

Innovative Finance in Health Care: Scaling Up Use of Impact Bonds in Public Health Care in Developing Countries

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ACKNOWLEDGEMENTS

The authors are grateful for the generous contributions and comments provided in their personal capacities by Cyrus Ardalan, Simon Brunschwig, Leslie Cornell, Kenneth Lay and Perry Teicher. Many thanks too to editorial consultant Catherine Garson for her guidance and suggestions.

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EXECUTIVE SUMMARY

Over the last twenty or so years, four encouraging and intersecting approaches in the funding of public health care in developing countries have evolved. These are: 1) outcomes- or results-based grant funding; 2) private sector investment through public private partnerships; 3) the expansion of the "impact investing" community and innovative "blended finance" structures; and 4) more recently, over the past twelve or so years, "impact bonds". The first three funding approaches have often been pursued in isolation from each other, where the potential for drawing on useful techniques in the others has not been optimally realized. Each approach has nonetheless been able to attract private sector investments in social or development projects and programs that are revenue-generating. Examples of projects funded through any of these approaches in the health care sector include the building and operation of hospitals and implementation of projects offering fee-based medical and technical services. These would typically serve those segments of the population that are able to pay for the services or where the government has the resources (e.g., a relatively healthy tax base) to offer these services. On the other hand, basic health care services and the treatment of infectious and chronic diseases for more marginalized communities who are unable to afford such services must often be provided by governments free of charge. But many governments do not have sufficient budget or tax bases to pay for these services, which generally do not produce a revenue stream. It has therefore often fallen to aid organizations, charities and other donor organizations to fund and deliver these services.

The challenges of providing essential services to marginalized populations are not, of course, unique to the health care sector. During the 25-year period¹ prior to the COVID-19 pandemic, poverty rates had been steadily declining. Nevertheless, provision of health care to the poorest and most marginalized around the world have historically been one of the social sectors attracting the least private sector investment – even as the world population (especially at the poorest levels) grows exponentially. There is a great deal of speculation as to why this may be the case. Some speculate that there is simply a lack of incentive to effect meaningful change. Others point to the high cost of drug development, the absence of effective government policy and governance, macro-economic challenges, geo-political risks and lack of data on investment opportunities. Yet, the fact remains.²

¹ World Bank: Poverty, available at: https://www.worldbank.org/en/topic/poverty/overview#1.

² Darrell M. West et al.: Private Sector Investment in Global Health R&D: Spending Levels, Barriers, and Opportunities (September 2017), available at: https://www.brookings.edu/wp-content/uploads/2017/09/private-sector-investment-in-global-health-rd final.pdf.

Impact bonds have done a better job of incorporating features of results-based grant funding, public private partnerships and blended finance approaches, and have been able to attract private sector "impact investors" and "commercial investors" (each, defined below) to fund social and development programs, including in the health care sector. Indeed, some of these have been targeted to reach the poorest and most marginalized communities.

In impact bonds, a government (or, in some cases, aid or charitable organizations) commits to repay impact bond investors with a return up to 5-7 years later if the program sponsor or service provider delivers pre-agreed outcomes. Some impact investors and aid organizations investing in impact bonds have been willing to risk not being repaid or earning returns if promised outcomes are not achieved. But private sector "commercial investors" (defined below) have been less willing to assume this risk. Impact bonds to date have therefore been highly customized in structure and documentation. More specifically, they involve idiosyncratic features that reflect the nature of the program sponsors and obligors on the bonds, the novelty of the risks involved in the individual social and development program and the risk-return appetite of its investors and other funders. This high degree of customization contrasts with the high degree of standardization of financial instruments, documentation and process in the corporate and sovereign bond markets, which rely on quantifiable and available operational and financial data (relating to the venture and bond obligors) and results to assure investors of repayment and earning of returns.

This paper thus examines the different structures of social and development impact bond investment. The discussion includes carefully chosen case studies and highlights the advantages and risks inherent in each structure.

There is today a great opportunity to dramatically scale up the funding and delivery of health care services in developing countries and attract private sector commercial investors (including "institutional investors" (as defined below) in some cases). These players can take some of the risks of these service delivery programs, including non-profit programs and other initiatives that do not inherently generate revenues. After looking at the different structures and case studies and outlining a range of key lessons learned from experiences with health and social impact bonds, we propose the following five broad measures. We believe that they more systematically connect the dots across the four approaches used to date in the funding of health care:

- 1. Standardize and design a single impact bond structure to attract a wider range of risk-taking investors and outcome funders. The simplification and standardization of the impact bond instruments and adoption of traditional bond and bond market features, processes and conventions has a greater prospect for attracting a wider pool of private sector commercial investors, including potentially institutional investors in the right circumstances.
- 2. Articulate the narrative around broader impact, beyond the direct beneficiaries of the impact bond to crowd in a wider range of investors and outcome funders. A more systematic public private partnership ("PPP")-type focus on the broader set of beneficiaries

and development impact of these social and development programs will better identify a broader class of investors and high-quality payors or guarantors of the bonds.

- 3. Articulate the Value-for-Money proposition and why the cost of involving private investors makes sense. The development and articulation of the qualitative and quantitative "Value for Money" analysis that is common to public private partnerships help governments and the public understand the advantages of crowding in private sector commercial investors to bolster scare public health care resources.
- **4.** Manage the risk appetite of investors and outcome funders. Private sector commercial investors are encouraged to exercise due diligence on the issuer of the bonds, the service providers, and payors or guarantors of the bonds, as well as on their ability to achieve preagreed operational outcomes, just as they would with corporate or government bond issuers, and therefore to share some or all of the risks associated with the program.
- 5. Establish a market and marketplace for impact bonds that cover charitable organizations and their non-profit (non-revenue generating) activities. An efficient marketplace for investments in these impact bonds will provide a formal and effective matchmaking platform for all stakeholders in health care projects in developing countries.

It is important to note that while this paper focuses on innovative financing structures in the health care sector, these structures could also be considered in the context of other sectors that can generate positive and measurable social impact, such as education, financial inclusion, housing, sanitation and more.

The paper is structured as follows: Giving background to the body of the paper, the first section describes the ecosystem of the funding of public health care in developing countries, as well as the role of the private sector. The next section looks at the four current approaches to funding: outcomes- or results-based grant funding; private sector investment through public private partnerships; the expansion of the "impact investing" community and innovative "blended finance" structures; and the different kinds of "impact bonds" with four case studies. This is followed by a comprehensive list of lessons learned from experiences with health and social impact bonds. The paper concludes with a detailed discussion of each of the five recommendations.

BACKGROUND

The historical heavy reliance on charities, philanthropic foundations, aid and non-governmental organizations ("NGOs") to support the delivery of basic public health care in developing countries provides context for discussion of new developments in health care financing. In many developing countries, governments struggle to deliver even basic health services. Private companies and small and medium-sized enterprises relieve governments of some of the burden. However, they usually pursue only the types of health care and services and the categories of companies, patients and beneficiaries that can and will pay. Funding and operations by charitable and philanthropic organizations and other types of international relief and aid organizations have therefore been essential in developing countries to the delivery of non-profit (and in many cases, non-revenue generating) health services, especially basic or primary and maternal health care and common infectious diseases and chronic conditions. These organizations have historically relied on grant funding from generous governments (and their agencies) and other donors to deliver these services through programs and local organizations operating on the ground.

Health care services can be broadly divided into the following areas: primary care, maternal care and family planning, pharmaceuticals and vaccinations, infectious diseases (such as HIV-AIDS, malaria, tuberculosis and diarrheal diseases), chronic diseases (such as diabetes, kidney disease, cataracts), and medical technology.

There have been four encouraging and intersecting developments in the funding of public health care: 1) outcomes- or results-based grant funding, 2) private sector investments through PPPs, 3) the expansion of the pool of "impact investors" and blended finance structures that include these impact investors and grant or concessional funders, alongside more traditional private sector "commercial investors", and 4) over the past twelve or so years, impact bonds. There is a certain degree of overlap between private sector impact investors and private sector commercial investors.

With several modifications to, among other things, the impact bond instrument and market, and a shift in mindset as to the identity of the beneficiaries of health care initiatives, there is a clear opportunity to dramatically scale up the funding and delivery of health care services in developing countries, including non-profit initiatives and even activities that do not inherently generate revenues.

"Impact investors", for the purposes of this paper, are investors committed to investing in opportunities designed to generate measurable, positive social, development or environmental impact, together with a diverse range of financial return expectations.

"Commercial investors", for the purposes of this paper, are investors interested in investments in enterprises with an expectation of generating competitive market rates of returns on their investment from the cash flows of the enterprise.

FOUR CURRENT APPROACHES TO HEALTH CARE FUNDING INVOLVING PRIVATE SECTOR INVESTMENT

This section briefly outlines the types of structures and risk sharing approaches involving the private sector in outcomes- or results-based grant funding, PPPs, blended finance structures and impact bonds. These have all developed over the last twenty or so years as the need for significant capital and technical resources in health care grow exponentially around the world and investment opportunities have evolved to attract private sector players. Important lessons can be drawn from these experiences, and these are covered in the next section (*Lessons Learned*). There is much fertile ground for offering recommendations as to how impact bonds in particular in the health care space (and more generally) could be structured and scaled up to achieve maximum impact. These are covered in the final section (*Recommendations*).

(Note that the Italicized text in this section is intended to emphasize one or more of the following characteristics for the purposes of comparison and contrast: attraction to private sector impact and commercial investors, nature of risk transfer to the private sector, key stakeholders and scalability.)

1) Outcomes- or results-based grant funding for government social and health services and charitable programs

This model of funding of health care services is "results-based" grant funding (sometimes called "outcome-based grant funding" and often structured as pay-for-performance or "pay-for-success" contracts). Performance-based contracts are common in many commercial contexts and sectors. Yet, results-based grant funding structures have only begun since around 2000 to truly begin to adopt some of the tools and disciplines used by private investors in more commercial contexts.³ Results-based funding has been a particularly welcome development in the charity/philanthropy space as donors are increasingly determined and indeed required to ensure that their scarce funds are put to effective use. Results-based funding includes a range of funding mechanisms in which the funding is conditional on, and provided after, the successful delivery of pre-agreed and verified results or milestones.⁴ Governments and charities, among others, have used these structures. The objective of the approach is to link funding more directly to desired outcomes, rather than to "inputs" and processes or even concrete "outputs" on their own. The approach also helps to increase accountability and creates incentives to improve the effectiveness of programs.

With results-based funding in the social services and other charitable areas, donors contribute to a charitable organization in the form of grants to support the charity's programs (i.e., programs that are not generally revenue generating and that therefore do not attract private sector

³ Amanda Melinda Grittner: Results-based Financing, Evidence from performance-based financing in the health sector (2013), available at: https://www.oecd.org/dac/peer-reviews/Results-based-financing.pdf.

⁴ DIE/OECD: Technical Workshop on Results-based funding (2014), available at: https://www.oecd.org/dac/peer-reviews/Results-based-financing-key-take-aways-Final.pdf.

commercial investment). The funding is conditional on the organization meeting certain predefined and validated results or outcomes. Governments, government agencies and aid organizations also often contribute to charities using this approach through specific development arms or programs. And they are often themselves the "sponsors" of such programs.

Donors in charitable and similar essentially non-revenue generating pursuits may provide their contributions in the form of non-recoverable or recoverable grants. Donors may include private foundations of companies or financial institutions, among others. Importantly and, depending on the timing and conditions to donations, donors may bear some or all of the risk of the charitable sponsoring organization to deliver the program as promised. Private sector commercial investors are not involved. An important additional benefit of results-based funding involving private foundations or other major philanthropic donors is that these donors bring a financial discipline and demand for good quality data and metrics to program sponsors and their service providers that may not previously have had such skills or been subject to heightened scrutiny in their operational models.

Results-based funding has been used around the world to support governments in addressing intractable health care challenges.⁵ Results-based grants will continue to be important. However, there is limited scope to significantly scale up these programs. Meanwhile, "[t]he cost of addressing the world's most critical problems reaches into the trillions, far exceeding the individual reach of both traditional philanthropies and most governments."

