newborn health. The winning team will receive US$25,000 in funding and support from CAMTech's global network and resources provided through the CAMTech Innovation Platform. In addition, teams will have the potential to work with GE's new five.eight Accelerator. J&J's Africa Innovation Challenge offers up to US$100,000 of funding, mentorship, and lab space in Africa for innovators with solutions for maternal and child health, empowering young girls and improving family well-being.[47]

FUTURE OPPORTUNITIES

There are many unexplored areas of innovative finance to advance health R&D. For example, existing mechanisms could be applied to other therapeutic areas and product adaptations for low resource settings such as heat stable therapies or product and packaging redesign to align with how low-income consumers purchase medicines (e.g., often in smaller packages/dosages). Many of the above mechanisms could also be used to incentivize companies to invest in identifying pandemic virus strains that would make it easier to respond to an outbreak.

Companies can also explore new mechanisms such as social bonds to raise capital for a dedicated social purpose. To date, companies have focused on green bonds as a way to channel greater corporate investment into climate change mitigation and related activities. Social bonds would apply a similar approach with a focus on catalyzing innovation in education, health, and other social purpose activities (e.g., access to medicines R&D bond). This approach benefits from the current low cost of capital for companies with strong credit ratings.

There are also exciting opportunities to partner with the tech sector and use new disruptive technology to attract innovators and crowd source solutions. For example, the Unilever Foundry seeks to stimulate and facilitate experimentation within the company's brands and functions aligned with its sustainable living goals. In partnership with the company's venture capital arm, Unilever Ventures, it uses a range of collaboration approaches, including hackathons, crowd-sourcing platforms, and company mentorship.[48] (See Consumer Products Case Study.)

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[45] Grand Challenges, http://grandchallenges.org/.

[46] Grand Challenges, Accelerate Development of New Therapies for Childhood *Cryptosporidium* Infection (Round 17).

[47] J&J Africa Innovation Challenge, www.jnjinnovation.com/africachallenge. Accessed February 1, 2017.

[48] Unilever Foundry, https://foundry.unilever.com/welcome.

Core Operations

This includes using innovative finance to support market entry, increased production/manufacturing capacity, new business models, and improved distribution networks that expand access to healthcare. Many of these activities are part of a company's core operations and affect the final price for consumers.

MARKET CHALLENGES

The journey from R&D to production, marketing, and distribution to the end-user is filled with bottlenecks and inefficiencies, especially in under-served market segments. Some of the challenges in core operations include:

» **Entering new markets or market segments—**It requires significant investment to understand new markets, including consumer needs and the existing distribution and sales landscape. This challenge is amplified in the base of pyramid (BOP) where there is a paucity of market research data and knowledge of existing market actors with insights and capabilities with which companies can partner. Companies also take on significant risks in environments with weak rule of law, poor transparency, and an absence of strong safety regulation or enforcement.

» **Manufacturing scale economies and pricing—**Maximizing efficiencies in production is essential to setting affordable prices for healthcare products. This typically requires investments in large-scale production capacity to take advantage of economies of scale, but it can be difficult to forecast sales demand for certain medicines in many low-income markets. Companies can also set up local production, but this requires significant investments in capacity-building to meet internationally accepted standards.

» **Inclusive business model innovation—**In cases where companies are establishing new business models there are a multitude of risks and challenges of operating in environments with weak infrastructure, poorly equipped healthcare facilities, and gaps in health insurance coverage. Companies often need to build an ecosystem of organizations to support the model, including healthcare and community health education providers.

» **Credit terms misaligned with distributors and retailers**—Pharmaceutical companies can struggle to do business with smaller distributors, retailers, and other value chain partners that can help expand access to lower-income market segments. Their working capital-constraints often mean they are unable to pay for products up front and need to operate on credit, which typically does not align with pharmaceutical companies' terms of trade.

INNOVATIVE FINANCE TRENDS AND EXAMPLES

Mechanisms that are being used to overcome the above barriers in company core operations include volume guarantees, corporate investment, program-related investments, and third-party co-financing.

Volume Guarantees: Volume guarantees are a de-risking mechanism whereby investors commit to procure larger orders from medical suppliers, enabling them to forecast production and capture efficiencies from economies of scale.

How can companies partner on this mechanism? Similar to AMCs, companies can sign a contract with investors committing to a certain production capacity and lower prices. Bayer and Merck & Co., Inc. have both participated in volume guarantee schemes to provide contraceptive implants. SIDA, Norad, the Bill & Melinda Gates Foundation, and the Children's Investment Fund Foundation (CIFF) created a joint guarantee to procure larger orders from the medical suppliers during a six-year period. Both suppliers delivered more than the agreed volumes in 2013; Merck & Co., Inc.'s plan was to deliver 2.2 million products but delivered 4.2 million, which meant that already in the first year the decrease of price dramatically increased demand.[49]

For companies to invest in production capacity, the value of the guarantee needs to meet a certain threshold. In the case above, the guarantee was valued at US$481 million.

Corporate Investment: This includes investments made directly by corporate functions or via corporate venture funds or comparable mechanisms with the aim of channeling funding into enterprises or value chain actors aligned with corporate strategic priorities. This can include philanthropic grants and loans as well as commercial and sub-commercial returnable capital (see program-related investments below) that can incubate or accelerate impactful enterprises or initiatives.

How can companies partner on this mechanism? By using corporate investment in new ways, companies can gain access to market insights and networks or improve the operating environment. In this case, brand teams, business franchises, or country affiliates play a catalytic or accelerator role by providing funding and in some cases, access to company technical expertise to scale initiatives. For example, Bayer Healthcare sponsors the EyeFocus Accelerator, which supports companies making products for preventing, curing, and living with eye disease and blindness.[50] This helps Bayer gain valuable insight into innovative companies that could be interesting acquisitions in the future. Companies including Philips and Medtronic have invested in the Abraaj Global Health Fund to help gain insights into—and spur growth in—the emerging middle class market segment.[51]

Outside the healthcare sector, there is a rapid growth in corporate social venture funds including Centrica's £10 million "Ignite" impact investment fund that helps energy enterprises grow through funding, mentorship, networking, and the skilled support of Centrica employees. Unilever's £10 million Transform initiative and its £10 million Enhancing Livelihoods Investment Initiative (launched jointly with Acumen and Clinton Giustra Enterprise Partnership) are also examples of how companies are infusing company's sustainability goals into corporate venture funds.

Program-Related Investments: This is philanthropic funding that goes beyond grants to embrace no/low-interest loans, loan guarantees, or equity investments. By adding returnable capital models to their modus operandi, foundations can a) help social entrepreneurs and other innovators bridge the "missing middle" financing gap; and b) create revolving funds where the same money can be invested repeatedly over the years, thereby increasing capital efficiency and social impact. Although PRIs can be used to invest in third-party value chain actors, they are designed to align with company strategy and objectives.

PRIs are increasingly used by private and corporate foundations such as the Ford Foundation, the David and Lucile Packard Foundation, and the Pfizer Foundation. In 2016, the U.S. Treasury

[49] Sida, Volume Guarantee Example.

[50] EyeFocus Accelerator, www.eyefocus.co.

[51] Hotopf, 2016.

Department and IRS finalized regulations that make it easier for private foundations to make PRIs, which is expected to increase uptake.[52]

How can companies partner on this mechanism? Healthcare companies can take advantage of PRIs in various ways. Corporate healthcare foundations can use PRIs as risk capital into funds or direct investments in social enterprises. The Pfizer Foundation is using both grants and PRIs in its Health Delivery and Social Innovation portfolio, launched in 2013.[53] This investment portfolio includes the StartHealth Investment Program, which aims to identify, mentor, and invest in early-stage technology startups that develop viable healthcare solutions for underserved communities in India. It was launched by the Unitus Seed Fund in partnership with Pfizer Inc. and the Pfizer Foundation, Narayana Health, Manipal Hospitals, and PATH. The program offers startups up to US$1.6 million in grants and investments as seed venture capital along with hands-on support and access to expert advisors and medical facilities. Innovations the program has supported include a mobile cardiac services platform offering on-demand opinions of multiple cardiologists for ECGs and a portable radiation-free noninvasive breast cancer screening device for use in low resource settings.[54]

The Bill & Melinda Gates Foundation invested US$10 million to acquire a stake in Liquidia Technologies, a biotechnology company working on new ways to deliver vaccines.[55] This came out of the Gates Foundation's US$1 billion pool of capital dedicated to PRIs.

As risk capital, PRIs are not appropriate in every situation and in many cases are most effective when combined with grants. PRIs can be used only when there is an income stream that can be a source of repayment. In contrast, grants are most effective in providing capacity-building, operating, or project support when there is no income stream for repayment.[56]

Third-party co-financing: This includes financing in the form of catalytic grants, equity, debt that is provided by third parties, most likely donors, development agencies, or foundations, to support business model innovation and expansion.

