



BACKGROUND NOTE

Developing Social Impact Bonds to Tackle Emerging Social Needs and Promote Social Welfare

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DEVELOPING SOCIAL IMPACT BONDS TO TACKLE EMERGING SOCIAL NEEDS AND PROMOTE SOCIAL WELFARE

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I. INVESTING WITH IMPACT: WHAT IS NEW?

Since 2012 impact investing has gained the attention of governments, philanthropic organizations, and businesses which are seeking innovative ways to address the root causes of social and environmental problems and to solve emerging welfare challenges. Impact investing has been defined by the Canadian Task Force on Social Finance (2010) and by the Global Impact Investment Network (GIIN) as active investments made with the intention to generate positive and measurable social (or environmental) impact alongside a financial return.

Impact investments target a range of returns (from principal to above market rate) and can be made in both emerging and developed markets, providing capital to address the world's most pressing challenges in sectors such as affordable and accessible basic social services, including housing, education, and health care (GIIN 2020).

Routed in the broader spectrum of social finance, impact investing is characterized by the fact that social and environmental returns are not incidental, but pre-defined and ex-post measured (World Economic Forum 2013; and Calderini et al. 2018).

According to the last GIIN survey (GIIN 2020) the impact investing market has grown in depth and sophistication over time by reaching a current market size of US\$715 billion (GIIN 2020). The term “impact investment” provides a broad rhetorical umbrella under which a wide range of instruments are currently grouped (Bugg-Levine and Emerson 2011; and Carè and Wendt 2018). Impact investments enclose private debt, publicly traded debt, private equity, public equity, real assets, equity-like debt, deposits, and cash equivalents.

On the subset of this emerging investment approach, social impact bonds (SIBs)—also known as Pay for Success in the United States or Social Benefit Bonds in Australia—are a relatively new funding mechanism for

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welfare programs able to leverage private investment for social interventions by transferring the risks from government and service providers to third-party investors that are only reimbursed if the desired social outcomes are achieved (Carè and De Lisa 2019; FitzGerald et al. 2019; FitzGerald et al. 2020; and Rania et al. 2020). SIBs' applications in low middle-income countries are known as development impact bonds (DIBs) and considered as a pioneering way to encourage private investors to fund international development projects that focus on the outcomes achieved (Loraque 2018).

II. SOCIAL IMPACT BONDS AND DEVELOPMENT IMPACT BONDS: HOW DO THEY WORK?

Since their introduction in the United Kingdom in 2010, SIBs received increasing attention from practitioners and scholars, being considered as one of the many innovative financing schemes that is able to monetize the benefits of social interventions and to redesign social programs through market-based solutions that are useful in enhancing the transparency and evaluation of public expenditures.

Conceived around the logic of “payment by results”, SIBs are, at the same time, financial instruments and social policy instruments routed on the idea that public savings and efficiency and effectiveness in social service delivery can be achieved with the help of private actors. The involvement of third-party investors who provide money to fund a social service program represents the main innovation and, at the same time, represents the main difference with other outcome-based contractual schemes because of their ability to catalyze social investments from capital markets (Edmiston and Nicholls 2018; and Fox and Morris 2019).