2) Public private partnerships in health care: largely focused on revenue-generating initiatives

This approach involves the use of public private partnerships ("PPPs") as a tool in the right circumstances to bring private sector commercial investors to support governments' delivery of public services and necessary other social safety net support, including in the health sector. While health sector PPPs have been used to varying degrees in developed countries, they have only gained traction in developing countries since shortly after 2000. PPPs are not a panacea. A PPP can be defined as a long-term contractual arrangement between a private party and a government entity for providing a public asset or service directly or indirectly to benefit some or all of the population. The private sector party (comprised of investors or shareholders) bears substantial risk and management responsibility for provision of the public asset or service, and remuneration is linked to performance. In particular, the private sector party usually assumes primary responsibility to deliver the design, feasibility, construction and implementation, and importantly, the operations and maintenance of the project. The government may contribute funding or resources to the venture or partnership and must support the private party's work, but essentially, it relies on the private party to deliver the asset or services to the government or to the intended

⁵ See, e.g., Grittner, supra note 3.

⁶ The Rockefeller Foundation: RF Catalytic Capital, Inc., available at: https://www.rockefellerfoundation.org/rf-catalytic-capital-inc/.

⁷ World Bank: Public-Private Partnerships in Health (2016), available at:

 $[\]underline{https://ieg.worldbankgroup.org/sites/default/files/Data/reports/lp_Health_PPP_1116.pdf.}$

⁸ Patricia O. Sulser: Infrastructure PPPs in the most challenging developing countries: Closing the gap, IFLR (2018), available at: https://www.ifir.com/pdfsifir/IFC-Book-May-17-2018.pdf.

beneficiaries of the project. PPPs operate on a continuum, and the role of the private sector party can vary among some or all of the outlined activities.

PPPs should be used by governments in situations in which the "Value for Money" proposition for government is clear. Value for Money ("VFM") has been defined as "the optimum combination of whole-of-life costs and quality (or fitness for purpose) of the good or service to meet the user's requirements". ⁹ The advantages of transferring risk and a degree of control to the private sector must outweigh the apparent increased costs of contracting and financing with the private sector, compared to the traditional public procurement method of delivering the goods or services. Government must include in its analysis not only the risk-adjusted return requirements of the private partner (which may at first appear excessive), but also the technical and managerial experience, innovations, improvements and efficiencies the private partner brings to the service delivery over the project's life. And government must naturally consider what the realistic alternatives to including the private partner are. A VFM analysis typically includes a qualitative and quantitative component.

PPPs have been supported by private sector commercial investors and development finance institutions ("DFIs") across sectors primarily in commercial ventures that will generate revenues in sufficient amounts to pay project construction and operating costs and taxes, repay lenders and offer returns to investors. In traditional PPPs, private sector commercial investors expect to earn returns that are commensurate with their assumption of the responsibilities and risks associated with implementation and operation of the project or initiative.¹⁰ The private sector partner frequently raises debt from a diverse group of lenders to finance the PPP. The purpose of a PPP is generally to deliver needed public goods or services to underserved populations and also, crucially, to achieve broader measurable social and development benefits and impact. But the need for the private sector commercial investors and operators to earn adequate risk-adjusted returns has been an equally important objective. PPP structures are often complex, and they are rarely standardized or involve the exact same public and private sector investors, lenders and service providers.

Charities and philanthropic foundations have begun to participate in PPPs through newly established for-profit ventures. These for-profit ventures must adhere to strict rules in the offering of these opportunities and regarding their governance to minimize the chances of altering the nature of the sponsoring charitable or philanthropic organization.¹¹

In addition, new types of entities that enjoy the status of international organizations have evolved to help meet the challenge of funding and delivering essential health services. These international organizations include state and non-state members and governments, and are structured as a different kind of public private partnership. They draw on the skills of their member partners,

⁹ The Value for Money analysis for PPPs has been extensively described in academic texts and practical guides. *See, e.g.,* World Bank Institute (WBI) and Public-Private Infrastructure Advisory Facility (PPIAF): Value-for-Money Analysis Practices and Challenges: How Governments Choose When to Use PPP to Deliver Public Infrastructure and Services (2013), available at: https://library.pppknowledgelab.org/d/1922/download.

¹⁰ Sulser, *supra* note 8.

¹¹ See, e.g., WaterEquity's website at: https://waterequity.org and Patricia Sulser, Laura Hills, Barbara Day & Carol Mates: Impact Investing Issues List for 501(c)(3) Non-profit organizations creating a for-profit legal entity (2021), available at: https://www.convergence.finance/resource/c9bdecce-9b16-4936-85cf-2d035f7eae11/view.

combining the technical expertise of the development community with the business know-how of the private sector and allowing their members to achieve their own respective objectives (whether social outcomes, financial returns or a mix of both).

Examples of these types of public private partnerships in the global health space include Gavi, the Vaccine Alliance ("Gavi"); the Global Fund to Fight AIDS, Tuberculosis and Malaria (the "Global Fund"); and Stop TB Partnership and Medicines for Malaria Venture. Apart from the fact that these organizations all strive to tackle unique global health challenges, what these organizations have in common is that, unlike the World Health Organization and other traditional international organizations formed by treaty among countries or their governments, they bring together both state and non-state actors from a number of countries through a single legal entity in support of a discrete global health objective (e.g., immunization, tuberculosis, HIV, malaria).

These organizations have faced challenges of structure and governance and how to preserve their respective privileges and immunities as non-traditional international organizations. Yet, the impact of these organizations on health care in developing countries has been enormous. For example, from 2000 through 2020, Gavi helped vaccinate more than 888 million children in 77 countries through routine immunization and supported more than 1.19 billion vaccinations through campaigns. Similarly, from 2002 through 2021, the Global Fund disbursed more than USD 50 billion in the fight against HIV, tuberculosis and malaria and for programs to strengthen systems for health across more than 155 countries, including regional grants, making it one of the largest funders of global health. 14

PPPs in the health care space in developing countries are common. They have successfully been used in interventions that are revenue-generating and in which private sector commercial investors (including DFIs) can expect to earn an acceptable risk-adjusted return.¹⁵ Nevertheless, while

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¹² One of the main structural challenges these initiatives face is around the most suitable institutional form for their coordinated governance and operations. Namely, one cannot form this type of partnership by a treaty, because some participants are not states and do not have the legal power to enter into a treaty under public international law. On the other hand, they cannot readily incorporate as a for-profit or non-profit company because some participants are states or treaty-based international organizations that cannot be subject to the national law of the country where the PPP entity is established. Recognizing a possible gap and an opportunity to host such hybrid organizations, in 2007, Switzerland enacted the Host State Act (more specifically, the Federal Act on the Privileges, Immunities and Facilities and the Financial Subsidies granted by Switzerland as a Host State, together with the corresponding Ordinance). This Act accords immunity from jurisdiction of domestic courts to organizations that are headquartered in Switzerland, have a purpose that is of non-profit and international concern, carry out activities in the area of international relations and whose presence in Switzerland is of special interest to Switzerland. *See, e.g., Clarke, L.C.:* Responsibility of hybrid public-private bodies under international law: A case study of global health public-private partnerships, University of Amsterdam (2012); Davinia Aziz: Global Public-Private Partnerships in International Law, Asian Journal of International Law (2012) and Timothy E. Nielander: Public-Private Partnerships in Global Development, Edward Elgar Publishing (2020). While these types of PPPs are beyond the scope of this paper, because of significant challenges to achieve the 2030 Sustainable Development Goals and the lack of confidence in the capacity of traditional international organizations to effectively address a number of persistent health problems in developing countries, we are likely to continue to see the proliferation of long-ter

¹³ Gavi, the Vaccine Alliance: Facts and Figures, available at: https://www.gavi.org/programmes-impact/our-impact/facts-and-figures.

¹⁴ The Global Fund website at: https://www.theglobalfund.org/en/overview/.

¹⁵ See, e.g., International Finance Corporation: IFC PPPs in Health, available at: https://www.ifc.org/wps/wcm/connect/Industry EXT Content/IFC External Corporate Site/PPP/Priorities/Health; and IDB Invest: Three Examples of Public-Private Partnerships in Health Care for Latin America and the Caribbean, available at: https://idbinvest.org/en/blog/financial-institutions/three-examples-public-private-partnerships-health-care-latin-america; https://www.dfc.gov/our-work/healthcare.

traditional PPP models have been used in infrastructure projects and development of public services, they have not necessarily been well suited to address diverse public health care initiatives that do not produce an adequate revenue stream, as expected by investors and lenders in PPP projects.

3) Expansion of the Impact investor community: blended finance approaches in health care bring more flexibility to support initiatives that are not financially viable

The key feature of this approach to health care funding in developing countries is the expansion of the pool of impact investors and the growing use of blended finance. This approach started gaining attention around 2012.¹⁶ In some PPPs, the financial model demonstrates that the program or project costs are greater or revenues are insufficient for the program or project to be financially viable and to yield adequate risk-adjusted returns for the investors. Similarly, in many instances, the business proposition has not yet been proven or financial returns are adequate but difficult to quantify or capture. For these reasons, it is therefore difficult to attract conventional private sector commercial investors. Some PPPs have therefore blended grant, concessional and/or impact investor funding to make the PPP "work"; i.e., to make the PPP financially viable. This is true in the health care space.¹⁷

Blended finance is the "strategic use of catalytic capital from public or philanthropic sources to increase private sector investment in sustainable development" 18. Sustainable development involves investments that are designed to achieve a particular sustainable environmental or social or development objective, often in developing countries. Blended finance structures have varied greatly and been developed on an ad hoc basis that can be difficult to replicate or scale up. "The common thread of these structures is that the concessional capital lowers the risk profile of a particular investment (for example, by bearing the first losses of the investment) to attract and provide comfort to commercial capital providers which seek risk-adjusted market returns. It is an important feature of blended finance structures that, while achievement of sustainable development goals is the primary motivating factor, financial returns are expected, with different capital providers having different return expectations and requirements based on their assessment of the risks of the investment and their strategic goals. Targeted returns can range from below market to market rates of returns, depending on the investor's objectives." ¹⁹ Selection of the appropriate benchmark and integration of non-financial metrics are a particular focus for projects structured using blended finance, including what alternative investment options, if any, correspond with the risk profile of the blended finance opportunity.

Blended finance is a particularly powerful tool in the health care space. By mixing and matching different stakeholders with different risk-return requirements (stacks of capital), a project that

¹⁶ Josh Michaud and Jennifer Kates: Blended Finance for Global Health: Summary of a Policy Roundtable (19 July 2019), available at: https://www.kff.org/global-health-policy/issue-brief/blended-finance-for-global-health-summary-of-a-policy-roundtable/.

¹⁷ PWC: PPPs in healthcare: Models, lessons and trends for the future, available at: https://www.pwc.com/gx/en/industries/healthcare/publications/trends-for-the-future.html; and International Finance Corporation, *supra* note 13.

¹⁸ See Convergence's website at: https://www.convergence.finance.

¹⁹ Convergence: Blended Finance, available at: https://www.convergence.finance/blended-finance.

would have been impossible using only private sector capital or only concessional or grant funding is possible. Examples of projects structured using blended finance are the building and operation of hospitals and implementation of projects offering fee-based medical and technical services. Health care projects needing blended finance to make them commercially and financially viable and attractive to private sector commercial investors have primarily involved concessional debt or equity, partial credit guarantees or other risk sharing instruments/risk insurance, design/preparation funding and technical assistance funds.

Key commercial investors have included such institutions as DFIs (such as International Finance Corporation ("IFC"), Netherlands Development Finance Company ("FMO"), United States International Development Finance Corporation ("DFC"), PROPARCO, Dutch Good Growth Fund and European Investment Bank) and impact driven funds (such as Calvert Impact Capital and Rockefeller's RF Catalytic Capital, each of which is a non-profit, charitable impact-driven fund).

Concessional funders have included, among others, the U.S. Agency for International Development ("USAID"), the Bill and Melinda Gates Foundation, FMO, the Rockefeller Foundation, IFC, Dutch Ministry of Foreign Affairs, Japan International Cooperation Agency, Private Infrastructure Development Group, Swedish International Development Cooperation Agency, the U.K. Foreign, Commonwealth & Development Office and the World Bank.²⁰

"Institutional investors" (such as pension funds, insurance companies, mutual funds, endowments, private foundations and sovereign wealth funds) hold approximately \$100 trillion under management and could provide the needed resources to dramatically scale up successful health care programs using blended finance approaches.²¹

"Institutional investors", for the purposes of this paper, are organizations that invest large amounts of funds on behalf of others, typically on a portfolio basis and by making allocations to "asset classes", each of which has a characteristic and return profile. Institutional investors can include pension funds, insurance companies, mutual funds, endowments, private foundations and sovereign wealth funds. Historically, institutional investors' motivation was to maximize returns for their beneficiaries. Today, many institutional investors balance financial and social returns through appropriate allocations of the funds they manage.