How can companies partner on this mechanism? Companies can serve as direct or indirect beneficiaries of co-financing. For example, in March 2017, USAID and the Bill & Melinda Gates Foundation issued a joint call for innovative and transformative solutions that can overcome key roadblocks and build more effective health supply chains in low- and middle-income countries around the world. Examples that could be considered for funding include distribution and delivery technologies and developing supply chain technical and managerial capacity.[57]

The IDB's innovation lab, MIF, represents an under-explored opportunity for healthcare companies wishing to pilot new business models, distribution partnerships, or capacity-building models in Latin America and the Caribbean. In collaboration with corporate partners, the IDB/MIF typically uses grants to catalyze and scale inclusive business models and uses other forms of finance such as partial credit guarantees to local banks to make it easier for them to lend to small businesses in the value chain.[58] The UK Department for International Development's Business Partnership Fund

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[52] Internal Revenue Service, Examples of Program-Related Investments, www.federalregister.gov/documents/2016/04/25/2016-09396/examples-of-program-related investments.

[53] Pfizer, Corporate Responsibility: Bridging the Gap to Access for Patients in Need.

[54] Unitus Seed Fund, 2015.

[55] Strom, 2011.

[56] Social Impact Exchange, PRI Toolkit.
www.socialimpactexchange.org/sites/www.socialimpactexchange.org/files/publications/PRI_Toolkit.pdf.

[57] Ensuring Effective Health Supply Chains, https://www.usaid.gov/grandchallenges/supplies.

[58] IDB Multilateral Investment Fund, www.fomin.org/en-us/home/aboutmif.aspx.

provides co-investment to support companies the piloting, scaling and replication of inclusive business models.

FUTURE OPPORTUNITIES

There are a number of emerging areas of opportunity to expand innovative finance in core operations. More development funders and philanthropic funders are providing co-investments to catalyze more activity in inclusive business and are seeking willing and capable partners, especially in the health sector. The IDB/MIF is actively seeking corporate partners in the healthcare sector who are interested to leverage each party's respective financial and nonfinancial resources to maximize impact. The MIF can provide blended financial instruments (catalytic grants, equity, debt), structuring capabilities, thematic and regional expertise, social impact measurement know-how, and recognized convening power with the public, private, and civil society sectors to any venturing partnership.

Early experience with volume guarantees has been successful, spurring interest among some funders to consider their application in other therapeutic areas beyond contraceptive implants. To do so, these areas would need to have similar situational attributes including significant latent or unrealized demand, higher cost of goods sold due to limited volumes, and funders with appetite to de-risk company action and jump-start the market.

Companies can also apply the green bond/sustainability bond model being pursued by governments and companies such as Starbucks for piloting and scaling inclusive business models in lower-income market segments. The current low cost of capital for investment-grade bonds in the global financial markets makes this a potentially attractive mechanism for companies seeking larger capital tranches to finance new programmatic activities. To do so, companies will need to present a clear narrative demonstrating the extent to which the bond-funded activities will explicitly address unmet social needs, such as those in the BOP or emerging middle-class segments.

Companies can also consider setting up joint ventures or subsidiary companies in partnership with development finance institutions to implement new inclusive business models at scale. For example, LafargeHolcim, a leading building materials company, and CDC created 14Trees, a joint venture that aims to scale the company's affordable housing program. It specifically seeks to accelerate the production and commercialization of Durabric—an environmentally friendly, affordable alternative to traditional clay burnt bricks.[59] This joint-venture model provides more flexibility to experiment with new business models than would a traditional business line of the parent company.

[59] LafargeHolcim, 2016.

Health Systems

This includes all of the organizations and people involved in the delivery of medicines and healthcare services to the target population.

MARKET CHALLENGES

Health systems vary from country to country, but in all cases a good health system should deliver quality services to all people, when and where they need them.[60] Yet, even when healthcare spending increases, this doesn't always translate into improved care and health outcomes. This can lead to significant challenges for companies in securing a route to market and ensuring that the underlying infrastructure is equipped to meet the needs of patients/customers. The following outlines some of the key challenges facing health systems:

» **Weak delivery networks—**Working capital constraints for distributors and retailers can lead to stock-outs and poor storage, which affects drug quality and availability. Inefficiencies can also lead to excessive downstream markups limiting affordability. These gaps also provide openings for counterfeit drugs, which have become a serious public health threat. The WHO estimates that 30 percent of medicines sold in developing countries are counterfeit or substandard.[61]

» **Provider and workforce constraints—**A well-trained and adequately paid workforce is essential to the delivery of quality health services. In the next 20 years, 40-50 million new healthcare workers will need to be trained and deployed to meet growing demands.[62]

» **Inadequate infrastructure and facilities—**There are significant gaps in the availability of health facilities and in the equipment and infrastructure for facilities to be able to meet population health needs, particularly in rural areas. The private healthcare market is rapidly growing in many countries, but many of these enterprises lack access to working capital. Health systems around the world are also ill-equipped to deal with pandemics. Recent economic analysis suggests that the annual global cost of moderately severe to severe pandemics is roughly US$570 billion, or 0.7 percent of global GDP.[63]

» **Weak information systems—**Robust health information systems provide reliable and timely information to policymakers, managers, and individual service providers to make informed choices about everything from patient care to national budgets. Many low-income countries face critical challenges in health data collection and management. Globally, two-thirds of annual deaths are still not registered.[64] There are many health IT innovators and startups developing affordable solutions, however many lack access to finance and mentoring support.

[60] WHO, Health Systems. www.who.int/topics/health_systems/en/.

[61] WHO, Substandard, spurious, falsely labeled, falsified and counterfeit (SSFFC) medical products, Fact Sheet www.who.int/mediacentre/factsheets/fs275/en/.

[62] WHO, Universal Health Coverage. www.who.int/mediacentre/factsheets/fs395/en/.

[63] Fan, Jamison, and Summers, 2016.

[64] WHO, Universal Health Coverage. www.who.int/mediacentre/factsheets/fs395/en/.

Many challenges facing health systems today go beyond the point of care. Socioeconomic and environmental factors such as climate change and eating habits are all affecting health and well-being. Addressing these factors requires more holistic, system-wide approaches through partnerships with schools, community centers, and food providers.

INNOVATIVE FINANCE TRENDS AND EXAMPLES

The field of innovative financing mechanisms to strengthen health systems is rapidly growing. This includes SME & trade finance, credit guarantees, impact bonds, pandemic bonds / financing facilities, and investment funds.

SME and Trade Finance: This is financing to provide health small and medium-sized enterprises (SMEs) with working capital to upgrade their operations. Health SMEs include smaller hospitals, diagnostic centers, health centers, dispensaries, maternity homes, health shops, and nurse-driven clinics. Two-thirds of SMEs need additional capital less than US$250,000.[65] These SMEs tend to be too large for microfinance but too small for large bank loans, thus sitting in the "missing middle."

How can companies partner on this mechanism? Companies can serve as investors and advisors in SME financing. In particular, there is a growing need for technical support to help SMEs use finance effectively. The Medical Credit Fund Africa is a hybrid public-private investment mechanism that provides performance-based financing in combination with technical support to eligible private primary healthcare providers. In addition to providing SMEs with loans, it offers technical assistance to help identify efficiencies in management and operations, scan the market for growth opportunities, produce business plans, install or upgrade clinical procedures and protocols, improve performance areas, and prepare for quality assurance through (SafeCare) certification and accreditation.[66] There is an opportunity for companies to provide technical assistance to banks in developing appropriate loan products for SMEs.

The IFC's trade finance facilities can help companies do business with capital-constrained trade partners in the value chain by acting as an intermediary with multiple distributors or retailers. This simplifies the trade and credit arrangements for both sets of parties, thus overcoming barriers to achieving wider penetration in lower-income market segments.

Credit Guarantees: Full or partial credit guarantees are a de-risking mechanism whereby a company or third party absorbs any potential losses, in effect lowering the investment risks. A number of DFIs, including CDC and IDB/MIF, use credit guarantees to stimulate lending to small businesses through local financial institutions. For example, USAID's Development Credit Authority (DCA) guarantee is used to encourage financial institutions to lend to creditworthy but underserved borrowers, such as private health providers. The DCA is a partial credit guarantee that covers up to 50 percent of defaults on loans made by private financial institutions. The DCA is being used in USAID's Banking on Health project, which aims to strengthen access to finance for private health providers, improving their capacity to deliver high-quality reproductive health and family planning services.[67] Similar credit guarantee mechanisms are provided by other development aid donors and development finance institutions (e.g., the Inter-American Development Bank).

How can companies partner on this mechanism? Healthcare companies could provide credit guarantees directly or via a third-party financial institution to expand the supply of capital to working

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[65] Medical Credit Fund, Private Healthcare Sector. www.medicalcreditfund.org/about-us/content/#the-private-healthcare-sector.

[66] Ibid.

[67] USAID. "The Banking on Health Project and the Development Credit Authority Guarantee."

capital-constrained partners in the value chain (e.g., networks of pharmacies, clinics, health-focused microfinance institutions, and health IT entrepreneurs with a focus on underserved communities).

Impact Bonds: Social or development impact bonds (SIBs or DIBs; also known as pay-for-success mechanisms) are results-based contracts in which an investor provides upfront capital, typically to a nonprofit provider, and is paid back principal plus a return if certain targets or objectives are met. These objectives are often sustainability targets or results linked to social programs and development initiatives. The first social impact bond was launched in the U.K. in 2010. The global market for such investments is currently estimated at around US$150 million and is projected to grow to somewhere between US$300 million and US$500 million over the next few years.[68] Most impact bonds are deployed in high-income countries, though an increasing number of DIBs are being piloted in low- and middle-income countries.