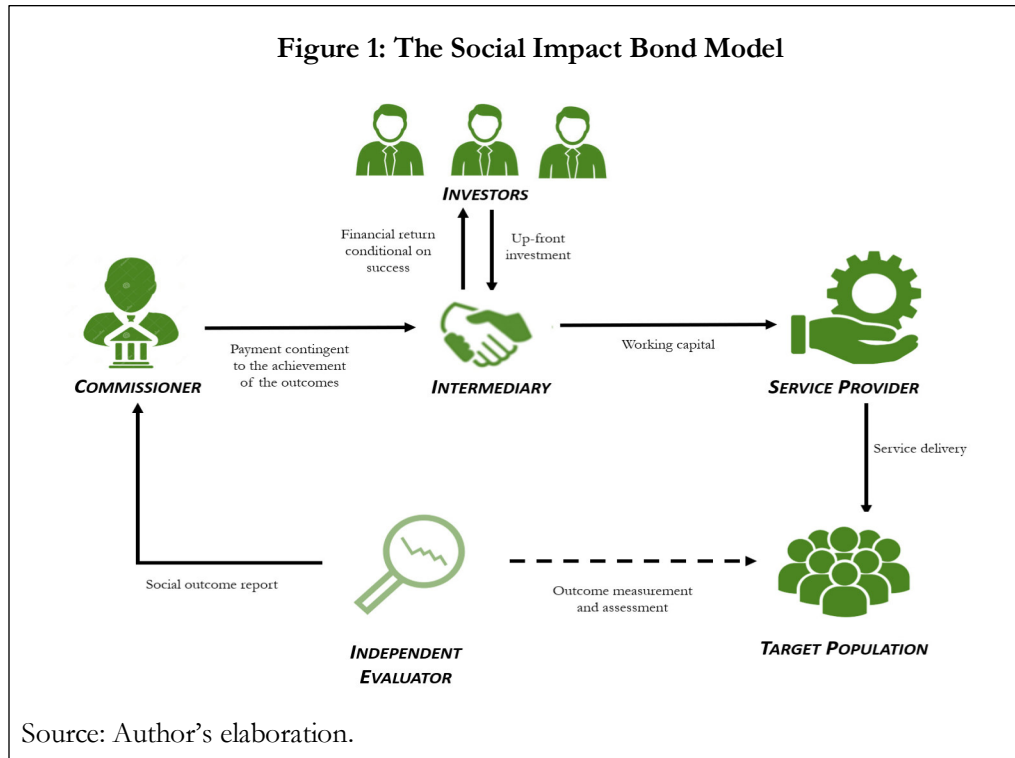
The rationale of SIBs is to support projects that, in case of success, will result in cost-savings for the government (or, more in general, for the public outcome commissioner) that are large enough to repay the initial capital provided by the private investors, and to provide a return on investment. Similarly but not identically, the rationale behind DIBs is routed on the idea to promote development projects in developing countries by using financial resources provided by third-parties, such as donors, philanthropic organizations, and development or international agencies, that are more willing to take higher risks to generate greater social impact (Development Impact Bond Working Group 2013). In more recent time, DIBs are seen as a remarkable instrument for the achievement of the United Nation Sustainable Development Goals (UN SDGs) because of their ability to connect private financing with critical development challenges and by transferring risks that the public sector cannot afford. An example of impact bond related to the United Nation 2030 Agenda is the “Rhino Bond” launched in 2015 by the United Nation Development Programme, the Global Environment Facility, the Zoological Society of London, and the United for Wildlife (a partnership between seven of the world's leading wildlife charities and The Royal Foundation of The Duke and Duchess of Cambridge) to

address illegal hunting and poaching and to boost conservation efforts in Kenya, Namibia, South Africa, and Zimbabwe. Under the project, investors will receive returns as payments against performance, such as the identification of conservation sites, improved protection of rhinos, and reduced poaching activities. Another example is represented by the Youth Employment Bond in Serbia, designed by the United Nations Development Programme and the Finnish Innovation Fund with the aim to provide funding for key services to long-term unemployed youth, such as skills development, career guidance, and entrepreneurship support (Department for International Development of the United Kingdom 2019).

Compared to traditional funding, SIBs are extremely interesting for commissioners (donors in the case of DIBs or public commissioner in the case of SIBs) as they transfer the risk to investors who put in the working capital for the service providers on the ground. Only “if” and “when” outcome indicators are met will outcome payers provide their contribution, including a potential bonus payment. Regularly measuring predefined targets enables the service provider to adapt quickly for any course correction and commissioners and investors to monitor the progress.

The SIB scheme is typically developed around a contractual agreement for the provision of public services by a private sector consortium (Carè and De Lisa 2019; and Rania et al. 2020). The best candidates for SIBs are programs with large upfront costs that serve large numbers of people, and with a strong evidence-based proof of effectiveness.