It is encouraging that many institutional investors have adopted principles for responsible investment that permit or require them to balance financial and social returns²², although financial returns still seem to underlie and be the key driver in decision-making. Many institutional investors continue to be required to maximize returns to their investors under management. Still, a number of institutional investors have been involved in blended finance transactions, alongside longer-established impact investors. However, institutional investors have not yet invested routinely or at scale in blended finance structures set up to deliver programs dedicated to the

²⁰ Global Impact Investing Network: What You Need to Know about Impact Investing, available at: https://thegiin.org/impact-investing/need-to-know/#who-is-making-impact-investments.

²¹ Kenneth Lay: Making Innovation Boring: The Key to Low-Cost Finance for "Public Goods", Foreign Affairs, The Rockefeller Foundation, available at: https://www.rockefellerfoundation.org/wp-content/uploads/FARockefellerFinalPDF 1.pdf.

²² See, e.g., BlackRock: Principles for Responsible Investment, available at: https://www.blackrock.com/corporate/sustainability/pri-report.

global public good.²³ This reflects, in part, the need for many institutional investors to invest in large ticket sizes and their historical motivation to maximize returns for their beneficiaries. It also reflects the idiosyncratic nature of the impact bond market to date, as discussed below. *Like PPPs, blended finance structures used in the health care space have primarily focused on underlying revenue producing, commercial propositions, even if the returns on such "commercial" ventures for some investors may be lower or less certain.*²⁴

Basic health care services for marginalized communities must often be provided by governments free of charge. However, many governments do not have sufficient budget or tax bases to pay for these services. For the world's poorest and marginalized, therefore, many essential health services have fallen to charitable organizations and philanthropic foundations and aid institutions to fund and deliver, where governments have not had the capacity.

4) Impact bonds: unconventional structures and varying degrees of private sector risk-assumption

Results-based grant funding, funding by private sector investors through PPPs and projects structured using blended finance involving impact investors to attract private sector commercial investors have successfully widened the types of entities involved in addressing the challenge of providing free or subsidized health care to marginalized communities. Their success in attracting private sector investment in health care projects and programs have primarily been in revenue-generating projects or programs. And each of these funding approaches has often been pursued in isolation to the other approaches, without fully drawing on techniques from one that might be useful to another.

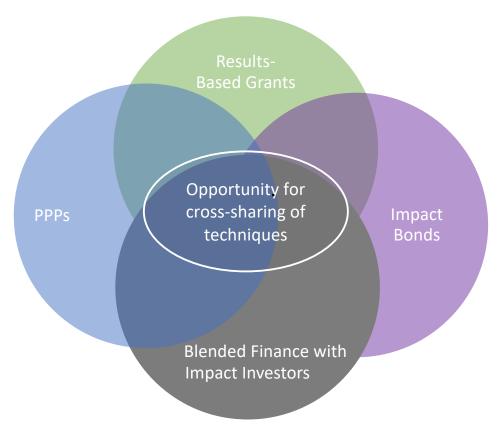
Given the enormous need and price tag of delivering adequate health care globally, charitable organizations and the newer non-traditional international PPP organizations like Gavi have been successfully exploring and testing new ways to crowd in private sector commercial, concessional and impact investors to deliver the types of health care programs and initiatives that are not inherently or directly revenue producing. The impact bond is one of the tools these organizations have used.

Impact bonds have done a better job of incorporating techniques of results-based grant funding, public private partnerships and blended finance approaches and have been able to attract private sector impact and commercial investors to fund both social and development programs that are revenue-generating and a number that are not. The diagram below shows the four funding approaches, with the overlapping area indicating where techniques from the individual approaches could be used to maximize a transaction's impact and scale up health care funding more generally.

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²³ Lay, supra note 21.

²⁴ International Finance Corporation, *supra* note 13 and IDB Invest, *supra* note 15.



What follows is a discussion of different kinds of impact bonds – social impact bonds (SIBs), development impact bonds (DIBs) and health care impact bonds (HIBs) – and some case studies illustrating how they have been used.

Social impact bonds

The development (in 2010) and evolution (since then) of the **social impact bond** (sometimes called "SIBs") "market" — is a most welcome development in the funding of health care in developing countries. Social impact bonds share many of the characteristics of results-based funding and PPPs, and often involve blended capital. SIBs and "pay for success" contracts are often used interchangeably, which can be confusing. Nonetheless, in many SIB transactions, private sector commercial and impact investors have joined donors to fund an organization that delivers a social program or services. The investors have relied on commitments to remunerate investors (often with a return) from the same governments that would have funded the organization's program over many years but, in many cases, in smaller allocated amounts if the investors had not invested. The first social impact bond involved an effort in the United Kingdom to raise private capital to fund a social program to reduce recidivism in the Petersborough prison population.²⁵ Other early

²⁵ Social Finance: Social Impact Bonds, The Early Years (2016), available at: https://socialfinance.org/wp-content/uploads/2016/07/SIBs-Early-Years Social-Finance 2016 Final.pdf.

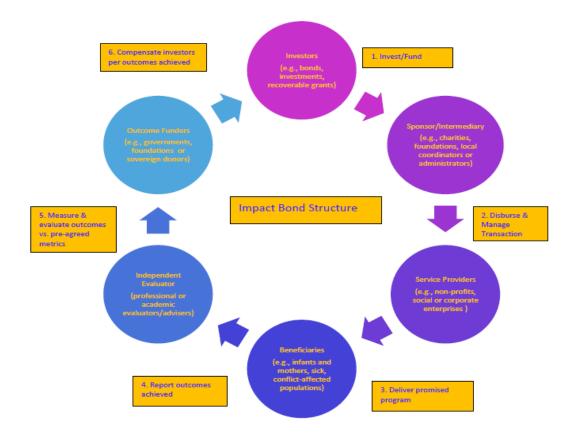
social impact bonds have supported efforts to reduce homelessness and to promote criminal justice, as well as addressing other urgent social issues.²⁶

There are many different iterations of impact bonds. The simplest impact bond structure involves private investors ("investors") funding a charitable or philanthropic organization or funding an international organization, which acts as a "sponsor" or "intermediary" of the proposed program or project. The sponsor or intermediary uses the investor funds to deliver, or to pay service providers ("service providers") to deliver, pre-agreed, achievable social outcomes on the ground. If these outcomes are achieved and validated by an independent validating agency and/or auditor, the host government (or, in some cases, the sponsoring charity or philanthropic organization) commits to remunerate the investors with a return in a bullet payment on a designated maturity date. Unlike some results-based funding programs where donors or investors do not fund until results are achieved, SIB investors often have wholly or partially funded up front. The government and other organizations that commit to compensating the investors are called "outcome funders" or "outcome payers". If the results are not wholly or partially achieved, the outcome funders do not repay or repay partially, depending on the risk appetite and requirements of the investors. Financing is therefore ultimately ensured by the public sector on the basis of actual results, while funding is provided by the private sector with the expectation of both a financial return and a social impact. In early social impact bonds, investors often included charitable or philanthropic organizations or impact investors dedicated to the social purpose equally or more than to financial returns, and therefore willing, to varying degrees, to take the risk that the outcomes were achieved.²⁷

Below is a diagram of a social impact bond involving sponsors/intermediaries and independent evaluators, as well as investors, service providers and outcome funders.

²⁶ Manchester Metropolitan University and USC Price: Social Impact Bonds 2.0: The First Ten Years, the Next Ten Years, available at: https://socialfinance.org/social-impact-bonds/ and McKinsey and Company: From Potential to Action: Bringing Social Impact Bonds to the US (2012).

²⁷ Social Finance, supra note 25.



This type of bond has not always involved private sector commercial (as opposed to charitable or philanthropic) investors that share the full risk of the service provider to deliver the program and impact. Charitable and philanthropic organizations, aid agencies and impact investors have been more willing to assume this risk. The impact structure can allow the government or sponsor to raise larger amounts of money earlier (which facilitates planning and reach). Importantly, it also relieves government of the need to fund the required amounts upfront and the risk of squandering scarce government resources (including tax dollars) on poorly executed social programs. This frees up the government to prioritize other urgent (sometimes emergency) activities.²⁸

The impact bond is structured similarly to a conventional bond with several notable exceptions that resemble a loan. In the capital markets, a bond is an investment security in which an investor lends money to a company or a government that has a credit rating, for a set period of time and usually in exchange for regular interest payments. The buyers of bonds (i.e., the lenders) may include the public: individuals (directly or through fund managers), pension funds, insurers, etc. Once the bond reaches its maturity date, the bond issuer (or its creditworthy guarantor) returns

²⁸ OECD: Understanding Social Impact Bonds (2016), available at: https://www.oecd.org/cfe/leed/UnderstandingSIBsLux-WorkingPaper.pdf.

the investor's original investment. Bond returns are normally fixed in amount, although there are floating-rate bonds with variable interest rates that allow investors to benefit from rising interest rates. Corporate bonds are issued by corporations for their corporate purposes or for an individual project. Sovereign or municipal bonds are issued by states, local regions, cities or municipalities (or entities they create) to finance the construction of roads, schools and other infrastructure. The interest on corporate bonds is taxable, but interest on government or municipal bonds is often exempt from income taxes. The issuance of bonds is regulated under securities laws in most countries. Bond documentation and bond issuances are highly standardized and the bonds are highly tradable and offer attractive returns that are commensurate with the risks associated with the bonds.

While a loan is also a debt instrument, in the corporate setting, a loan, in contrast to a bond, is generally considered a private transaction between an entity or individual (the borrower) and usually a bank (the lender). The lender loans the borrower money for a set period of time and charges interest on the loan. The borrower pays interest and repays principal, usually over the loan term. Loans and loan documentation vary greatly in their terms and the loans are not easily transferable or highly tradable. Nor are loans regulated by securities regulators as "investment securities".

As in the case of a conventional bond, an issuer of an impact bond borrows funds from (i.e., issues a debt obligation/bond or promissory note to) an investor for a certain period and there is an obligation to repay the bond at the end of the period (and sometimes with interim payments). However, instead of offering a fixed return, impact bonds are structured to pay a "return" component (and repay the principal itself) contingent on the "issuer" successfully achieving preidentified quantifiable outcomes, usually measured against established baseline levels. And unlike conventional bonds which are repayable based on clear financial metrics and reliant on the credit rating of the issuer or a guarantor, impact bond outcome results can, by their nature, be difficult to quantify and measure. This is why the development of clear outcome metrics and involvement of an independent, professional agency and/or auditor to validate the results on which the payments are based is critical. Social impact bonds are also affected by several more variables than affect conventional bonds, although they are not generally affected by interest rate or currency risk, reinvestment risk or market risk. However, social impact bonds are still subject to default.

Because of these differences and the unique features of each impact bond, impact bonds have not been recognized as "bonds" in the conventional, capital markets sense. *Indeed, many impact bond issuances have not been actual bond instruments at all, but rather customized, privately negotiated bilateral pay-for-performance arrangements among the stakeholders, and have not involved a public offering or formal private placement that complies with applicable*

securities laws.²⁹ As a result of this wide variation in structures and risks and rewards, it has been difficult to scale up the use of SIBs in a meaningful way.

Like simple outcome/results-based charitable models, impact bonds have the power not only to relieve governments of the need to risk scarce tax dollars on ineffective or poorly managed social programs or service providers, but also to fund the vast amounts of money up front that would be needed to provide services to marginalized populations. In addition, they can strengthen systems for the delivery of social services by incentivizing collaboration and to professionalize and instill rigorous quantification, monitoring and evaluation disciplines around outcomes and management of service deliver.³⁰ And they can attract private sector commercial and impact capital to the social purpose or charitable mission.

There are champions and critics of social impact (and indeed all types of impact) bonds. An excellent summary of the criticisms and analysis of them is provided by the Center for Global Development.³¹ Yet, nobody would argue with the notion that a key feature of impact bonds generally has been their flexibility and adaptability to the circumstances and stakeholders involved.