In the United States, a number of states are experimenting with pay-for-success to strengthen health systems. South Carolina is using the mechanism to scale a nurse-family partnership program aimed at reducing infant mortality rates. Private investors provide Nurse-Family Partnership (NFP), a nonprofit organization, with US$17 million along with around US$13 million in federal Medicaid reimbursements. If the NFP's interventions achieve targets on reductions of pre-term births, child hospitalizations, and emergency-room use, investors can be repaid with money set aside by South Carolina government and can expect to receive a return of 5-13 percent. If the NFP fails to meet the goals, the investors will lose their principal and the government will owe them nothing.[69]

How can companies partner on this mechanism? Companies can use philanthropic funds to invest in impact bonds as a way to drive innovation and cost-effectiveness of healthcare service delivery models. They could also be used in a commercial context where service delivery and outcomes are tied to reimbursement (e.g., driving greater adherence to treatment regimens for patients with chronic diseases like diabetes and hypertension).

The Mozambique Malaria Performance Bond (MMPB) is a Development Impact Bond that aims to increase funding for, and the efficiency of, malaria interventions by tying payment to impact outcome targets. If the interventions are effective in reducing incidence rates by 30 percent or more by year three, the public-private coalition behind MMPB will repay investor principal with 5 percent interest; if the interventions are ineffective, investors are repaid 50 percent of their principal with no interest and are absolved of further commitments. An initial US$25 million bond will be piloted in the Maputo Province of Mozambique. Nando's, a restaurant chain, in partnership with Dalberg, created the Goodbye Malaria Trust (GMT) and the Bond Against Malaria Mozambique (BAMM) Operating Company to oversee the bond. Other partners include Anglo American, Standard Bank Group Limited, The Coca-Cola Foundation, and Samsung Group.[70]

To use impact bonds, the investment recipient must be able to show that the intervention delivers a quantifiable increase in the desired outcomes compared to the status quo. Therefore, investment in rigorous baseline measurement is necessary.[71]

Investment Funds: As highlighted above, impact investment funds can be venture capital funds or private equity funds created by investment or asset management firms, bilateral or multilateral donor funds, or corporate fund created by corporations themselves. In the context of health systems, these

[68] Levenson Keohane and Madsbjerg, 2016.

[69] Institute for Child Success, 2016.

[70] Clinton Global Initiative, Commitment by Nando's, 2013. "Goodbye Malaria: Mozambique Malaria Performance Bond."

[71] Dear et al., 2016.

funds are typically used in market development activities and improving health facilities and infrastructure.

There is a rapidly growing fund market dedicated to strengthening health systems. One example is the Africa Healthcare Fund, managed by Aureos Capital, which was established in 2009 by the IFC, the Gates Foundation, the African Development Bank, and the German Investment and Development Corporation (DEG), who jointly invested US$57 million. The fund's objective is to help low-income Africans gain access to affordable, high-quality health services through targeted investment in the provision of private healthcare. The Fund invested in C&J Medicare, a leading healthcare provider in Ghana, to establish a new facility in a second location in Accra, acquire over US$2 million of medical equipment, and recruit new clinical and managerial staff. The new C&J Medicare facility will deliver specialist care in psychiatric health, cancer screening, and cardiology that is not currently available locally.[72] The END Fund mobilizes capital to strengthen health system capacity and deliver medicines for the five most prevalent Neglected Tropical Diseases.[73] The World Bank's $500 million Pandemic Emergency Financing Facility will mobilize funds swiftly to low income countries and international responders to stem an outbreak before it reaches pandemic proportions.

How can companies partner on this mechanism? Companies can either create their own investment funds or act as investors and/or advisors in third-party funds. In early 2016, Medtronic made a commitment to the Abraaj Group's Growth Markets Health Fund, which is focused on improving access to healthcare in Asia, the Middle East, and Africa, as well as other developing markets. Abraaj purchases or builds hub hospitals, surrounded by networks of referring hospitals and clinics. Medtronic serves as a strategic partner and sees this partnership as a key opportunity to expand existing therapies into emerging markets.

Deutsche Bank's Essential Capital Consortium (ECC), a five-year US$50 million social enterprise fund, has attracted MetLife, Inc., Calvert Foundation, IDB/MIF, IBM International Foundation, and Cisco Foundation as investors. ECC will provide debt financing to social enterprises in the energy, health, and inclusive financial services sectors. SIDA is also providing crucial credit enhancement support.[74] One of ECC's first investments was in Sproxil, a developer of a patented text message-based drug authentication system. Sproxil customers include both local companies and global pharmaceutical giants such as GSK and Johnson & Johnson.[75] Deutsche Bank also established an Eye Fund in 2010 to invest in expanding the capacity of eye hospitals to expand facilities, buy equipment, and implement Aravind-style cross-subsidization business models that expand access to surgery for low-income patients.[76]

Other examples include Patagonia's $20 Million & Change, an internal fund to help start-up companies bring about positive benefit to the environment.[77] GE Healthcare's first healthcare accelerator, five.eight, launched in 2016, is a dedicated US$50 million fund to finance global health startups that improve healthcare outcomes in the developing world. Portfolio companies from four social impact investors— Acumen, Aavishkaar-Intellecap Group, Unitus Seed Fund, and Villgro—will be among the initial applicants for the first accelerator program.[78]

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[72] The Abraaj Group, 2013.

[73] www.end.org

[74] Deutsche Bank, 2015.

[75] Acumen, Sproxil. http://acumen.org/investment/sproxil/.

[76] Deutsche Bank Eye Care Fund, https://convergence.finance/sample-deal/449.

[77] $20 Million & Change, www.patagoniaworks.com.

[78] Miliard, 2016.

Centrica's Ignite Fund and Pearson's Affordable Learning Fund are both examples of social impact investment funds created by companies to help achieve both strategic commercial and social objectives. Unilever's venture fund, Unilever Ventures, is an example of a hybrid approach that invests in both pure-play commercial investments as well as in compelling social or environmental value propositions that align with the priorities outlined in the Unilever Sustainable Living Plan. (See Consumer Products Case Study for more information.)

FUTURE OPPORTUNITIES

There are many untapped opportunities to apply existing mechanisms to strengthen health systems. For example, impact bonds could be used to scale up existing efforts to train front-line health workers to service provision for prevention, primary care, and patient support (e.g., health system navigation, adherence). Companies could work with investors and donors to strengthen distribution systems to combat stockouts and excessive price markups.

The approach being used by Pearson Affordable Learning Fund to enhance affordable education in developing countries could be replicated in healthcare, especially as companies seek to develop and expand healthcare delivery and distribution networks through both public and private providers.

Companies also have an opportunity to tap new programs focused on scaling innovations in health technology and building local innovation hubs. For example, IFC's newly launched TechEmerge program offers matchmaking and funding to companies with proven health-technology innovations in areas such as point-of-care testing and remote monitoring. The aim is to connect innovators globally to healthcare providers in India to improve healthcare delivery and patient outcomes. The program is open to all companies, whether they are operating in India or not. TechEmerge is being implemented in partnership with the Finnish Ministry of Employment and the Economy and the Israeli Ministry of Economy and Industry, and is supported by Health 2.0.[79]

Companies like Philips are investing in local innovators who can develop innovations for the local market, particularly in resource-constrained settings. The Philips Africa Innovation Hub is working on the development and clinical testing of a robust and affordable Automated Respiratory Rate Monitor that aims to support the diagnosis of pneumonia among infants and children, using smart sensing technology. This device will be specially designed for use by community health workers and nurses in rural areas and is being developed in partnership with Kenya Medical Research Institute.[80]

There is also space to apply the Grand Challenges mechanism used in R&D to support innovative solutions to health systems challenges. One example is the PEPFAR DREAMS initiative that seeks to reduce HIV infection among adolescent girls in 10 sub-Saharan African countries. As part of the initiative, PEPFAR, Janssen Pharmaceutica, NV, one of the Janssen Pharmaceutical Companies of Johnson & Johnson, and ViiV Healthcare are investing $85 million in an Innovative Challenge to support many solutions beyond the health sector that keep girls in secondary school, provide a bridge to employment, and strengthen leadership and capacity of community-based organizations.[81]

More experimentation in pay-for-success mechanisms could be applied in the healthcare sector. The Swiss government, for example, is funding a pilot to test a new Social Impact Incentives model that works with social businesses with revenue streams and pays them an incentive on top of the revenue

[79] IFC TechEmerge, www.techemerge.org.

[80] Philips, 2014.

[81] PEPFAR, DREAMS Innovative Challenge.

if social outcomes are achieved. The US$1.6 million pilot is being led by the IDB/MIF to support four companies and "crowd-in" between US$6 million and US$10 million in private capital.[82]

Patients and Customers

This includes innovative finance to stimulate demand, improve affordability, and ensure proper use of medicines and health technologies.