A SIB starts when an entity with a mandate to promote social welfare programs—typically public entities (governments, municipalities, and other kind of public sector entities), or philanthropic organizations/donors in the case of DIBs—decide to provide new and innovative programs in a specific social policy area and on a specific target population by playing the role of outcome commissioner. Different contractual schemes can be used to arrange the partnership between the private and public actors (Carè and De Lisa 2019). A classical SIB scheme is provided in Figure 1.



From Figure 1, the key aspects of SIBs emerge:

- (i) The outcome payer agrees to pay only in case of achievement of the scheduled social outcomes.
- (ii) The investors provide upfront working capital to the service provider, and receive a return only if the outcomes are achieved.
- (iii) Results of the program are verified by an independent evaluator, based on pre-agreed metrics.
- (iv) Advisors and specialized intermediaries support all the involved parties and manage the partnership/contract.

In the SIB model, investors provide the working capital needed to the service provider to start the service delivery and assume the financial risk for program failure. Through the SIB, investors can achieve a social impact in a targeted community; a financial return; diversify their portfolios; and improve their reputation. The partnership is usually managed by an intermediary, typically a classical financial intermediary or a specific social finance intermediary, who raises capital from investors and uses funds to support service providers who have a plan to address the targeted problem. The independent evaluator is a central figure in a SIB project by ensuring an unbiased evaluation of the outcomes achieved according to the terms and conditions of the contractual agreement. Depending on the evaluator's final assessment at the end of the implementation stage, the commissioner will decide whether to repay the investors. If the evaluators report that the service provider

has failed to meet the previously established goals for the SIB program, the outcome commissioner will neither reimburse the investors for their prior financial investment nor pay them the scheduled return.

The structure of DIBs reflect that of SIBs: investors provide up-front capital to a local service provider to deliver a specified intervention, but in contrast to SIBs, in which the outcome payors are usually public entities or local government, the outcome payors in DIBs so far have been foreign governments, nongovernment organizations, and multilateral organizations (Mitra-Majumdar 2017).

III. THE PROMISE AND CHALLENGE OF SIBS AND DIBS: THE CONCEPT OF SOCIAL IMPACT

Despite the growing attention around SIBs and DIBs, methodologies for measuring the social impact are still not standardized (Nicholls et al. 2015).

Evaluation and measurement represent the key feature of impact investing and SIBs being the main instruments demonstrate the social impact that these investments are able to obtain. Social impact can be defined as “all social and cultural consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organize to meet their needs, and generally cope as members of society” (Burdge and Vanclay 1996, 59). Three main reasons to measure social impact exist: (i) strategic planning and decision-making to maximize the value created, (ii) external accountability to investors, and (iii) assessing the holistic impact of an investment (Nicholls et al. 2015).

Currently used assessment and measurement systems span from social return on investment, cost-benefit analysis, social cost-benefit analysis, expected return method, mission alignment methods, Theory of Change, and experimental and quasi-experimental methods (Greve 2017; Nicholls 2018; and Tsotsotso 2020).

The social return on investment methodology—derived from return on investment used by traditional investors—is used to assesses the added social value strictly due, directly or indirectly, to a specific activity while the cost-benefit analysis is a general framework for the appraisal of public projects (Costa 2017). The Theory of Change, an approach drawn from the field of program evaluation, provides comprehensive description of how and why a desired change is expected to happen in a particular context (Jackson 2013) and is widely used in the impact investing industry. Differently, the randomized control trial is a methodology in which people, entities, or places are randomly allocated to one or more interventions and in which one of the interventions may be a control condition that receives no special treatment, and which is then construed as the counterfactual. This methodology aims to identify causal relationships by using the comparison of the different interventions in estimating their effects and a legitimate statistical statement in the results of the comparison (Boruch and Rui 2008).