Development impact bonds

Development impact bonds (sometimes called "DIBs") built on the social impact bond structure and were designed to achieve development impact, with DFIs and a broader category of donors and philanthropic groups than governments or social agencies stepping up to become "outcome funders".³²

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²⁹ See, however, discussion below regarding the IFFIm public offering of bonds. Green bonds are also issued in the capital markets. However, they are designed to fund multiple investment programs or projects with a variety of different "green" objectives. While there is not a single definition of a green bond, elements common across many standards (including the International Capital Market Association's Green Bond Principles) include: (i) use of proceeds towards financing new or existing projects that have positive environmental or climate benefits, (ii) ongoing reporting on foregoing "green use" of proceeds and (iii) the provision of a second opinion by an independent third-party reviewer certifying the green aspects of the bond. See Baker McKenzie and IFLR: Critical challenges facing the green bond market (2019), available at: https://www.bakermckenzie.com/-/media/files/insight/publications/2019/09/iflr--green-bonds-(002).pdf?la=en. Sustainability-linked bonds are an outgrowth of green bonds and are also an important contributor to addressing global environmental and social challenges. See https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/sustainability-linked-bond-principles-slbp/. Some professionals view impact bonds as unlike any corporate or sovereign bond and more like loan transactions. See, e.g., Brunschwig, infra note 39.

³⁰ Emily Gustafsson-Wright and Sarah Osborne: Harnessing private capital and tying funding to results to build back better (2021), available at: https://www.brookings.edu/research/harnessing-private-capital-for-social-good-pay-for-success-to-build-back-better.

³¹ Center for Global Development: Investing in Social Outcomes: Development Impact Bonds, available at: https://www.cgdev.org/page/investing-social-outcomes-development-impact-bonds-0.

³² Center for Universal Education and Convergence: Impact Bonds in Developing Countries: Early Learnings from the Field (2017), available at: https://www.brookings.edu/wp-content/uploads/2017/09/impact-bonds-in-developing-countries web.pdf.

Case study: The International Committee of the Red Cross

A good example of and variation on how a development impact bond works is the structure launched by the International Committee of the Red Cross ("ICRC"). ICRC issued "humanitarian

Notable ICRC Bond Features

- Series of pay-for-success bilateral contracts
- Investors included private sector institutional investors
- Outcome funders included a significant bank foundation and creditworthy governments
- Repayment of capital partially at risk
- Returns based on outcomes achieved

bonds", where private sector investors included an insurance company (New Re) and Lombard Odier pension fund and charitable foundations and others, and outcome funders included governments and the socially conscious philanthropic arm of large banking group. Outcome funders will repay investors at the end of five years (in 2022) partially, in

full or with an additional return, depending on how well ICRC performs in terms of the efficiency of selected new rehabilitation centers. Specifically, the amounts payable by the outcome funders, and consequent returns to social investors, will be based on the defined staff efficiency ratio ("SER"), calculated by the number of beneficiaries having regained mobility thanks to a mobility device, divided by the number of local rehabilitation professionals. If the performance of the new centers is below the targeted outcomes, then investors will lose a certain amount of the initial investment. ICRC self-reports results data, which are used to calculate the SER and will be verified by an independent auditor. The auditor will visit a 5% sample of beneficiaries to confirm that they have regained mobility, based on a standardized physical functionality test used by ICRC.³³ Note that private sector stakeholders and outcome funders shared the risk of ICRC delivering the promised outcomes. ICRC itself has described the instrument informally as a "private placement".³⁴ Interestingly, in part because the program's funding was not structured as a conventional bond, it has since been renamed the ICRC Programme for Humanitarian Impact Investment (PHII).³⁵

(A table of key terms of the ICRC impact bond is attached as Annex 1.)

Health care impact bonds

³³ Ecorys: ICRC Humanitarian Impact Bond: A case study produced as part of the UK Department for International Development's Development Impact Bond Programme, with UK AID support, available at: https://golab.bsg.ox.ac.uk/documents/ICRC-Case-Study-v5-76YMUKa.pdf. Ecorys is an international provider of research, consulting, programme management and communications services.

³⁴ ICRC: The world's first "Humanitarian Impact Bond" launched to transform financing of aid in conflict-hit countries (2017), available at: https://www.icrc.org/en/document/worlds-first-humanitarian-impact-bond-launched-transform-financing-aid-conflict-hit.

³⁵ Government Outcomes Lab: ICRC Programme for Humanitarian Impact Investment (PHII), available at: https://golab.bsg.ox.ac.uk/knowledge-bank/indigo/impact-bond-dataset-v2/INDIGO-POJ-0057/.

In the health space, as in the DIB space, health care impact bonds ("HIBs") have largely been *ad hoc* structures built around the requirements of investors and outcome funders. Sponsors of these bond transactions seem to have tended primarily to be impact investors, charitable organizations and philanthropic foundations, NGOs, DFIs, or other international organizations. Stakeholders work closely with relevant local government agencies and service providers on the ground to deliver results. Many have included commercial and concessional commitments of DFIs (e.g., Department for International Development of the U.K., IFC, FMO and DFC) and international development agencies (such as USAID) and are backed by sovereign commitments.

Several impact bonds in the space stand out as good examples of structures that have varying degrees of risk-shifting to investors and commercial investor participation.

Case study: Gavi and the International Finance Facility for Immunisation

Notable IFFIm Bond Features

- Public bond offering based on developed country sovereign credits
- Investors included private sector institutional investors
- Billions of dollars raised
- Outcome funders included developed country governments
- Repayment of capital and returns only at risk if sovereigns in protracted arrears with the IMF.
- Returns not based on outcomes achieved

Gavi, through a separate U.K.-based charity called the International Finance Facility for Immunisation ("IFFIm"), has issued *public vaccine bonds*, which has allowed Gavi to accelerate the delivery of vaccines by making the money from long-term government donor pledges to Gavi available immediately. *The bonds have attracted a wide range of investors worldwide, in both institutional and retail markets.* Since 2006, IFFIm has successfully raised over USD 7.5 billion through 38 issuances in seven currencies in

Australia, Japan, Norway, the UK and the US. IFFIm has also issued sukuks in the Islamic financial markets.³⁶ Investors do not assume the risk that IFFIm or Gavi will deliver the promised outcomes. They are assured of repayment of the bonds by the irrevocable and legally binding commitments to pay pre-agreed amounts, as set out in the donor governments' grant agreements. Notably, donor government payments are conditional and governed by the grant payment condition, which stipulates that donors' payments to IFFIm can be reduced if a Gavi program country enters into protracted arrears with the International Monetary Fund. To mitigate this risk, IFFIm only issues bonds against part of overall donor commitments in order to provide a "cushion" between income from donor commitments and payments to bondholders.

The stated purpose of the bond was to frontload capital to enable Gavi to commit to the manufacturing and distribution of millions more vaccines than would have been possible relying only on annual, smaller government and donor funding. For example, if a donor government pledges USD 100 million to Gavi, paid in USD 10 million tranches annually over the course of ten years, Gavi would be limited to spending only USD 10 million each year and would have to wait ten years before seeing the full impact of the pledged funds. However, backed by this donor

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³⁶ IFFIm Resource Guide 2021, available at: https://iffim.org/sites/default/files/IFFIm-Resource-Guide-2021.pdf.

pledge, IFFIm issues its vaccine bonds in international capital markets and investors buy these bonds for an attractive rate of return, which makes funds immediately available to IFFIm. As the sole recipient of funds raised by IFFIm, Gavi then uses the proceeds of these bond issuances to purchase more vaccines to immunize more people in the world's poorest countries. The donor government's annual payments to IFFIm will go towards repayment to bondholders. Notably, IFFIm is fundamentally different from the other three case studies described in this paper. Strictly speaking, it is not a results-based instrument and could arguably be classified as a category of its own. The instrument could be adapted in a number of ways, allowing for — for instance — contingent commitments for future disaster relief, with donor government pledges becoming payable upon the occurrence of a pre-defined trigger event, such as the outbreak of a pandemic.

(A table of key terms of the IFFIm vaccine bond is attached as Annex 2.)

Case study: the Utkrisht Impact Bond

Notable Utkrisht Bond Features

- Series of pay-for-success bilateral contracts
- Investors included investment bank foundation, international advisor and service providers
- Outcome funders included pharmaceutical company foundation and USAID
- Repayment of capital and returns based on outcomes achieved

In the Utkrisht Impact Bond offering, dedicated to reducing maternal and infant mortality and promoting maternal and infant health, investors included UBS Optimus Foundation using UBS clients' funds, alongside co-investments from implementing partnership comprised of Palladium (a socially committed international advisor and manager) and two service providers. Outcome funders

included Merck for Mothers and USAID, which committed to repaying UBS first and then other investors if facilities achieved the pre-agreed quality standards at the end of three years. *Private investors took the implementation risk that the service providers did not perform to agreed metrics (like investors or lenders take commercial risk of their borrower). And the philanthropic foundation arm of Merck (and USAID) took risk as outcome funders.*

(A table of key terms of the Utkrisht Impact Bond is attached as Annex 3.)

Case study: the Cameroon Cataract Development Impact Bond

Notable Cameroon Cataract Bond Features

- Series of pay-for-success bilateral contracts
- Investors included DFC and a charitable foundation
- Outcome funders included a hotel foundation, another foundation and charitable organization
- Repayment of capital not at risk
- Returns based on outcomes achieved

Finally, in the Cameroon Cataract Development Impact Bond, investors included the DFC (then called Overseas Private Investment Corporation or OPIC) and the Netri Foundation, which provided upfront capital to operationalize a program designed to provide cataract surgery. Service

providers implemented the program and aimed to achieve a pre-agreed defined set of outcomes,

which included certain financial outcomes. If these outcomes were achieved by a set target date, the outcome funders were required to repay investors their initial investment plus a prenegotiated return. The investors were given a 100% capital repayment guarantee, to be paid by the outcome funders and the service providers. Investors only risked losing possible returns if the outcome goals were not achieved. DFC stood to lose up to 50% of its return if all outcomes were not achieved. The Netri Foundation stood to lose up to 100% of its return if all outcomes were not achieved. The outcome funders were The Conrad N. Hilton Foundation, The Fred Hollows Foundation and Sightsavers. Outcome payments were to be made in year 3 and year 5 and the risk of non-performance was split between the outcome funders and the service providers, which were liable to repay in the case of non-performance. Impact bond structures have been largely ad hoc structures and carefully tailored to the specific organization and the risk appetite of the investors and outcome funders. The purpose of the funding has also influenced the structure. The purpose of impact bonds has been to relieve governments or sponsoring organizations from heavy up-front funding of large social or development programs, to gather data for results, to test a structure or business proposition, to implement realistic but demanding results requirements, to instill rigorous monitoring and evaluation and management disciplines, or a combination of several of these objectives.

In some cases, as in the Cameroon Cataract Bond, in order for the bond offering to succeed, commercial investors have needed to be reassured that they will not risk losing their investment even if the service provider fails to achieve the pre-agreed outcomes. Similarly, in the IFFIm vaccine bond transaction, investors were certain to be repaid and indeed were repaid annually a portion of their investment.

(A table of key terms, including the performance-based compensation, in the Cameroon Cataract Development Impact Bond is attached as Annex 4.³⁷)

³⁷ Ecorys: Independent Evaluation of the UK Department for International Development's Development Impact Bonds (DIBs) Pilot programme (2019), available at: https://golab.bsg.ox.ac.uk/documents/Independent Evaluation of DIBs Pilot Programme Full Report.pdf.

LESSONS LEARNED FROM HEALTH AND SOCIAL IMPACT BONDS

There are a number of excellent, learned and thorough reports on the development of the impact bond market and analyses of individual impact bond experiences. Many of these reports and analyses involved a systematic review of the data relating to impact bonds to the date of the relevant report. They provide useful lessons learned around, for example, the process of structuring and realizing the impact bond transaction, alignment of the parties and the challenge of developing objective, measurable outcomes that can be achieved in a few years, and building consensus around all of these aspects.³⁸ The following lessons stand out relating to the impact bond structure itself insofar as they point to constraints on attracting and retaining private sector, risk-taking commercial investors and outcome funders in the field. The lessons are drawn in part from the referenced materials and primarily from our own anecdotal review of impact bonds in the health care field, primarily impact bonds supporting non-revenue generating programs.