MARKET CHALLENGES

Access to healthcare also requires patients or consumers who are willing and able to seek care. This depends upon a number of factors, including:

» **Demand:** Many people do not seek healthcare because they are unaware of health risks or do not understand the value of treatment. Studies show that socioeconomic status is a strong predictor of health and a key factor underlying health inequities across populations. In particular, poor education and literacy levels have a significant effect on health-seeking behavior.

» **Affordability:** More than 100 million people slip into poverty every year because of medical payments. There are major gaps in financial services, in particular health insurance, for low-income individuals in both developing and developed countries.[83] Even in cases where national health insurance schemes do exist, people still end up paying out of pocket for products and healthcare services not covered by the scheme. In many countries, traditional bank loans to cover health emergencies are only accessible to those who can provide periodic salary payments or other assets as collateral.

» **Use:** Even when patients are able to access medicines they may use them inappropriately (e.g., take medicine when none is needed, take the wrong medicine, or not adhere to the full treatment regimen), which can drive drug resistance and leads to poorer health outcomes.

INNOVATIVE FINANCE TRENDS AND EXAMPLES

There are currently two partnership mechanisms being used to address challenges facing patients and customers: demand stimulation and aggregation and financial inclusion.

Demand Stimulation and Aggregation: This involves the promotion of health education and awareness to stimulate healthcare-seeking behavior and health system utilization. It focuses on reaching people via community focal points such as schools, markets, and churches. This can improve the financial viability of inclusive business ventures and impact investments, especially in low-income and/or low-population density settings. Using innovative finance to drive demand stimulation and aggregation can be an efficient use of donor funds as it helps stimulate private-sector activity in underserved market segments. This aligns well with the increasing focus of development agency funding on helping make markets work for the poor.

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[82] Price, 2016.

[83] MicroEnsure, http://microensure.com/.

BSR's HERproject is an example of a public-private partnership that uses the workplace as an entry point to improve the health- and finance-related knowledge and behaviors and access to health and financial services and products of low-income working women. The program uses peer-to-peer training and access partnerships to empower women working in garment, footwear, electronics, agricultural, and horticulture supply chains.[84] In addition to grants from various private foundations and government entities, companies pay US$4,700 to US$7,500 per factory per year, which goes directly to local NGOs to implement HERproject.

How can companies partner on this mechanism? Companies can target philanthropic or commercial investments—either directly by the company or together with financing partners—to focus on new or existing interventions that increase the feasibility and viability of large-scale impact. For example, in 2016, Takeda Pharmaceutical Company partnered with BSR to deepen and expand the impact of the HERproject with a focus on increasing access to healthcare.[85] Companies implementing inclusive business models can seek development agency funding support for activities that resolve market failures, such as community health education and screening.

Financial Inclusion: This includes a wide range of products such as health savings accounts, insurance, voucher schemes, loans, and mobile money that reduce the financial burden and vulnerability of healthcare payments for patients. Microinsurance requires a different approach to business process and technology; most underwriting is done at the time of claim, rather than at the time of purchase. Individual risks, such as pre-existing medical conditions, are priced into the product rather than excluded from coverage. As a result, microinsurance is uniquely designed to operate at scale; rather than providing US$1 million coverage to 1,000 people as in traditional insurance, microinsurance can provide US$1,000 coverage to 1 million people.[86]

LeapFrog Investments invests in a number of enterprises that are transforming the customer insurance model. For example, one of its investees, AllLife, provides life coverage for people with HIV. In addition to insurance, it also helps clients manage their health through regular reminders to do their blood tests and take medication, among other aspects of managed care. This has helped the micro-insurer maintain competitive pricing and has had significant impacts on the health of clients. AllLife clients average a 15 percent improvement in their CD4 count within six months of being insured.[87] Another LeapFrog investee, BIMA, provides low-cost insurance products to 9 million people, 40 percent of whom are in rural communities.

How can companies partner on this mechanism? Companies can work with financial services firms to develop appropriate patient financing and health insurance schemes. For example, Roche and Swiss Re have partnered to provide cancer insurance in China. Roche provides Swiss Re and several Chinese insurers with statistical data on various types of cancer, including how treatable they are. Swiss Re calculates the risk and cost of treatment and designs and prices policies for insurers. It also provides reinsurance, so local firms do not assume the full risk.[88] Roche does not benefit directly from insurance policy sales, but this partnership is aligned with its commercial interest in market access and expansion, as well as its commitment to improve access to cancer prevention and treatment.

Companies can also introduce a health component to traditional microfinance or lending schemes, given how important health is to loan repayment and the ability for small businesses to succeed. GSK

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[84] BSR HERProject, https://herproject.org/downloads/bsr_herproject.pdf.

[85] Kotas, 2016.

[86] MicroEnsure, http://microensure.com/.

[87] LeapFrog, AllLife: Insuring the uninsurable.

[88] Lunt, 2012.

has partnered with Pro Mujer, which supports low-income female entrepreneurs through loans and training, to launch a health clinic that provides Pro Mujer clients and their families with easy, convenient, and affordable access to high-quality healthcare. The clinic leverages a center where clients and their communal bank groups already gather to receive loan disbursements. This "one-stop shop" approach is a sustainable way to provide health services and strengthen financial inclusion.[89]

FUTURE OPPORTUNITIES

As technology transforms the way people access health information, there are a number of opportunities to use innovative finance to make these services more accessible to people, especially given high rates of mobile phone penetration in many developing countries. For example, Grameen Foundation developed MOTECH, a software system that harnesses the ubiquity of mobile phones to deliver and receive information from patients and caregivers. The MOTECH system has been implemented for the Treatment Advice by Mobile Alerts program in urban India, which is a partnership between Grameen and Johnson & Johnson. This project aims to increase the appointment and treatment adherence for patients on antiretroviral regimens.[90]

Technology can also transform access to primary healthcare services and lower the costs of medical transportation in remote areas. For example, an IDB/MIF project in the Dominican Republic, in partnership with technology manufacturer Matternet, aims to establish a small aerial drone network for the distribution of laboratory samples and medicines between rural clinics and hospital labs.[91] There are also opportunities to apply mechanisms used in other parts of the value chain, such as impact bonds, to health education and awareness programs, such as HERproject, which has already demonstrated a return on investment as high as 4 to 1.[92]

There is also a need for more partnerships between the health and microfinance industries to develop a "beyond insurance or finance" approach that couples insurance or loan products with access to health services. Insurance clients' perception of the value of health insurance is very much linked to the quality of the services around them. More partnerships that leverage health system interventions with financial inclusion could help boost participation in health insurance schemes.[93]

[89] Messing, 2014.

[90] MOTECH, https://motechproject.org/about/.

[91] IDB/MIF, 2016.

[92] Yeager, 2011.

[93] Tayag, 2011.

3 Harnessing Innovative Finance for Access at Scale

Innovative finance has the potential to unlock billions of dollars toward improving access to healthcare. However, harnessing this potential requires navigating a rapidly evolving investor landscape and developing new approaches to partnership that align business goals with the expectations of a diverse range of actors from the investment and donor communities.

Despite its promise, the flow of innovative finance towards healthcare challenges far from matches the unmet financing needs, and corporate uptake of innovative financing strategies has been much too slow. Many healthcare companies currently lack the tools, knowledge, and expertise to be able to capitalize on the opportunities presented by innovative finance. At the same time, the mainstream investment and donor communities are not always aware of specific investment needs and how to engage companies effectively in filling these needs.

This section is intended to help companies navigate some of the real and perceived complexity of tapping innovative finance to advance their access to healthcare goals. It is presented as a step by step guide and set of practical recommendations to help demystify the field of innovative finance for healthcare companies. There are many different scenarios for which companies will use this guide. Some may already be investing and looking to increase total funds allocated. Others may want to attract funding to scale promising initiatives inside the company. This guide may also be useful for investment professionals and development agencies as they explore innovative finance partnerships with companies. Ultimately, this guide should help all actors address gaps in communication and collaboration as well as address the mismatch between available capital and the needs of the healthcare sector. (Note that most of the advice in this chapter is targeted toward companies that are seeking capital for their own operations or for those of third-party actors in the value chain, i.e. investment flows 1 and 3).

Figure 3. Step by Step Guide to Harnessing Innovative Finance

1. Prepare

This step should answer: *What resources and expertise can we leverage? What are some key entry points to engage in innovative finance?*

If designed and executed effectively, innovative finance can reap significant rewards for companies, investors, and society. Doing so is not without its challenges, however, which is why it is important that companies start by building awareness and understanding of the innovative finance landscape, players, and opportunities and then testing low-risk interventions. As one interviewee put it, it is important that companies "learn to walk before they can run." Many companies have tried to go from nothing to form complex partnerships in one step, which can prove to be too ambitious.[94] To help companies get started in innovative finance it is important to:

» **Build internal expertise and capabilities**: To start, companies should have appropriate financial and legal expertise. This could include tapping both internal and external experts familiar with the investor landscape, financial instruments, and the company's own financial assets and liabilities. By bringing together colleagues from finance and accounting departments with the medical and health access departments, the company can build its internal expertise and develop a common language for communicating its investment strategy and needs. When looking for external financial advisors, it is important to include experience and commitment to social purpose and impact as part of the selection criteria. These advisors can help the company weigh different options based on the company's risk tolerance, return expectations, and social goals.