Even though social impact represents one of the key elements for SIBs and DIBs evaluation, recent programs are experiencing new and alternative approaches to this concept. In this vein, for example, the Rikers Island SIB, launched in New York in 2012, focused on increasing employment among formerly incarcerated individuals, and has been designed around a randomized controlled trial. Success criteria was designed around the differences between members of the treatment group and members of the control group. Differently, the Peterborough SIB was based on propensity score matching which has been used to create the comparison group.

Another interesting case is represented by the Community Hypertension Prevention Initiative launched in Canada in 2016, in which the public commissioner was not motivated by public savings, and payments were not related to a mere future savings goal (Carè and De Lisa 2019). The program was developed around two main metrics: (i) intake volume metric and the blood pressure metric calculated by considering the number of people who submit to a blood pressure reading and sign up for the program, and (ii) the average change in blood pressure across all participants after 6 months. The idea to free outcome payments from public cashable savings makes the contractual structure more flexible. More in detail, from a public perspective, the idea to develop a SIB project without outcome metrics built around the boundaries of cost saving could potentially rely on the main goal of preventing a pressing health problem by considering a reduction in future costs for hospitalization and the increased overall level of wellbeing (Carè and De Lisa 2019).

IV. WHAT TO MEASURE IN SOCIAL IMPACT BOND AND DEVELOPMENT IMPACT BOND PROJECTS?

There is no clear and single definition of social impact evaluation, and there is not a unique outcome metric that could fit all projects. Naturally, policymakers and decision-makers also have to be sure that they know what is going on, especially in the wake of public sector expenditure growth. Life outcomes for children in foster care, people experiencing homelessness, or prisoners at risk of recidivism are converted into “quantitative” representations to be coupled with the accounting mechanisms that underpin financial investments (Cooper et al. 2016; and Mollinger-Sahba et al. 2020). Rather than being judged on whether they have delivered their intended outcomes, the ‘success’ of a SIB is a more “malleable construct”, seemingly determined by their innovativeness (Roy et al. 2017) and by their ability to provide financial resources for programs that, otherwise, would never have started. SIBs can engender innovation in service delivery, improve social outcomes, provide future cost savings, and stimulate partnerships and additionality (Edmiston and Nicholls 2018).

Proponents of SIBs have focused heavily on shorter-term outcomes that can be monetized by showing clear savings to government entities in line with the need to specify contract payments based on a narrow set of well-measured outcomes (e.g., reduced reoffending, improved school behavior, reduction in rough sleeping, number of children and young people who attended the program, reduction in homelessness, hospital bed days, and number of participants employed or in training) (Fischer and Richter 2017).

SIBs seek to achieve outcomes-based social impact for marginalized members of society. However, an oversimplification of outcome focus could induce opportunistic phenomena that focus on data to prove outcomes (Lowe et al. 2019; and Tse and Warner 2020).

Moreover, the focus on outcomes measurement leads to new forms of marketization of social outcomes. Dowling and Harvie (2014) present this concept as an emerging shift towards the financialisation of social value in public service delivery.

Looking to the sample of developed SIBs, performance indicators focus, for example, on elements such as how many patients to treat, how many students to educate, and how many children to take care of. At the same time, there is no clear and simple definition of best practice because of the limited number of closed projects and for which data are available. Since DIBs are structured around the desired outcomes, they should allow investors and service providers more flexibility to adapt interventions to achieve success than other input-oriented contracts (Development Impact Bond Working Group 2013). What is important to be understood is that measurement is more than metrics, especially considering that each program provides support to people in need, and the development of a standard evaluation model should not leave out the clear understanding of what is important to measure for each stakeholder involved in this kind of projects.

V. CLOSED DEVELOPMENT IMPACT BONDS IN THE ASIAN REGION: AN OVERVIEW

Social and development impact bonds are increasingly being applied across different sectors and countries (Clifford and Jung 2016; and OECD 2019). The SIB model was first proposed by the Ministry of Justice at Her Majesty's Prisons in Peterborough (United Kingdom) in 2010 and, since then, above 140 deals have been launched or are in a launching stage (Social Finance Database 2020).