- Technical and financial assistance to humanitarian and social institutions to get up to speed
 on what is and is not possible is crucial. Many do not have the expertise (nor would they
 be expected to have expertise) and either fail to spot the opportunities for involving private
 sector players or risk spending a lot of time on ideas which have little prospect of
 materializing. Not every humanitarian or social institution is a good candidate to issue
 health impact bonds.
- Strong reputation and track record of the program sponsor and service providers delivering the intervention are crucial.
- Strong credit and track record of outcome funders (i.e., bond payors/guarantors or credit enhancement providers) are essential.
- Investors, especially private sector commercial investors or their foundation arms, may need some degree of capital protection, guarantee mechanisms, and/or early termination clauses to help mitigate the risk of the program not fully delivering promised outcomes.
- Investors, especially private sector commercial investors, may require intermediate goals or milestones related to the outcomes and periodic payments, instead of a single balloon payment after several years. Organizations such as Social Finance now only use structures with multiple payment points, quarterly or even monthly. Earlier detection of implementation or evaluation issues and the consequent suspension of donations or exits has also given these organizations more room to iterate with project design at earlier stages to improve later project performance and more secure funding.
- Enhanced communications and interaction among key stakeholders in getting these transactions structured and executed are important because, in practice, different classes

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³⁸ See, e.g., Ecorys, supra note 33; Center for Global Development, supra note 31; OECD, supra note 28; Global Partnership for Results-Based Approaches: Results-Based Financing, available at: https://www.gprba.org/results-based-financing; Center for Universal Education and Convergence, supra note 32; Brookings: Outcomes-based financing: Impact bonds and outcomes funds, available at:

https://www.brookings.edu/product/impact-bonds/; Adva Saldinger: Devex Invested: Lessons from 10 years of development impact bonds (2022), available at: https://www.devex.com/news/devex-invested-lessons-from-10-years-of-development-impact-bonds-102841; USAID's Center for Accelerating Innovation and Impact: Investing for Impact (2017), available at:

https://www.usaid.gov/sites/default/files/documents/1864/investing-for-impact-aug2017-508.pdf; Roger Drew and Paul Crist: Evaluating Development Impact Bonds, A Study for DFID (2015), available at:

https://assets.publishing.service.gov.uk/media/57a0896b40f0b64974000092/DIB_Study_Final_Report.pdf.

- of investors (private sector commercial, institutional and concessional) have tended to operate in silos and do not communicate.
- Consideration needs to be given as to the tradeoffs and extent of involving investors in the design of the intervention. On the one hand, involving sophisticated investors early in the structure design and the terms and conditions of the impact bond can help avoid later surprises. On the other hand, many investors are not specialists in the design of these programs, and getting them involved too heavily in the governance and implementation of the intervention may create complexity, disagreement and gridlock (e.g., around determination of performance metrics).
- If possible and consistent with the sponsoring organization's purpose, it is helpful to charge some, more financially stable, users an affordable or subsidized amount for the service to create a limited revenue source. This should be balanced against any restrictions on the charging of such amounts (and the launch of the impact bond itself) under the organization's legal form under the relevant law or its constitutive documents. Most likely, the organization will have to demonstrate that it does not use such instruments as its main method of fundraising and that the proceeds will be used in furtherance of the organization's non-profit purpose.
- To supplement any revenue stream, it can be useful for the bond to be supported by a reserve account established to collect costs (e.g., providing health care to ill employees or their families and the impacts on businesses) that are normally budgeted for by government and can be avoided because of the program's intervention.
- To compensate for the high cost of a first-of-a-kind transaction, it is useful to anticipate and plan for a series of bond issuances, if the first pilot bond is successful.
- It is critical to anticipate the countries and laws that impose restrictions on the ability of the sponsoring charitable organization or NGO to issue impact bonds, to reimburse or repay investors their contributions or pay interest and other returns to investors. Other laws and constitutional documents may restrict public sector entities from funding private sector profits. Moreover, as impact bonds draw on both public funding and private investment, they will be subject to tax regulations and taxation on the returns of the investment. This should be accounted for in the financial model.³⁹
- Use of a single financing structure or pooled funding scheme (rather than a suite of bilateral contracts) is helpful both to reduce inefficiencies arising from investors and donors having unique investment requirements and also to build transparency and equitable treatment among investors and outcome funders.
- At the design stage, the organization is likely to have to consider whether to structure the scheme through a special purpose vehicle (SPV). An SPV is particularly useful if the transaction falls outside the scope of the organization's usual business activity and can also protect the organization from the legal, tax, financial and other risks associated with the transaction.⁴⁰ IFFIm is an example of an SPV structure for the issuance of Gavi's vaccine bonds. On the other hand, commercial investors and outcome funders may not be

³⁹ See Simon Brunschwig and Philipp Fischer: Swiss Legal and Tax Implications of Social Impact Bonds, Jusletter (2018).

⁴⁰ *Id. See also* Sulser, *supra* note 8.

- comfortable dealing with an SPV and may prefer to deal with the organization directly (which may have influenced ICRC's decision not to use an SPV for its impact bonds).
- It is critical to be able to justify and articulate the apparent "premium" paid by governments, taxpayers and program sponsors to private investors in terms of productivity gains, among other benefits of the impact bond.⁴¹
- Clarity of mission and specific, single purpose use of proceeds make the four case studies outlined in this paper stand out in the sea of ESG-themed issuances. This is different from, for example, some green bonds, where proceeds are being applied toward climate change mitigation, but at the same time, the issuer can engage in a much broader set of activities. Funds are not a panacea in this area.
- Related to this, outcomes should be as transparent and auditable as possible.
- For impact bonds to make their way into one of institutional investors' low-cost, long-term asset class allocations, impact bonds will have to demonstrate three key characteristics: credit quality, competitive returns and, to the extent possible given the usual bespoke nature of these instruments, liquidity.⁴² For public impact bond offerings, this means, among other things, that core government or other outcome funders must have strong credit ratings to support the bond's credit rating, if there is one. Alternatively, the bonds may require credit enhancement. The IFFIm program meets these three requirements.

RECOMMENDATIONS

Here are some recommendations to scale up private sector investment in the funding of health services in developing countries. These recommendations also apply to other sectors and thereby are offered as a way to catapult the broader impact bond market as well. These suggestions draw on techniques from results-based funding, PPP and blended finance practices, and the health impact bonds described. They are designed to be more likely to attract a broader class of risk-taking private sector commercial investors and outcome funders. The effect of broadening the investor and outcome funder base would relieve governments and charities of the entire burden of supporting essential health care programs. These suggestions are in addition to the many other published suggestions to improve and scale up impact bonds (including in the referenced sources throughout this paper):

Five broad recommendations

1. Standardize and design a single impact bond structure to attract a wider range of risk-taking investors and outcome funders.

⁴¹ Ben Parker: Saving lives and making money: Can humanitarian impact bonds marry the two?, The New Humanitarian (2019), available at: https://www.thenewhumanitarian.org/analysis/2019/08/15/humanitarian-impact-bonds.

⁴² Lay, *supra* note 21. Lay points out the opportunity to attract low-cost, long-term investment from institutional investors' liquid fixed income allocation for programs dedicated to the global public good. This opportunity depends on the bonds enjoying a high credit rating, liquidity and competitive returns. He also suggests an ambitious objective to create a diversified pool of and to securitize bond offerings for social and development programs with mostly common features. This may not be achievable across many disparate health care initiatives around the world, but could be possible across common programs across countries and multiple countries.

- 2. Articulate the narrative around broader impact, beyond the direct beneficiaries of the impact bond to crowd in a wider range of investors and outcome funders.
- 3. Articulate the VFM proposition and why the cost of involving private investors makes sense.
- 4. Manage the risk appetite of investors and outcome funders.
- 5. Establish a market and marketplace for impact bonds that cover charitable organizations and their non-profit (non-revenue generating) activities.
- 1. Standardize and design a single impact bond structure to attract a wider range of risk-taking investors and outcome funders
 - Create a single asset class.
 - The structure should ideally be a formal bond and be streamlined.
 - Conventional corporate terminology should be used.
 - Participation of underwriters engenders investor confidence.
 - Investors are encouraged to undertake full, conventional due diligence.
 - The bonds should have credit quality, competitive returns and, where feasible, liquidity.
 - External, reputable evaluators and rating agencies should be engaged for larger, sustained initiatives.

For impact bonds to be a recognized asset class and attract a broader group of impact and private sector commercial investors and outcome funders, there should be a consolidation of the types of "impact" bonds without a focus on the nature of the social or developmental purpose or types of outcome funders—i.e., create a single, asset class that is not fragmented across social, development, vaccine, humanitarian and other impact bonds. Indeed, a better way to categorize impact bonds would be based on any fundamental differences in structure (risk-return).

To the maximum extent possible, the "bond" should be an actual bond instrument rather

than a suite of bilateral contracts. And ideally, the basic structure of the impact bond and the documentation should be streamlined and made as uniform as possible and use more conventional corporate or sovereign bond market terminology, such as "issuer", "investors" or "purchasers" and, where relevant, "payors", "obligors" and/or "guarantors" of the bonds. After all, for investment banks that traditionally underwrite bond instruments, the sheer efficiency of modern capital markets means that the fees available for designing, underwriting and distributing an instrument from multiple disparate initiatives are so small that the "heavy lift" required isn't worth the cost. 43

The *ad hoc* bilateral contract approach has worked to date because organizations that seem to have been among the largest investors of impact bonds have tended to be buy-and-hold investors and focus on a single transaction or series of related transactions. However, the *ad hoc* approach is a significant limiting factor to replication and scaling up of private sector commercial investment for these programs. Streamlining and standardizing an instrument and process could be a challenge given the wide range of social and development programs, countries, governments and

⁴³ Id.

sponsoring organizations and service providers. However, they are important to attract and conduct repeat transactions with private sector commercial investors, and especially, in the right circumstances, institutional investors.

Commercial investors and other participants (such as underwriters and market makers) in the bond markets are fully equipped to understand and manage any unusual features of impact bonds relative to conventional bonds. They are also equipped to analyze any unique features and risks of the particular impact bond relative to other investment opportunities with comparable risk-return profiles. Participation by underwriters would also greatly help build confidence among investors in the impact bond instrument.

The sponsoring organization or issuer of the bonds should follow the customary ways of offering such investment securities to the public (e.g., as a private placement or public offering), consistent with relevant securities laws and market conventions. All of the impact bond risks should be fully and accurately described in a professionally prepared and vetted disclosure document, prospectus or information memorandum. Investors should be invited and ideally required to do due diligence regarding the issuer, the payors or guarantors, the service providers, the proposed data, metrics and process for measuring outcomes, as well as the other aspects of the proposed program and investment proposition. This type of due diligence is familiar to commercial and institutional bond investors, who routinely evaluate the projected financial success and credit of bond issuers (or their guarantors) and their ability to meet their operational objectives and repay the bonds.

Perhaps most important and as noted above, in order to attract the widest range of private sector commercial investors (and particularly institutional investors, where feasible), at the needed large scale, lowest potential cost and longest term possible, the impact bonds should embody the three key characteristics of public bonds: credit quality, competitive returns and, where feasible in light of the unique nature of these bonds, liquidity. ⁴⁴ The issuer and core government or other outcome funders (see Recommendations 2 and 3 for suggestions for expanding the universe of such entities) must have strong credit and a track record of honoring their financial obligations. Alternatively, a credit enhancement provider should be involved which has the requisite credit and track record. Ideally and where feasible, the impact bond obligors and bonds should have a formal credit rating from a recognized international rating agency, as in the IFFIm program.

It is worth noting that achieving standardization with respect to categorization and terms and conditions is likely to be much easier than achieving standardization with respect to the structure of financial instruments, given the highly idiosyncratic nature of the initiatives that these programs are trying to finance. The ability to compare risk and reward analyses is key to private sector commercial investors.

For larger and sustained initiatives, introduction of an acknowledged expert, international "rating" agency of sponsoring organizations' and/or service providers' track record of program delivery would also be welcome. By analogy, in the United States, Charity Navigator and Guidestar.org

⁴⁴ Id.

evaluate charities in terms of their financial stability, the percent of donations allocated to administration against program delivery, adherence to best practices for both accountability and transparency, and results reporting.

In recent years, several Environmental, Social, and Governance ("ESG") rating agencies have emerged that examine a company's ESG policies to determine its contribution to sustainability. Some ESG rating organizations provide an assessment of the ESG risks and opportunities of a company or relating to an investment or transaction. The U.S. Securities and Exchange Commission has recently proposed rules for public comment⁴⁵ that would require companies to disclose climate-related information in their registration statements and annual reports. The number and quality of ESG rating agencies, as well as the absence of a single, agreed methodology for measuring and monitoring ESG issues, are subjects of ongoing healthy debate. The existence of charity and ESG rating agencies emphasizes the importance of having adequate information and evaluations of that information to the charitable and philanthropic community and the commercial and financial markets. The same is true for the impact bond market and its participants.