Advisors, particularly internal counsel, can also help determine whether there are any legal restrictions to investing through certain instruments or mechanisms. For example, some foundations may face restrictions on the use of returnable capital. Others may need to outline standards for impact investing in the articles of association of the foundation.[95] There are also some jurisdictions, like Switzerland, which do not allow foundations to invest endowments with the expectations of a financial return.[96]

» **Assess opportunities across the access to healthcare portfolio:** Innovative finance is not ideally suited for small, isolated initiatives or side projects. Rather, it is most effective when used for strategic priorities or primary therapeutic areas. As a result, it is important for companies to assess their access to healthcare portfolio to see which initiatives would be good candidates for innovative finance. These may be initiatives that lack sufficient internal sources of capital, face market barriers, or appeal to broader development priorities being pursued at national or international levels.

» **Determine company role (financial flow):** Companies should also determine what role they plan to play. Is the company seeking capital, providing capital, looking for co-investors with its capital, or planning to facilitate the flow of funding to third parties? (See Chapter 1 reference to financial flows.) As part of this, companies should validate that innovative finance is the right approach, clarifying the rationale and benefits of using innovative finance. For example, would innovative finance help stimulate more internal investment in production as in the case of volume guarantees? Would innovative finance help identify promising enterprises in service delivery as in the case of Pfizer Foundation's investment in the StartHealth program?

[94] Interview with financial services company

[95] Ibid.

[96] Ibid.

- **Secure internal buy-in:** It is important that senior level executives are committed to innovative finance and that there is ownership and alignment internally for the project to succeed, especially when you are innovating and pushing the envelope. As innovative finance can often sit across multiple departments, it is important that it finds the right home and champions on the corporate side for these types of investments. As one asset manager told us, investors want to see that someone owns this inside the company and that there is alignment and buy-in to the investment strategy.[97]

- **Start with low-risk opportunities:** Many companies have found that the best way to ease into innovative finance is through philanthropic funds that present less commercial risk and more opportunity for experimentation. This could be catalytic seed funding that supports cutting-edge ideas, organizations, or business solutions. This approach has been used by various healthcare companies including the Pfizer Foundation.

2. Define social and business goals

This step should answer: *What is the problem the company wants to solve and how can innovative finance help advance both business and social goals simultaneously?*

While the “getting started” step should help the company prepare to engage in innovative finance, step 2 is designed to help the company define the specific goals and parameters for investment. From the very outset it is important that companies think about how innovative finance is simultaneously addressing a business need while advancing social goals. For philanthropic investments, the focus on business needs may be reduced, or may be focused on the business needs of investees (e.g., social enterprises).

- **Clarify the business problem/opportunity:** Building on the outcomes of step 1, companies can then identify the key therapeutic areas, target beneficiaries, and key value chain barriers that it seeks to address. To do this, companies should draw on both external data, such as market insights and user/patient demographics, along with internal information on strategic priorities, etc. This should also capture the tangible value that will be created in terms of market reach, increased sales, production capacity, etc. This step will have a bearing on the type and scale of funding available and how the company communicates the investment need and alignment with the business.

- **Specify the social impact goals and intended outcomes:** In addition to the business goals, it is important that companies are explicit about the social impact goals and expected outcomes. Companies should keep in mind that different donors have different thematic priorities, geographies, etc. As a result, companies may want to consider the wider impacts and potential outcomes beyond their primary objectives that could help them appeal to a wider set of donors. For example, companies focused on noncommunicable diseases (NCDs) through mhealth and ehealth solutions could include potential investors interested in digital strategies in health, even if the investors’ priorities are not NCDs.

3. Estimate financial returns

This step should answer: *What prospect is there for financial returns? For whom are these returns?*

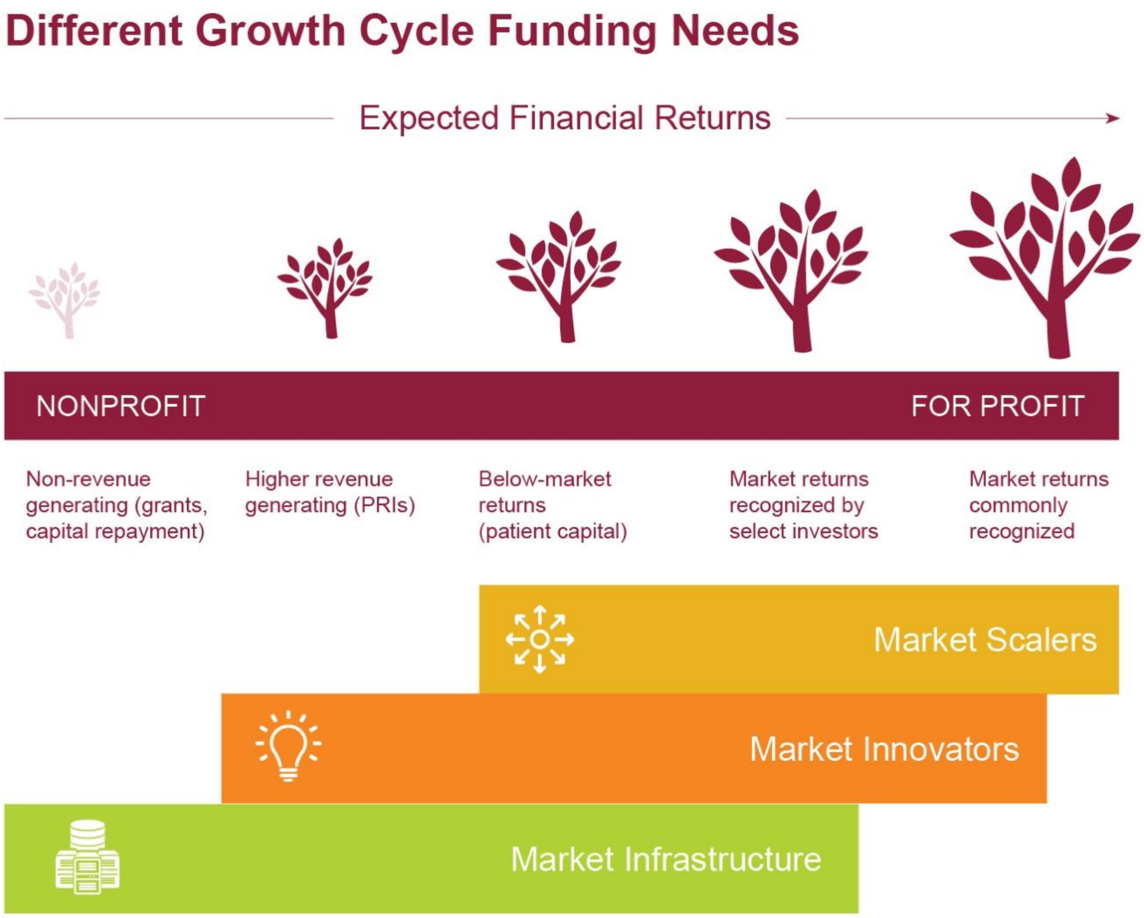
Investors have a range of risk/return profiles, and mainstream investors increasingly see innovative finance mechanisms as a way to diversify their portfolio. While some investors may seek market-

[97] Interview with financial services company

based returns, others may want to deploy capital toward deals that have longer tenures and higher risks. Most importantly, investors need reliable data to help them make informed investment decisions.

» **Determine the investment's growth cycle stage:** A wide range of investors and instruments is needed to meet the changing needs of markets and businesses at different stages of the growth cycle. Early-stage investments in building the market infrastructure and funding early-stage innovators/startups typically provide low to no market returns. At this stage grants and funds play a critical role, with "patient capital" instruments like PRIs playing a bridging role for investees that are growing their businesses but are not yet able to access commercial funding.

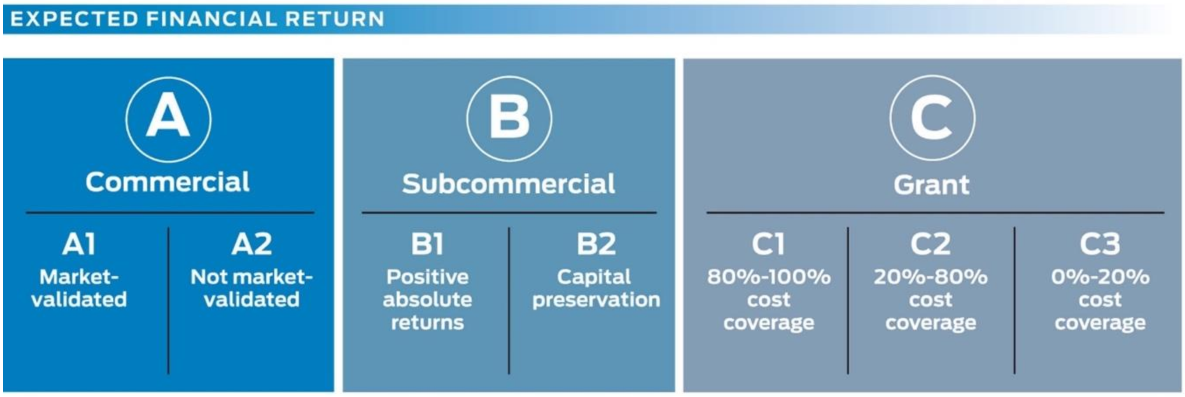
Figure 4. Different Growth Cycle Funding Needs



» **Estimate financial returns**: The information above can help companies estimate the expected financial returns that will determine the types of investors they can attract. Many investments at the base of the pyramid (BoP) are unlikely to offer competitive returns, but they may still be attractive to donors, foundations, and patient capital investors who are interested in incubating ideas or enterprises. Companies and investors may also be interested in high-return investments such as emerging market funds offered by private equity houses or boutique asset management firms such as Abraaj Capital, Bamboo Finance, or LeapFrog Investments.