In addition to the ratings described above, in order to attract institutional investors specifically, the bonds would need to have maximum liquidity and enjoy competitive returns. Liquidity can be provided by governments and their agencies or by DFIs (such as, in the case of the IFFIm bond program, the World Bank). Or investment banks involved in the bond program can act as market-makers as they do for traditional corporate and sovereign bond programs. Getting a credit and operational rating on the bonds (and ideally servicing them through clearing systems) can spur a secondary market in trading of these instruments, which can attract institutional and potentially retail investors dedicated to the social or development purpose. One must acknowledge, however, that not all impact bonds are suitable for public issuance, which can be expensive and come with regulatory, tax and other burdens. In these cases, standardization of contracts within transactions and across transactions is nevertheless strongly encouraged. This means having a "template contract", with the specificities of each contracting party addressed in an addendum, which amends specific provisions of the "template contract." 46

⁴⁵ "The Securities and Exchange Commission ('Commission') is proposing for public comment amendments to its rules under the Securities Act of 1933 ('Securities Act') and Securities Exchange Act of 1934 ('Exchange Act') that would require registrants to provide certain climate-related information in their registration statements and annual reports. The proposed rules would require information about a registrant's climate-related risks that are reasonably likely to have a material impact on its business, results of operations, or financial condition. The required information about climate-related risks would also include disclosure of a registrant's greenhouse gas emissions, which have become a commonly used metric to assess a registrant's exposure to such risks. In addition, under the proposed rules, certain climate-related financial metrics would be required in a registrant's audited financial statements." Securities and Exchange Commission, 17 CFR 210, 229, 232, 239, and 249, available at: https://www.sec.gov/rules/proposed/2022/33-11042.pdf.

⁴⁶ Brunschwig and Fischer, *supra* note 39.

Moreover, impact bonds will need to provide a competitive return compared to other bond opportunities available to the commercial or institutional investors.

The above standardization and features of the instrument and process may come with the burden and cost of compliance with securities and tax laws and regulations, and with the introduction of new players into the process. However, these modifications also have the power to open the impact bond market to many more types of private sector commercial and institutional investors, concessional and impact investors, and outcome funders, willing to assume the risks of social or development program delivery. They could also promote and facilitate trading of the bonds, where feasible.

2. Articulate the narrative around broader impact, beyond the direct beneficiaries of the impact bond to crowd in a wider range of investors and outcome funders

In addition to the *ex ante* and *ex post* metrics around the intended outcomes and impact, operational and financial results, the case should be made for the "ripple effect" and broader impact on the economy of the initiative. This can encompass the private or commercial entities and sectors that will benefit from the service provider's programmatic work. Direct beneficiaries

- The case must be made for the "ripple effect" of outcomes, beyond direct beneficiaries.
- Many entities along the supply chain can benefit.
- Knock-on effects for the economy and communities should be promoted.
- The larger development impact story helps to identify and attract more investors and outcome funders.

include, using the sample bond issuances mentioned above, the mothers or babies being cared for, and the patients having vaccines or cataract surgery. In each social or development program, many other people and organizations are involved in, and benefit from, the program achieving targeted outcomes, beyond the direct beneficiaries. For example, the following entities along the supply chain might benefit

(often regardless of the program being successful): manufacturers of medications and vaccines, transportation and logistics companies, hotels, local and international businesses whose workers can be expected to more routinely come to work and be productive if they receive adequate health care for their families. In addition, these businesses can expect to avoid lost revenues as a result of illness and the costs of retraining and rehiring staff. The government and broader community also benefit from achieved outcomes in the form of higher productivity of businesses generally in the community, and from avoided costs of illness and poor overall health being a drag on the government and economy. In many cases, avoided costs can be set aside as a reserve to act as a proxy for or boost of a program's revenue stream. After all, "an ounce of prevention is worth a pound of cure"; a "penny saved is a penny (plus return!) earned." These benefits can enable the government to raise taxes (including potentially raise higher taxes⁴⁷) from a broader base of citizens and companies and can strengthen the credit of government outcome funders.

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⁴⁷ Some governments in more developed environments have been able to use Tax Increment Financing ("TIF") program, where permitted by applicable laws and regulations. TIF funding allows a government to issue bonds backed by a program or project's future taxes, with the bond proceeds being applied to the payment of the project's implementation.

Using a wider lens to identify the broader impact of the program (as is done in the context of PPP analyses) can be a way to identify a wider range of stakeholders as investors or high-quality outcome funders. For example, Merck, which is a pharmaceutical company and vaccine manufacturer, is an outcome funder through its foundation of the Utkrisht Impact Bond; and Hilton, which is a hotel owner and manager, through its Hilton Foundation, is an outcome funder of the Cameroon Cataract Bond. In addition, insurance companies such as New Re, banks (such as CaixaBank through its social arm) and other financial intermediaries indirectly benefit from selling their products and services as a result of health impact bond programs. Each of these entities has stepped up, to varying degrees, to assume some of the risks of service providers delivering promised outcomes, either as investors and/or as outcome funders. Other potential investors or outcome funders could include other businesses in the community that are unrelated to the program, but which benefit from the overall better health care in the community. This larger development impact story must be data-based, able to be validated and achievable, but should not be included as part of the pre-agreed outcomes.

Moreover, promoting the "S" in ESG among the major institutional asset holders (such as pension funds and insurance companies) and their managers will help broaden their focus to social (ripple effect) returns in addition to purely financial returns.

DFIs are accustomed to quantifying and articulating these kinds of macroeconomic development impact results. Developing the larger development impact story is consistent with global PPP practice and the VFM proposition, and will therefore also provide the basis for DFIs to more routinely support programs and other initiatives that may not be inherently revenue-generating, including charitable and humanitarian purposes. These further or "indirect" beneficiaries of the initiative may need, for legal and tax reasons, to invest or be outcome funders through independent philanthropic arms, as UBS Foundation, Merck for Mothers, La Caixa Foundation, New Re, The Hilton Foundation have done. Given the challenge of quantifying projections of broader impact narratives, care must be taken to ensure compliance with the regulations governing projections in regulated prospectus and other offering materials.

⁴⁸ This is the kind of analysis, e.g., that must be made for PPPs for climate resilience or adaptation that are not directly revenue-generating. The equivalent of the cash resources of outcome funders of these climate resilience and adaptation projects must also be identified – e.g., government taxes (which are larger as a result of the improved resilient services), user pay models, enhanced land use, avoided costs. See Global Commission on Adaptation and Finance UNEP Initiative: Driving Finance Today for the Climate Resilient Society of Tomorrow (2019), available at: https://climatefinanceadvisors.com/wp-content/uploads/2019/07/GCA-Adaptation-Finance-background-paper FINAL-7-17-19.pdf and World Bank Group and GFDRR: Enabling Private Investment in Climate Adaptation and Resilience, available at: https://openknowledge.worldbank.org/bitstream/handle/10986/35203/Enabling-Private-Investment-in-Climate-Adaptation-and-Resilience-Current-Status-Barriers-to-Investment-and-Blueprint-for-Action.pdf?sequence=5.

⁴⁹ See Sulser, supra note 8.

3. Articulate the VFM proposition and why the cost of involving private investors makes sense

In each situation, the investment proposition should include a clear articulation of the VFM

- The investment proposition should include a clear articulation of the VFM analysis.
- There must be rigorous qualitative and quantitative VFM analysis with robust data.
- The VFM analysis should be made available to the public.
- This may be time consuming, but it is an important part of project preparation.

analysis. Involvement of private investors may appear to raise the overall cost to governments and philanthropies of the charitable program. However, many social or development programs would not be undertaken or might be much smaller and uncertain without up-front funding and risk taking by private sector commercial investors. Undertaking a rigorous and professional qualitative and quantitative

VFM analysis, including robust data to back up the business case, and making the analysis available to the public is an important part of project preparation.⁵⁰ This will, of course, take time, and it is important to take this into account when planning the project.

4. Manage the risk appetite of investors and outcome funders

- There should be equitable risk sharing among investors, funders, the sponsoring organization and/or service providers.
- Sponsoring organizations need to be familiar with risk-return requirements of potential participants and stakeholders.
- Forms of repayment and capital protection must be formalized and appropriate to the nature of the risk being taken.

To relieve governments and charities of the full burden of providing essential health care programs in developing countries and better align the various stakeholders' interests, investors, outcome funders, the sponsoring charitable or philanthropic organization and/or service providers should share the risk of the service providers to deliver the agreed results more equitably and in the most standard way possible. Corporate bond investors and lenders (and guarantors of

bonds or loans) routinely evaluate the capacity of an issuer to achieve its operational results to achieve financial targets, as well as reviewing the issuer's or borrower's (or guarantor's) credit rating, where relevant.

Moreover, sponsoring organizations also need to familiarize themselves with, and adjust their projects to, the risk return requirements of the various potential participants and stakeholders, including commercial and development banks, asset managers, insurance companies, foundations, national development agencies, governments, etc. The mindset of charitable and philanthropic organizations tends to differ from that of financial institutions. Therefore, understanding what is and what is not possible will be key to enabling charitable and philanthropic

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⁵⁰ Center for Global Development, *supra* note 28.

organizations to spot the right opportunities, on the one hand, while on the other hand not spending precious resources on projects that are unlikely to materialize because they simply do not align with financial institutions' core requirements.

Risk sharing can take many forms. To encourage a broader group of private sector commercial investors to invest and take risk, blended finance structures can be used, where necessary, to ensure that impact investors, concessional funders, aid organizations or outcome funders in the program either assume the first loss of the investments or provide some degree of capital protection. For example, these entities could provide a guaranty to pay some or all of the principal of the obligation notwithstanding failure of the program to achieve promised outcomes. Or, the program sponsor or services providers may agree to a deferred fee structure as part of a waterfall of cash flows. Further, private sector commercial investors may require interim payments and early opportunities to exit or terminate if the program is failing, with accompanying termination payments. Therefore, outcome funders may need to commit to making partial payments during the program implementation, possibly against key milestones achieved. Or they may need to repay at least some percentage of investors' contributions if outcome results are not fully or partially met. These repayment features will have the corresponding benefit of solidifying the nature of the bond instrument as a debt instrument familiar to investors in the corporate and government bond markets. If investors are expected to take the full risk that operational outcomes are not achieved, it is likely to be evaluated more like a charitable grant or equity investment.

5. Establish a market and marketplace for impact bonds that cover charitable organizations and their non-profit (non-revenue generating) activities

- There needs to be a formal, dedicated impact bond marketplace for finding investors.
- Sponsoring organizations can use the platform for issuing RFPs.
- The marketplace needs to be formalized with regulators undertaking rigorous vetting processes.
- Existing matchmaking platforms for blended finance and philanthropy can provide models for replication.

Finally, it is important to access or create an environment—ideally, the formal bond market or a dedicated impact bond marketplace—for governments, international and aid organizations, NGOs, charities and philanthropic foundations to find investors and outcome funders by sector, country and interest. Such a market could provide a platform for sponsoring organizations to issue Requests for Proposal and invite respondents to offer solutions to the problem being

addressed, much as governments invite bidders to suggest design and other solutions in competitive tenders for PPPs. A more formal impact bond market would need a regulator and manager that can operate an effective vetting process for the participants and types of transactions that would be good candidates for an impact bond structure (e.g., a reputable sponsoring organization or service provider with a successful track record of delivery, the right size and the type of program that does not involve delivery of urgent or emergency services). Organizations that have platforms and matchmaking services for blended finance and

philanthropy could be good models for designing such a marketplace – for example, Convergence Finance and African Venture Philanthropy Alliance.

Using a more formal bond instrument and standardizing the bond offering process in a marketplace along more conventional lines – and with attractive credit quality (and ideally credit ratings), liquidity and competitive pricing – will make impact bond transactions more accessible to a broader range of investors, including potentially institutional investors. Crowding in the private sector commercial investors is key to being able to meaningfully scale up investment and delivery of health care in developing countries.

Annex 1

ICRC Humanitarian Impact Bond⁵¹ July 2017

Sponsoring Organization: ICRC

Amount Raised: CHF 26 million.

Purpose of Blended Impact Funding: Raising funds for: (1) 3 new physical rehabilitation activities (in the Democratic Republic of Congo, Mali and Nigeria) outside of the traditional programmatic framework of the ICRC in order to serve more people and provide training to the new staff; and (2) developing and testing new efficiency measures, and building a Digital Centre Management System ("DCMS") to improve the efficiencies of the centers providing service. The aim of the bond is to increase the number of people with physical impairments gaining (or regaining) mobility through the provision of appropriate and quality physical rehabilitation services. In addition, the bond aims to improve the overall operational efficiency of physical rehabilitation centers, allowing them to deliver services in the most costand impact-effective manner possible, while still ensuring the high quality and appropriateness of services.

Issuer or "Borrower": ICRC is the main recipient of funds to be used to perform the above-described activities. No There is no SPV.

Service Providers: Funding will be provided to ICRC, which will use the proceeds for the above-described purpose.

Beneficiaries: 3 new physical rehabilitation facilities and their thousands of patients, as well as 8 physical rehabilitation pilot centers that will benefit from the improved efficiencies introduced.

Manager of Bond Offering/Lead Coordinator and Implementing Agent/Adviser: KOIS⁵² supported ICRC in the design and development of the bond offering. The government of the Netherlands provided a grant of USD 1.2 million to cover costs incurred during the set-up phase.

Instrument/Contract Structure; Governance, Location and Form of Offering: Not a classical bond, but rather a financing arrangement that allows ICRC to enter into "pay-for-success" contracts with donor governments, on the one hand, and private investors, on the other hand. ICRC describes its transaction as a private placement. Investors will be repaid at the end of five years by the outcome funders partially, in full or with an additional return, depending on how well the ICRC performs in terms of the efficiency of the new centers. Amounts payable by the outcome funders will be based on the so-called staff efficiency ratio (SER), which is calculated by the number of beneficiaries having regained mobility thanks to a mobility device, divided by the number of local rehabilitation professionals. SER results will be measured at the end of the program against historical SER rates of comparable centers.

The investors provide the working capital to launch the centers, paying a total of CHF 18.6 million. If the new centers operate less efficiently than past centers, the investors will make a loss on their investment and ICRC will be liable to make a loss payment equal to 10% of investor capital; however, if the centers deliver more efficiently, then the investors will recover their investment and can make a moderate return. In other words, the investors could lose a certain amount of the initial investment if outcomes are not fully achieved.

⁵¹ The outline of ICRC'S bond is based on ICRC's and Ecorys' descriptions. See ICRC, supra note 34 and Ecorys, supra note 33.

⁵² KOIS is an international impact investing firm that specializes in investment management and innovative finance services. *See* KOIS's website at: https://koisinvest.com/innovative-finance-impact-bonds-impact-funds/.

⁵³ Brunschwig and Fischer, *supra* note 39.

While ICRC and KOIS originally intended to have one contract, ultimately different contracts were needed for each outcome funder, due to their different requirements and respective legal frameworks. On the other hand, the investors agreed on one investor contract which was signed by all investors.

Investors: New Re (the cornerstone investor and a member of the Munich Re Group)⁵⁴ provided CHF 10 million, and Lombard Odier pension fund and charitable foundations and other private investors identified by Lombard Odier, the placement intermediary, provided CHF 8.6 million. This was paid in two equal tranches, in July 2017 and July 2018, which provided some capital protection for investors. *The investors take substantial, but not the entire, risk that ICRC will perform to the required metrics (similar to investors who take commercial risk of their borrower)*.

Results/Outcome Funders: Aggregate of CHF 26.09 million split as follows: CHF 10 million from the Swiss Confederation, CHF 9.31 million from the Kingdom of Belgium, CHF 3.21 million from the Republic of Italy. CHF 2.5 million from the United Kingdom and CHF 1.07 million from "la Caixa" Foundation, the foundation arm of the CaixaBank Group.⁵⁵ The final amount payable by the outcome funders will be based on the results of the program, payable in September 2022, with the exception of La Caixa's EUR 1 million funding, which will be payable upon the successful construction of the centers.

Independent Verification/Outcome Metrics to be Measured: Amounts payable by the outcome funders will be based on the SER, which is calculated by the number of beneficiaries having regained mobility thanks to a mobility device, divided by the number of local rehabilitation professionals. ICRC's self-reported results data, which will be used to calculate the SER, will be verified by an independent auditor. The auditor will visit a 5% sample of beneficiaries to confirm that they have regained mobility.

Expected Investment Return Rate: If the outcome measure is less than or equal to one (i.e., there is no improvement in the SER of the centers relative to the baseline centers), ICRC will make a first loss payment to the investors of 10% of the commitments. The return to the investors ranges from a loss of 11.3% per year (equating to a loss of 40% of their initial commitment) if there is a 100% deterioration in the SER compared to the benchmark, to a return of 7% per year (equating to 134.5% of the commitments) if there is an 80% performance improvement. Returns are calculated inclusive of the 2% annual coupon payments, that is, the annual interest paid to investors based on the amount owed if results are achieved.

Expected Impact: Thousands of people to gain or regain mobility in an efficient way (i.e., ideal SER is achieved) and improving their lives and becoming productive members of the economy and society.

Advisory Support: KOIS led the discussions with potential outcome funders. Their main focus was the outcome metric, outcome target, interest rate, capital protection and timing of payback. Contracting was a particular challenge as the legal frameworks in Switzerland and Belgium had no provisions for the humanitarian impact bond ("HIB") model. Other Advisors included: Norton Rose Fulbright and Oberson and Abels.

Ambition/Scaling Up Opportunities: The main advantages were that the HIB provided longer term upfront capital to ICRC, brought together existing ICRC partners and new partners, brought in private sector finance, which enables the funding of the DCMS and efficiency improvement measure testing, in addition to the three new physical rehabilitation program centers. The main disadvantages were that the HIB was complex to design and expensive to set up.

⁵⁴ See New Re's website at: https://www.newre.com/en/about-us.html.

⁵⁵ See CaixaBank's website at: https://www.caixabank.fr/historyoflacaixa en.html.

Annex 2

International Finance Facility for Immunisation (IFFIm)⁵⁶ (ongoing issuances)

Sponsoring Organization: IFFIm is a company limited by guarantee, registered as a charity with the Charity Commission for England and Wales. IFFIm's sole member is Gavi, the Vaccine Alliance (Gavi).

Amount Raised: As of 2021, IFFIm has successfully raised USD 7.6 billion through 38 issuances.

Purpose of Blended Impact Funding: The proceeds of the vaccine bonds help Gavi ensure predictable funding and more efficient operations. In addition, Gavi can frontload funds when necessary for rapid roll-out of new and underused vaccines. The impact of this innovative finance mechanism is best illustrated through an example: If a donor government pledges USD 100 million to Gavi, paid in USD 10 million tranches annually over the course of ten years, Gavi will be limited to spending only USD 10 million each year and will have to wait ten years before seeing the full impact of the pledged funds. But backed by this country donor commitment, IFFIm issues its vaccine bonds in the international capital markets and investors buy these bonds for an attractive rate of return, which makes funds immediately available to IFFIm. As the sole recipient of funds raised by IFFIm, Gavi then uses the proceeds of these bond issuances to purchase more vaccines to immunize more people in the world's poorest countries. The donor government's annual payments to IFFIm will go towards repayment to bondholders.

Issuer or "Borrower": IFFIm.

Beneficiaries: Gavi is the sole beneficiary of proceeds from the vaccine bonds, and the Gavi programs and the people who are vaccinated through the program benefit directly.

Manager of Bond Offering/Lead Coordinator: The World Bank, as IFFIm's treasury manager, manages its bond offerings.

Instrument/Contract Structure; Governance, Location and Form of Offering: These are classic bonds (similar to sovereign bonds), which have been issued in Japan, the UK, Australia and in the Eurobond market. IFFIm has also issued in the Islamic finance market. IFFIm has been rated AA-/Aa1/AA by Fitch Ratings, Moody's Investor Service and Standard & Poor's based principally on: (a) the high credit quality of its country donors (grantors or essentially the bond's outcome funders) and their legally binding commitments; (b) its politically compelling mandate to support immunization and vaccination in developing countries; and (c) its conservative financial policies and financial and risk management by the World Bank. IFFIm's vaccine bonds are secured by long-term commitments by donor countries ("grantors") made to Gavi. Grantors enter into legally binding obligations to make scheduled grant payments to Gavi over periods of up to 20 years. Gavi then assigns the right to receive these grant payments to IFFIm in consideration for IFFIm's agreement to assess programs presented by Gavi, and to use its reasonable endeavors to raise funds for such programs if approved. Principal agreements in this grant payment assignment process include: (1) grant agreement between country donor and Gavi under which the donor will commit to making grant payments to Gavi in accordance with the agreed grant payment schedule; (2) deed of assignment between IFFIm and Gavi to assign the rights, benefits, title and interest in and under the grant agreement to IFFIm; and (3) grant payment administration agreement between the donor, IFFIm and the World Bank to set out the procedural and administrative matters governing the making of the grant payments. The facility is designed to permit series of bonds, through pricing supplements, and not just a single bond offering. As in any classic bond issuance, key documents include the prospectus and accompanying pricing supplements, the trust deed, the subscription agreement, a finance framework agreement, the procedures memorandum and a treasury management agreement.

⁵⁶ IFFIm Resource Guide 2021, supra note 36.

Donors/Investors: IFFIm's donors (somewhat analogous to outcome funders in the DIB structure) are sovereign governments that want to accelerate the impact of vaccination through a flexible funding mechanism. Currently there are 10 donor countries: Australia, Brazil, France, Italy, the Netherlands, Norway, South Africa, Spain, Sweden and the UK. The bonds provide investors a portfolio diversification opportunity with attractive risk adjusted returns in a socially responsible investment, with clear and straightforward due diligence, while helping to protect the lives of millions of children. While investors do not take the risk that immunization outcomes are achieved, IFFIm's activities expose investors to three principal types of financial risk: (1) credit risk, (2) liquidity risk, and (3) market risk. These risks and IFFIm's mitigation strategies to address each risk are described below:

- 1. **Credit Risk**: IFFIm's credit ratings are closely tied to the credit ratings of its donors. A change in the outlook for, or a downgrade of, the credit rating of one of the major donors may cause one or more of the credit rating agencies to review its outlook or credit rating for IFFIm and to amend such outlook or credit rating accordingly. A change in the credit rating of IFFIm may affect the market value of IFFIm's debt. Key to managing this risk is maintaining the highly rated base of donors, their strong commitment to IFFIm, the irrevocable and legally binding nature of their pledges and the conservative financial management of IFFIm by the World Bank.
- 2. **Liquidity Risk:** Under its liquidity policy, IFFIm seeks to maintain an adequate level of liquidity to meet its operational requirements, provide predictability of program funding and support its credit rating. Taking these factors into account, IFFIm maintains a minimum liquidity equivalent to its cumulative contracted debt service payments for the next 12 months. Further, IFFIm's bond issuances are managed against the present value of expected future cash flows from the donor pledges, in view of the grant payment condition (described in paragraph (3) below) and other credit factors, in accordance with a tailored gearing ratio limit model.
- 3. Market risk: IFFIm's bondholders are subject to market risk comprised of interest rate and foreign exchange rate risks. IFFIm mitigates these risks through the use of interest rate and currency swaps. Donor pledges are swapped into US dollar floating rate assets and, at issuance, IFFIm's bonds payable are swapped into US dollar floating rate liabilities. Moreover, another risk unique to this structure is the fact that, although donors agree to irrevocable and legally binding payments of pre-agreed amounts over a number of years, their annual payments are conditional and governed by the grant payment condition (GPC). The GPC stipulates that donors' payments to IFFIm can be reduced if a Gavi program country enters into protracted arrears with the International Monetary Fund. Since IFFIm issues bonds on the basis of donor pledges, the fact that donor payments can be reduced because of the GPC presents a risk to bondholders. To mitigate this risk, IFFIm only issues bonds against part of overall donor commitments in order to provide a "cushion" between income from donor commitments and payments to bondholders.

Results/Outcome Funders: N/A. Unlike in the case of other bonds described in this paper, IFFIm bondholders do not take any risk of Gavi's programmatic success. Moreover, IFFIm is a stand-alone entity and Gavi has no obligation, contingent or otherwise, to pay any amounts under the bonds. The financial servicing and performance of the bonds depend primarily on the performance by each donor country of its obligations under the grant agreement to which it is a party and its covenant to make payments thereunder.

Independent Verification/Outcome Metrics to be Measured: IFFIm is not engaged with an independent entity to verify its impact metrics. Instead, in order for donors to measure and communicate the impact of their pledges, Gavi, IFFIm and donors have developed a method of measuring each donor country's share of the funding Gavi receives, as outlined below:

- 1. Gavi aggregates the present value (PV) of each donor's available future funds (i.e., those that have not already been borrowed against) over a given period to get the total available future funds.
- 2. Gavi uses this figure to calculate each country's pro rata share of total available future funds in that same period.
- 3. The pro rata share is applied to the funds IFFIm provides to Gavi over the given period to represent each donor's contribution.