It is important to recognize that achieving high returns is not the only goal for many investors. As one asset management firm interviewed noted, "depending on the goals you have set yourself, high returns are not everything, but your starting point should be the commercial viability of the investment."[98] Moreover, it is important to understand the extent to which the returns will be shared or divided.

Figure 5. Range of Expected Financial Returns



Source: Omidyar Network

4. Determine funding needs

This step should answer: *What size/type of funding is needed and how can it be deployed?*

In partnership with financial advisors, companies should determine how much capital is needed and what type of capital is most appropriate. This can include equity, debt, and guarantees, among other types of capital that can be blended in different ways. It may be helpful to refer to Chapter 2 for more information on different mechanisms.

» **Map investment needs:** For companies providing finance, they should develop a profile of the funding recipient(s), including information such as their likelihood of repayment and where they are in their growth cycle and journey between grant dependency and commercial investment-readiness. Companies should also understand the capital characteristics (timing, flexibility, and structure) and type of capital (equity, debt, and hybrid) and in what situations and scenarios these can be deployed effectively.[99] It is also important to view this as an iterative process that may begin with a certain type of funding and change with growth and maturation. There are a number of examples where companies started with one type of capital to get off the ground, for example through Grand Challenges, and later were able to attract capital to help implement and scale solutions.

Capturing a full view of the investment needs can help avoid a common pitfall in innovative finance: bringing inflexible capital into the market and expecting enterprises to bend to the capital requirements. The Global Health Investment Landscaping Project led by the Calvert Foundation, USAID, and others found "there is capital flowing in the global health investment space seeking deals, but the capital available is not always meeting the needs of the entrepreneurs or enterprises. Restraints on capital include risk appetite, programmatic lens, return expectations, and 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 pre-defined capital 'boxes.'"[100]

[98] Interview with financial services company.

[99] Bafford and Gelfand, 2015.

[100] Calvert Foundation, 2015.

» **Evaluate and mitigate unintended consequences**: Public-sector donors/investors are cautious to avoid crowding out private-sector capital and market actors (e.g., subsidies for certain health commodities or financial services can cause companies to stop trading due to their cost-disadvantage compared with subsidized alternatives). All players engaging in innovative finance need to guard against the risks of market distortion, as they can typically be identified and mitigated. Similarly, when investing in organizations such as social enterprises, microenterprises, or SMEs, it is important to ensure that the right types and amounts of capital are provided for each stage of the growth cycle. For example, receiving too much grant capital can impede progress towards becoming commercially investment-ready, whereas taking on debt or equity prematurely can damage future growth prospects.

5. Find aligned investors

This step should answer: *How well does the impact align with funding and investment priorities of donors and investors in governments, foundations, and the private sector?*

Forming partnerships takes time and constant care. This is especially true for innovative finance partnerships that by their nature involve risk taking and experimentation with novel mechanisms and solutions. It is important that all parties are clear about their objectives and expectations and what they can contribute to a partnership.

» **Get to know potential investors/partners:** Companies should understand the interests, expectations, and concerns of various investors, or work with advisors who already have these insights. This includes information about their financial risk/return expectations, types of funding and instruments at their disposal, thematic priorities, and social goals. For government donors and development actors, it is important to understand sensitivities around working with large companies and how private-sector engagement aligns with their broader strategy.

  Companies should also be able to communicate the investment need in addressing market failures that can help improve access to healthcare and lead to improved health outcomes. Companies should seek to find a common language that balances technical information (medical/scientific, development, and financial) with simple, easy-to-understand communication of its short- and long-term outcomes.[101]

» **Map investor/donor interests against company goals:** Companies can map the sources, types of investors, and investment goals of different potential partners against the company's own goals. The aim should be to find investor organizations with geographic footprints, social impact priorities, financial returns expectations, and technical capabilities that align with the needs of the company. Investors vary significantly in the types of financial instrument they can use (debt, equity, impact bonds, etc.). Hence, the desired intervention type will determine which organizations companies can partner with.

» **Select partners and determine roles/contributions of partners:** Once partners are selected, it is important to carve out and identify where each player can realistically contribute and have an impact. Partners also need to identify what will happen when things do not go according to plan. For example, risk tranches and exit situations involving unwinding, restructuring, or closing

[101] Munn, 2016.

something early should be determined upfront so it is clear who has priority for payback.[102] Aim to keep the number of partners to a manageable level to avoid excessive complexity.

» **Balance innovation, risk, and feasibility:** If exploring the use of a highly innovative, novel financial structure, it is advisable not to deploy it in a highly novel or risky market segment or application, as this can result in too much project risk. As a rule of thumb, apply novel structures in better-known markets and application areas, and well-known and understood investment structures in more uncertain markets and application areas.

[102] Interview with financial services company.

4 Way Forward

The major sustainability challenges facing society and business call for a new era of collaboration and coordination and unprecedented levels of investment. Innovative finance is now seen as an essential tool to help achieve the 2030 Sustainable Development Agenda and fulfill the Paris Climate Agreement. In late 2016, the UN Secretary General at the time, Ban Ki-moon, announced the launch of a new platform for scaling up innovative finance solutions to support the achievement of the SDGs and called on countries to increase and diversify financial flows in pursuit of low-carbon growth and climate resilience.

For the healthcare field, innovative finance could be a game-changer in the way we solve society's greatest health challenges. While the nexus between impact investing, innovative finance for development, and corporate activity is still at an early stage, it is developing rapidly. As the number of partnerships grow, the transaction costs of building and implementing them will gradually decline as investors build pattern recognition and streamline investment processes.

The healthcare sector has numerous, immediate opportunities to leverage innovative financing to amplify the positive impact on patients, healthcare providers, and health systems more broadly. These opportunities include, but are not limited to, the ones listed below.

Philanthropy

The role of philanthropy has been described as providing "the risk capital of social change," playing a uniquely important role in areas where public policy and the markets fail or operate inefficiently. Applying innovative finance approaches and partnerships as part of a broader portfolio of investments offers an expanded range of opportunities to increase social impact by making markets work for underserved communities.

» **Leverage**: Smart, targeted deployment of philanthropic capital can have a catalytic effect that enables significantly larger funds to be deployed than would be the case without philanthropic support. Examples include funding early-stage activities that inform and catalyze investment or act as first-loss capital to absorb highest risk.

» **Returnable capital/capital redeployment**: By providing partially or fully repayable grants and subcommercial loans (e.g., program-related investments), companies and their foundations can create a revolving fund dynamic in which capital can be reinvested multiple times over the long term. This increases the net impact that foundations and corporate giving departments are able to have with their finite funds.

» **Scalability**: There are thousands of startups, social enterprises, and SMEs with products, services, and business models that have the potential for scalable, self-sustaining impact in healthcare and other sectors pertinent to the social determinants of health. However, most struggle to go to scale, in part due to the "funding valley of death." This refers to the dearth of early-stage risk capital and growth capital with risk tolerance and financial returns profiles that align with the market realities and needs of innovators in earlier-stages and lower-income market segments. To cross this so-called funding valley of death, innovators need to gradually transition from grant funding to subcommercial debt and/or equity, before being able to access commercial sources of capital. Innovative financing approaches to philanthropy have been proven to have catalytic potential in this regard, especially when coupled with nonfinancial support such as financial and operational mentoring.

Inclusive pricing and business models

Many companies are innovating and implementing inclusive pricing models and business models in the healthcare sector and in adjacent value chains such as food and nutrition, clean water, mobile telecommunications, and financial services. However, these business models frequently scale slower than hoped due to the compound effect of multiple market inefficiencies and access/scaling barriers at different stages of the value chain. Innovative financing partnerships can be part of the solution to overcoming these challenges and accelerating the path to scale and economic viability. Opportunities include:

» **Financial support for business model pilots**: Organizations such as IDB/MIF are able to co-finance efforts with companies and their partners to pilot new business models that serve lower-income market segments in Latin America and the Caribbean. This support can include grants, partial credit guarantees, loans, equity, and technical assistance.

» **De-risking market entry and expansion**: Volume guarantees (see case study) and the Affordable Medicines Fund for Malaria are both examples of funding that has enabled companies to either enter lower-income market segments or to significantly expand their presence and sales in them.

» **Insurance**: After years of suboptimal growth, the penetration of micro-insurance (i.e., impact insurance) in many low- and middle-income countries is growing rapidly, aided by the use of mobile phones as a distribution and payment channel. Increasingly, insurance companies are coupling insurance with integrated healthcare delivery services to manage costs and quality of delivery. Healthcare companies have an opportunity to partner with insurance companies to help them improve their understanding of currently uninsured diseases and health conditions, with a view to expanding coverage. This approach has already been pioneered in several markets, but it remains a largely under-explored and untapped opportunity.

» **Tackling market failures and inefficiencies**: In the past five years there has been a quantum increase in the recognition of the importance of the private sector and its methods among development actors. Development agencies such as the U.K. Department for International Development (DfID) and USAID are expanding their funding portfolio to include investment funds that catalyze new inclusive business models or improve the environment in which they operate. This includes mobilizing funds to tackle market inefficiencies that directly relate to companies' inclusive businesses, e.g., community health education, capacity-building of healthcare providers, and improved distribution. This emerging new partnership approach can help companies accelerate the path to scale and financial sustainability for their ventures in low-income and emerging middle-class market segments.

» **Investments in value chain partners**: In many market segments and therapeutic areas, companies face barriers to patient access and market expansion due to the weakness of the downstream value chain. These market inefficiencies and failures are often systemic in nature and include inadequate distribution; volume, range and quality of health services; community health education; and financial inclusion. The systemic nature of these issues makes them difficult for individual companies to address at large scale. Therefore, working with financing partners to increase the total funds deployed can expand the market by increasing the numbers of patients seeking care, being able to afford care, and being able to receive quality care.

Service delivery in high-income settings

North America, the EU, and Japan are grappling with ageing populations and unsustainable prevalence of chronic diseases, resulting in major costs to families, health systems, and economies. This creates an urgent need to improve the amount and quality of community-based care and patient support to improve primary prevention of disease onset and secondary prevention of disease progression through earlier and better healthcare provision.

Healthcare companies have long-lasting relationships among R&D and marketing brand teams and patient associations and other community healthcare organizations that are active in their diseases of focus. Companies have the potential to co-create innovative financing partnerships including:

» **Social Impact Bonds (SIBs) / Pay for Success (PFS)**: Companies can help identify, develop, and implement SIBs/PFS initiatives that have the potential to increase the quality and impact of service delivery in areas such as patient support for disease management and treatment adherence.

» **Risk and growth capital**: Following the reduced levels of grant funding in the aftermath of the 2008 global financial crisis, an increasing number of community health organizations have started moving toward a social enterprise model which is less grant-dependent and more scalable. As described in the Philanthropy section above, companies can help fund these organizations and co-create scalable models for community-based care and patient support (e.g., treatment adherence).

Concluding advice: just get started

Innovative finance is here to stay and will continue to grow rapidly in healthcare and other sectors. This represents an opportunity to amplify the social impact of strategic philanthropy and market access investments, and the commercial impact in terms of market expansion and creating a better operating environment.

BSR suggests that companies start small and build internal capacity, while also partnering with intermediaries that have existing capabilities to reduce the resource intensity of engaging in innovative finance. The “learning-by-doing” approach is typically much more productive than exhaustive desktop research and analysis of potential opportunities.

Be creative and proactively seek out and propose opportunities. This is a rapidly developing field with many players who want to partner with large corporations and who are receptive to being approached with well-conceived partnership proposals.

BSR plans to continue facilitating the exchange of lessons learned and emerging models and mechanisms in innovative finance as well as exploring ways to bring together more parties that can help innovative finance expand access to healthcare at scale.

Appendices

Appendix 1: Case Studies

CASE STUDY 1: VOLUME GUARANTEE FOR CONTRACEPTIVE IMPLANTS

The Challenge

There are more than 225 million women worldwide who want to avoid pregnancy but are not using modern contraceptives. A group of international partners, including the Bill & Melinda Gates Foundation, sought to address this challenge by launching a global campaign in 2012 with the audacious goal of ensuring that 120 million women in developing countries have access to modern contraceptives by 2020.[103] Contraceptive implants, which provide long-lasting, effective contraception, are particularly attractive in low-resource settings because, aside from insertion and removal, they do not require regular checkups from a trained health worker. This also makes them a cost-effective option when considering the full lifespan of the product.

Despite growing demand for these contraceptives, the product had been in chronically short supply. Their market share stood at 1-2 percent due to limited competition, fragmented procurement, high upfront costs, and a shortage of trained workers.[104] Funding for large purchases of contraceptives had historically been unpredictable and politicized and the high cost of contraceptive implants (approximately US$18 per unit) made budgeting difficult for donors and national health ministries.[105] This caused the two key suppliers of the implants, Bayer and Merck & Co., Inc., to be cautious in their forecasts about future sales volumes.

Approach

To increase supply and lower the price of contraceptive implants, the Gates Foundation offered Merck & Co., Inc. and Bayer a sales volume guarantee of double the current demand over a six year period. This volume guarantee was secured by US$340 million in legally binding agreements by the Gates Foundation, which committed US$120 million. Other guarantors included the governments of Norway and Sweden, and the U.K.-based Children's Investment Fund Foundation. USAID, and the U.K. Department for International Development supported implementation. The donors first signed an agreement with Bayer, which agreed to provide its Jadelle implants at US$8.50 per unit, a 53 percent reduction, in return for a guarantee of orders of at least 27 million units over six years—approximately 3-5 million units per year. A similar agreement was later made with Merck & Co., Incwhich committed to supply 13 million units.[106]

The agreements with the suppliers guaranteed that donors and NGOs would buy a specific (and large) quantity of the contraceptive implants, in return for a commitment by the drug companies to

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[103] Bank, 2016.

[104] SIDA, Volume Guarantees Case Study.

[105] Gates Foundation, Bayer Contraceptive Implants.

[106] Banks, 2016.

lower prices. However, if the market did not grow at the predicted rate, the donors and investors would bear the responsibility of paying for the increased production.

Outcomes and Lessons Learned

The results of the volume guarantee have so far surpassed expectations. Both suppliers delivered more than the agreed volumes in 2013. Demand for the contraceptives is also higher than the original forecast. As of July 2015, 24.4 million more women and girls were using modern contraceptives than in 2012. By 2020, the number of women who will have gained access to contraceptive implants is expected to exceed the 40 million units originally estimated and guaranteed by the partnership.[107]

The price of implants has halved over the pre-volume guarantee prices as a result of the multi-donor volume guarantee, which has already saved US$240 million for global public health donors and could reach US$500 million by 2018.[108] This has enabled donors to reinvest the savings in supply chain improvements and training. Moreover, the guarantee is helping to reshape and expand the market and encourage governments to take more steps to make contraceptive implants available. Merck & Co., Inc. and Bayer also announced they would maintain the volume guarantee price for the contraceptives through 2023, five years beyond the agreement.

If demand continues to be strong there will be no need for partners to use the guarantee, which will free up the money for other projects. However, the liabilities remain on their balance sheets. For the Gates Foundation, this volume guarantee represents the largest share of its US$1.5 billion mandate for PRIs.

» **Priming the market:** Volume guarantees are a powerful tool in specific situations when an infusion of capital can help jump-start a market in the case of persistent failures of supply and demand. However, they have significant transaction costs and are most effective when there is a significant size market opportunity once the guarantee ends. Moreover, guarantees are not to be used in perpetuity or they could permanently distort the market. The partners also realized that there needs to be additional support to ensure enough on-the-ground demand and trained staff to actually deliver the increased number of contraceptive implants.

» **Deep understanding of the market dynamics:** The Gates Foundation developed the guarantee after gaining a deep understanding of the supply and demand dynamics of the industry, suppliers' business models, and the cost of goods and how that might change at higher volumes. This included detailed studies and interviews with women and NGOs in the field to understand how lower prices would affect demand.

» **Win-win:** The volume guarantee was designed as a win-win for all partners involved, including the suppliers. For donors and investors, the partnership offered a way to advance their priorities in women's rights and access to health. By spreading the risk across the partners, this reduced the exposure of any single partner. However, the contracts were so large that, if the guarantee had failed, it would have significantly impacted the Gates Foundation's PRI reserves. For healthcare company suppliers, the guarantee helped remove the long-term financial risk of increasing capacity by ensuring predictable long-term sales.

[107] Banks, 2016.

[108] Children's Investments Fund Foundation, Contraceptive Implant Volume Guarantee; Banks, 2016.

CASE STUDY 2: INNOVATIVE FINANCE IN THE CONSUMER GOODS SECTOR

The consumer goods industry has been pioneering innovative finance to address a range of challenges along the value chain and catalyze and scale solutions aligned with companies' sustainability priorities. Unilever, Danone, and Nestle, in particular, have been deploying commercial sources of capital in different ways, including through corporate venture funds, challenges/competitions, and other partnerships to invest in startups and other enterprises in the value chain.