Expected Investment Return Rate: The interest rate on IFFIm's bonds varies per issuance, but is similar to those of other similarly rated sovereign or supranational issuers.

Current/Expected Impact: Since 2006, IFFIm has provided approximately USD 3.7 billion to support Gavi's vaccination programs, enabling Gavi to immunize 80 million children ahead of receiving donors' grants and contributing overall to saving more than 13 million lives from 2006-2019. In the current strategic period (2021-2025), IFFIm is expected to disburse USD 2.2 billion to Gavi for its core immunization programs.

Advisory Support: The World Bank serves as IFFIm's treasury manager and performs the following functions for IFFIm: (1) execution of IFFIm's funding program, (2) liquidity management services, (3) accounting and reporting, (4) asset and liability management, (5) donor payment tracking and cash management and (6) management of gearing ratio. Additionally, the Gavi Secretariat donates services (legal, operational, administrative, etc.) towards the management of IFFIm. Moreover, as in the case of a traditional bond issuance, there are a series of advisers, including, for example, Slaughter & May (as English law counsel), Davis Polk (as the U.S. securities law counsel), Citibank and Banque Internationale à Luxembourg (as paying and transfer agents), JPMorgan, Goldman Sachs and other investment banks (as underwriters), etc.

Annex 3

Utkrisht Impact Bond ⁵⁷ November 2017

Sponsoring Organization: Several, led by Palladium.⁵⁸

Amount Raised: US \$8 million.

Purpose of Blended Impact Funding: Supporting private health care facilities in Rajasthan, India to achieve and sustain a standard of quality that will result in decreased maternal and newborn mortality. Demonstrating the impact of private health care facilities, as opposed to public facilities, on maternal and infant survival and health.

Issuer or "Borrower": Palladium is the main recipient of funds to be disbursed to service providers, who further disburse on the ground. There is no SPV.

Service Providers: Funding will be provided to Population Services International (PSI) and Hindustan Latex Family Planning Promotion Trust (HLFPPT) to support private (as opposed to public) healthcare facilities attain the level of quality that enables them to be certified under a joint quality standard consisting of the Manyata initiative, a new national certification and quality improvement system to recognize private facilities that consistently deliver quality care to the women they serve and the National Accreditation Board for Hospitals (NABH) Small Health Care Organisation entry-level certification. Private facilities make an important contribution in India to maternal and infant health.

Beneficiaries: Base case of 360 private healthcare facilities in Rajasthan, India; up to 444 facilities.

Manager of Bond Offering/Lead Coordinator and Implementing Agent: Palladium. Early stage structuring support (grant) from Convergence Finance⁵⁹.

Instrument/Contract Structure; Governance, Location and Form of Offering: This is not a classical bond instrument. Rather, UBS Optimus Foundation's funding to Palladium is required to be repaid by outcome funders within three years, with a three-month mobilization period and a four-month wind down period. Principal bilateral contractual arrangements include the following agreements: (1) agreement between the investor (UBS Optimus Foundation) and project lead (Palladium) for "investment", (2) agreement between outcome funders (Merck for Mothers and USAID) and the investor (UBS Optimus Foundation) for the "repayment with return", (3) agreement between the project lead (Palladium) and service providers (various contractors/service providers) and (4) agreement between the outcome funder (Merck for Mothers) and the independent verifier (Mathematica). Steering committee comprised of all stakeholders, including government, resides over the Project's direct Board. In addition, the government of Rajasthan signed a memorandum of understanding with Palladium, agreeing to help Palladium to develop the impact bond and providing for the government to sit as a non-executive member on the project's steering committee. Moreover, if the program is successful, the government will become the outcome funder for the next phase of interventions.

⁵⁷ Convergence: Utkrisht Impact Bond Case Study, available at: https://www.convergence.finance/resource/1AtarfuyM8suugqE06084Q/view.

⁵⁸ See Palladium's website at: https://thepalladiumgroup.com/about.

⁵⁹ Convergence offers grant funding for practitioners to design catalytic blended finance vehicles that aim to attract private capital to global development at scale.

Investors: UBS Optimus Foundation using UBS client's funds⁶⁰ contributed USD 3.5 million, alongside co-investments from the implementation partnership comprised of Palladium (USD 0.3 million) and the service providers PSI (USD 0.5 million) and HLFPPT (USD 0.5 million). Investment commitments total USD 4.8 million, aimed at covering working capital needs of the base case of 360 facilities. A portion of outcome payments were to be recycled as working capital, reducing the need to draw down additional investor capital. The co-investment from service providers equaled about 20% of working capital costs. *Investors take the risk that the service providers and beneficiaries do not perform to the prescribed metrics (similar to investors who take commercial risk of their borrower).*

Results/Outcome Funders: The investors will be remunerated by the outcome funders, Merck for Mothers⁶¹ and USAID (acting through its Center for Accelerating Innovation and Impact) if facilities achieve the quality standards, as certified by Mathematica. USD 1 million is set aside for independent verification and impact evaluation. The remaining USD 8 million is available for investors and service providers on delivery of results.

Independent Verification/Outcome Metrics to be Measured: Mathematica Policy Research verifies that centers are ready for accreditation under the new standard. The outcomes included lower neonatal and maternal mortality rates, as measured against pre-defined quality improvement metrics.

Expected Investment Return Rate: 7.1% is the expected investment return rate for the base case of 360 facilities. UBS Optimus Foundation has a first call on the distribution of outcome payments, up to a capped maximum return of 8%. Any surplus over 8% will be pooled with other surplus outcome payments as incentive payments for achievements above target (if any) and distributed to service providers. Foreign exchange risk associated with the currency mismatch between USD and Indian Rupee will be borne by the investors. Overall payments including investment return and incentive payments will be capped at 15% of the overall cost of the implementation activities.

Expected Impact: Up to 600,000 pregnant women impacted; up to 10,000 lives saved over a five-year period. For outcome funders, the latter estimate equates to a cost per life saved of approximately USD 900.

Advisory support: Social Finance was engaged in mid-2016 to advise on the design and structuring of the impact bond and continual oversight through financial close. They also supported the transaction through investor-friendly and media-targeted communications. This included developing the financial model that underpins the impact bond's outcome framework and the legal and governance framework around it. Instiglio, Reed Smith and Phoenix Legal provided advisory support.

Ambition/Scaling Up Opportunities: Use of the donor outcome funding model as a proof of concept for eventual local government outcome funding. By increasing the number of quality private facilities in Rajasthan, the program will demonstrate to the Rajasthan government a cost-effective way to channel government funding to private facilities that deliver quality maternal care.

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⁶⁰ UBS Optimus Foundation, the philanthropic arm of UBS, was familiar with both impact bonds and Rajasthan, having invested in Educate Girls in Rajasthan (one of the first impact bond pilots implemented in a developing country).

⁶¹ Merck for Mothers, known as MSD for Mothers outside of the United States and Canada, is a 10-year USD 500 million initiative by the global healthcare company Merck & Co., Inc. (Kenilworth, N.J., U.S.A) focused on improving the health and well-being of mothers during pregnancy and childbirth.

Annex 4

Cameroon Cataract Bond⁶² January 2018

Sponsoring Organization: Cataract Bond Design Coalition, which comprises the Conrad N. Hilton Foundation, The Fred Hollows Foundation and Sightsavers (the three outcome funders), the African Eye Foundation (founding organisation of the Magrabi ICO Cameroon Eye Institute ("MICEI")) and Volta Capital (bond manager and performance manager). One of the sources (Ecorys) describes the coalition as a partnership among leading non-profit eye health funders, private sector advisors and service providers.

Amount Raised: USD 2 million.

Purpose of Blended Impact Funding: Making the MICEI operational after construction was completed in 2016 with the ultimate goal of making the hospital self-sufficient after five years. The Africa Eye Foundation (AEF) built the MICEI to provide cataract surgery to address the problem of avoidable blindness in Cameroon.

Issuer or "Borrower": The MICEI is the main recipient of funds from this bond in order to meet the outcome goals as listed under the "Independent Verification/Outcome Metrics to be Measured" heading below.

Service Providers: MICEI, with guidance from the Africa Eye Foundation.

Beneficiaries: MICEI, cataract surgery patients.

Instrument/Contract Structure; Governance, Location and Form of Offering: This is not a classical bond; rather, it takes the structure of a development impact bond, where the investors (DFC (then called Overseas Private Investment Corporation or OPIC) and the Netri Foundation) are given a 100% capital guarantee, to be paid by the outcome funders and the service provider if the outcome goals are achieved. DFC stands to lose up to 50% of its return if all outcomes are not achieved. The Netri Foundation can lose up to 100% of its return if all outcomes are not achieved. Given this arrangement, the Cameroon Cataract Bond thus functions as a concessional loan for outcome funders where the interest is tied to outcomes.

Investors: DFC (then OPIC) and the Netri Foundation provided 87.5% and 12.5% respectively of the USD 2 million upfront capital in January 2018.

Results/Outcome Funders: The outcome funders are The Conrad N. Hilton Foundation, The Fred Hollows Foundation and Sightsavers. Outcome payments will be made in years 3 and 5, and *the risk of non-performance is split between the outcome funders and the service provider*, which is liable to repay in the case of non-performance according to the terms below:

• In year 3, 60% of the principal is repayable. If performance targets are met, outcome funders repay the principal at an 8% interest rate to investors. If performance targets are not met, 76.5% of the principal is repaid by outcome funders, and 4% interest to DFC only, and the service provider repays the remaining 23.5%, interest-free.

⁶² Global Outcomes Lab: Cameroon Cataract Bond, available at: https://golab.bsg.ox.ac.uk/knowledge-bank/case-studies/cameroon-cataract-bond/; Lorcan Clarke et al.: Development Impact Bonds Targeting Health Outcomes, Center for Global Development (2018), available at: https://www.cgdev.org/publication/development-impact-bonds-targeting-health-outcomes and Ecorys: Cameroon Cataract Bond: A case study produced as part of the Cameroon Cataract Bond Evaluation (2021), available at: https://golab.bsg.ox.ac.uk/documents/Cameroon-Cataract-DIB-Case-Study-v5 WO0x9E1.pdf.

• In year 5, the remaining 40% of the principal is repayable. If performance targets are met, outcome funders repay the principal at 8% interest rate accrued to investors and pay a bonus payment to the service provider of USD 120,000 if the equity target is met. If the performance targets are not met, outcome funders repay 55% of the outstanding principal to investors, and 4% interest to DFC only and the service provider repays 45% of the outstanding principal, interest-free.

Independent Verification/Outcome Metrics to be Measured: AEDES (European Agency for Development and Health) has been contracted as the independent evaluation agency. Outcome metrics to be measured against baseline figures include: the number of cataract surgeries performed annually, the quality outcome according to WHO guidelines, financial sustainability of the program at the end of 5 years, and targets pertaining to cataract surgeries performed on the bottom two wealth quintiles of the population⁶³.

Expected Investment Return Rate: Up to 8% interest on investment if outcomes listed above are achieved.

Expected Impact: The Cameroon Cataract Bond is expected to provide access to free or discounted eye surgery for over 18,000 patients who otherwise would not be able to afford it.

Advisory Support: The Cameroon Cataract Bond developed its outcome targets in consultation with the MICEI management team. The targets were then verified by experts such as the Aravind Foundation and the Africa Eye Foundation. The setting of these targets was based on the country demand for eye surgeries, benchmarks from other eye hospitals, the service provider's track record and WHO standards. Data from the Africa Eye Foundation was used to build the financial modelling behind the performance indicators. The quality indicator specifically aligns to the WHO's benchmark for a good cataract surgery outcome. Volta Capital serves as the bond manager and performance manager.

Ambition/Scaling Up Opportunities: The purpose of this impact bond seemed primarily focused on improving transparency and accountability, as well as improving the design of impact measurements and improved performance management. Implementation of a structure to allocate risk among public and private sector stakeholders was also achieved but not, seemingly, a primary purpose. As a result, some of the results might have been achieved and could in the future be achieved through a well-designed grant.⁶⁴

⁶³ This equity target does not have an outcome payment attached to it. It is a performance bonus given at the end of year 5 if the service provider succeeds in reaching the target.

⁶⁴ Ecorys, supra note 62.