Unilever

The Unilever Sustainable Living Plan, launched in 2010, is at the core of the company's values and purpose. To achieve its long-term goal of making sustainable living commonplace, the company is constantly seeking ways to stimulate and facilitate experimentation, innovation, and partnerships with its more than 400 brands. The Unilever Foundry is one key entry point for innovators to work with company brands to pilot and scale ideas and solutions around sustainable living. The Foundry uses hackathons, challenge competitions, crowd-sourcing platforms, and mentorship programs to identify and nurture promising start-up enterprises aligned with the company's core business. Unilever Ventures is the venture capital and private equity arm of Unilever and invests in the best ideas emerging from the Foundry.[109] Under the umbrella of the Foundry, Unilever launched TRANSFORM, a partnership with U.K. DfID and the Clinton Giustra Enterprise Partnership (CGEP) to support market-based approaches to meet low-income household needs in developing countries around water, sanitation, and hygiene (WASH) and energy.[110]

The company is also creating other innovative finance partnerships focused on improving the lives of smallholders in their value chain. One example is the Enhancing Livelihoods Investment Initiative established by Unilever, Acumen, and CGEP. It commits US$10 million over three years to improve 300,000 smallholder farmers and their communities by investing in small enterprises that support farmers. Another example is the Enhancing Livelihoods Fund, a partnership between Unilever, Oxfam, and the Ford Foundation that provides a mix of loans, guarantees, and grants intended to incentivize investment in new processes that have a social impact, while improving agricultural practices and crop yields.[111] Unilever has also used innovative financing approaches to advance its environmental goals, such as the issuance of an £250 million green bond in 2014.[112]

Danone

For the last decade, Danone has been pioneering social enterprise models to tackle persistent global challenges and address financing and skills gaps facing actors along its value chain. In 2006, the company, in partnership with Muhammad Yunus, launched Grameen Danone Foods, a business focused on fighting malnutrition and improving access to clean drinking water. This helped launch the first danone.communities fund, Danone's incubator for social enterprises, which is currently investing in nine social enterprises in seven countries.[113] The Danone Ecosystem Fund was established in

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[109] The Unilever Foundry, https://foundry.unilever.com/.

[110] Unilever, Enterprises for sustainable impact.

[111] Unilever, Enhancing livelihoods through partnerships across the value chain.

[112] Unilever, Unilever issues first-ever green sustainability bond.

[113] Danone.communities.

2009 as part of the company’s goal to rethink the way it interacts with the entire social and environmental ecosystem of its value chain. The €100 million Ecosystem Fund has launched 63 projects in 28 countries since 2009. All of these projects are initiated and co-created by Danone business units in partnership with local NGOs and local communities. The Fund specifically focuses on strengthening opportunities for small actors in its value chain including smallholder farmers, micro-distributors, caregivers, and waste pickers.[114]

Danone has launched a series of other funds to tackle sustainability challenges, including the Livelihoods Carbon Fund, which has attracted investors such as Schneider Electric, Crédit Agricole S.A., Michelin, Hermès, SAP, CDC Climat, La Poste, Firmenich, and Voyageurs du Monde. This fund has invested over €40 million to finance nine on-the-ground environment and climate programs. Building on the success and knowledge gained on that fund a second investment fund was launched in 2015—the Livelihoods Fund for Family Farming (L3F). Danone and Mars Inc., founding investors of L3F, have now been joined by Firmenich and Veolia to invest €120 million in projects that convert 200,000 small farms to smart and sustainable agricultural practices.[115]

Nestlé

Nestlé’s sustainability strategy is deeply rooted in the concept of shared value. One important example of how the company puts this concept into practice is through its efforts to help milk and coffee farmers become better suppliers while improving economic opportunities and incomes. In 2015, the company enabled around 98,000 farmers to access financial services amounting to US$33 million of assistance. Of this, approximately US$29 million was direct financial assistance by Nestlé, such as investment and/or operational loans, advanced payments, subsidized interest rates, and bank guarantees. The balance was comprised of third-party financial assistance and in-kind support.[116]

The company also partnered with ID/MIF, and ADOPEM Savings and Credit Bank to develop a microfranchise model that will benefit 4,500 low-income women in the Dominican Republic. The total cost of this strategic alliance is US$1.1 million, of which US$400,000 will be provided by the MIF, US$450,000 by Nestlé, and US$250,000 by ADOPEM Bank.[117]

Lessons

» **Strategy alignment:** Each of these companies takes a unique approach based on their own business strategy and which tools and resources the company can apply toward driving change. Although all three companies take a different approach to innovative finance, they all engage business units or brands in the design and implementation of the partnerships.

» **Partner alignment:** All three companies selected partners that were aligned with company goals, offered unique expertise or resources, and shared in the risks and benefits. For example, Acumen was able to provide Unilever with access to investment-ready social enterprises in its network. For Grameen Danone, the strong personal relationship and trust between Muhammed Yunus and Danone CEO Franck Riboud played an important role in the development of the social enterprise. For Nestlé, ADOPEM was able to create specific loan products for low-income borrowers that opened new markets for ADOPEM and helped strengthen Nestlé’s microfranchise network.

[114] Danone Ecosystem Fund.

[115] Danone Livelihoods Funds.

[116] Nestle, Nestlé in society: Creating Shared Value and meeting our commitments 2015.

[117] IDB Multilateral Investment Fund, 2014.

Appendix 2: Glossary of Terms

Blended finance: The strategic use of development finance and philanthropic funds to mobilize private capital flows to emerging and frontier markets.

Capital aggregator: An entity responsible for identifying suitable investment opportunities for its clientele. This differs from a social fund in that the capital aggregator serves as an advisor and does not have discretion over investor funds.

Convertible debt: A debt instrument that carries the option of being traded in for an equity interest.

Direct Funding: Provision of debt equity or grants to a project or company at various stages of a Market Segment.

Exit: Liquidation of holdings by an investor, usually by selling an asset to convert it into cash.

Family home office: An investment entity set up by a high net worth individual in order to execute the investment objectives of the individual.

Flexible (Concessional) Debt: Debt with favorable terms for the borrower relative to market rates and risks (e.g., longer tenor, lower interest rate).

Market Rate Debt: Borrowed money to be repaid, typically with interest.

Grants: A financial award with no expected repayment or compensation over a fixed period of time.

Horizontal aggregation: The process of syndicating distinct pools of impact capital matched to the various growth phases of an investee's development.

Impact investing: Investments made into companies, organizations, and funds with the intention to generate social or environmental impact alongside a financial return

Internal syndication: When a single entity participates/invests in multiple phases of a single beneficiary's growth cycle (e.g., initially giving a grant, followed by a soft loan at a later date).

Liquidity: The measure that shows how quickly an investment can be bought or sold with little or no impact on price.

Mission-Related Investments (MRIs): Investments made from the endowment of a philanthropic organization that are intentionally aligned with both the philanthropic mission of the foundation and the financial objectives of its endowment investment strategy (e.g., perpetual capital preservation).

Program-Related Investments (PRIs): Investments made from a philanthropic organization's annual charitable distributions (i.e., alongside grants) into nonprofit or for-profit organizations that intend to generate some financial return.

Senior Equity: Ownership in a company where value is determined at time of investment.

Small and growing business: Commercially viable businesses that have significant potential for growth and social impact in the area where they operate. Typically they seek capital from US$20,000 to US$2 million (as defined by the Aspen Network for Development Entrepreneurs - ANDE).

Social fund: An investment entity that is focused on social impact but has an obligation to its investors to generate a below-market rate of return.

Social venture capital fund: An investment entity that is focused on social impact but generally aims to generate a competitive market rate of return.

Soft loan: A short-term debt instrument (usually one-to-three year maturity) that carries a below-market rate of interest.

Subordinated/Junior/Mezzanine Debt: In the event of default, subordinated debt will only be repaid after all senior obligations have been satisfied.

Syndication: Two or more investors agree to support the same investment either at a moment in time or with staged investment based on milestones.

Trade Credit: When a supplier of goods or services provides credit to a customer, allowing the customer to pay for the goods or services at a later date.

Appendix 3: Acknowledgements

The authors wish to thank the following stakeholders for their invaluable contributions to this report:

Yasmina Zaidman, Acumen

Randall Kempner, Aspen Network of Development Entrepreneurs

Gary Cohen, BD

Laura Bradford, Bristol-Myers Squibb

Andrei Xylas, CDC Group plc

Eugene Amusin, Citi

Laura Hemrika, Credit Suisse

Panayota Bird, Department for International Development, U.K. (DFID)

Laura Kelly, Department for International Development, U.K. (DFID)

Keith Thompson, Department for International Development, U.K. (DFID)

Ben Midberry, Deutsche Bank

Cathy Clark, Duke University: The Fuqua School of Business

Caroline Bryant-Bosa, Flintridge Bryant

Holger Thies, Deutsche Gesellschaft für Internationale (GIZ)

Glenn Rockman, Global Health Investment Fund

Elizabeth Boggs Davidsen, Inter-American Development Bank

Ruzgar Barisik, International Finance Corporation

Alexandra LaForge, Investors' Circle

Ali el Idrissi, J.P. Morgan

Vaughan Lindsay, LeapFrog Investments

Felix Olale, LeapFrog Investments

Kate Antrobus, Lion’s Head Global Partners

Christopher Egerton-Warburton, Lion’s Head Global Partners

Natalie Mrak, Merck KGaA

Ken Gustavsen, Merck & Co., Inc

Michael Fuerst, Novartis

Yasemin Saltuk Lamy, Omidyar Network

Lorenzo Bernasconi, Rockefeller Foundation

Gregory Lamory, Sanofi

Ben Thornley, Tideline

John Simon, Total Impact Capital

Priya Sharma, USAID

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