As clarified before, DIBs represent the adaptation of SIBs in low-resource countries able to finance development programs with money from private investors who earn a return if the program is successful, paid by a third-party donor. Interventions span from different policy areas, including criminal justice, workforce

development, housing/homeless, health, child and family welfare, education and early years, poverty, and environment. The next sections provide an overview of two of the most important DIBs developed in the Asian region.

A. The Cambodia Rural Sanitation Development Impact Bond

The Cambodia rural sanitation DIB aims to bring safe sanitation to some of the poorest and most vulnerable households in Cambodia. The deal is the result of a partnership between the Stone Family Foundation, iDE, and the United States Agency for International Development (USAID). The program will develop market-based solutions that will contribute to universal sanitation coverage in six provinces (Kampong Thom, Kandal, Prey Veng, Svay Rieng, Siem Reap, and Oddar Meanchey) (USAID 2019). The DIB will use results-based finance to help the Government of Cambodia achieve by 2025 the UN SDGs target of 2030. Table 1 shows the key elements of the Cambodia rural sanitation DIB.

Table 1: Cambodia Rural Sanitation Development Impact Bond: Key Facts

<i>Launch date</i>	November 2019	<i>Service provider</i>	iDE
<i>Time from initial design to launch</i>	9 months	<i>Impact investor</i>	Stone Family Foundation
<i>Duration</i>	4 years (2019–2023)	<i>Type of investment</i>	100% at risk
<i>Cohort size</i>	1,600 villages	<i>Maximum outcome payments</i>	\$9,999,999
<i>Policy area</i>	Water, sanitation, and hygiene	<i>Outcome funder</i>	United States Agency for International Development
<i>Target population</i>	Rural communities across six provinces (Kampong Thom, Kandal, Prey Veng, Svay Rieng, Siem Reap, and Oddar Meanchey)	<i>Outcome metrics</i>	Open defecation free status for each village
<i>Overall objective</i>	To increase sanitation coverage to 85% in line with the National Action Plan for Rural Water Supply, Sanitation and Hygiene	<i>Feasibility study and design support</i>	Social finance

Source: Author's elaboration on publicly available information.

Currently, Cambodia has the highest rate of open defecation in the region and with 1-in-3 Cambodians using water from non-improved sources and with children that continue to be stunted and die from preventable sanitation- and water-related causes (UNICEF 2019).

The program is developed around the previous work done by the iDE's Sanitation Marketing Scale-up Program that increased latrine coverage in select provinces from 29% to 67% in the last 10 years. The use of this kind of outcome-based contract represents the shift from donor to impact investor of the Stone Family Foundation with the possibility to further recycle the investment in future new impact investments in case of success. The outcome metrics refer to the Government of Cambodia's definition of open defecation free status that is based on the following requirements: (i) 100% of households do not practice open defecation; (ii) at least 85% of households have access to a functional improved latrine in their own homes; (iii) all households dispose of infant feces into owned or shared latrines; (iv) no evidence of human excreta in the village environment; (v) households have handwashing device with soap; and (vi) the community has enforced informal and formal actions against open defecation (USAID 2019).

B. The “Educate Girls” Social Impact Bonds

Launched in 2015, the Educate Girls Development Impact Bond was the first international development projects aimed to help improve education for more than 7,000 children aged 6–14 in Rajasthan (India).

The program was promoted by the UBS Optimus Foundation that provided the upfront working capital of US\$270,000 and by the Children's Investment Fund Foundation that, by acting as outcome payer, promised to pay back the original amount plus extra returns to the initial investor in case targets would have been met (Table 2) (UBS 2018).

Instiglio, a nonprofit impact bond and results-based financing intermediary, provided technical assistance to all parties during the design and implementation stage of the DIB (Gustafsson-Wright and Gardiner 2016).

The program has been evaluated by using a randomized controlled trial approach. Moving from the two main outcome metrics, the evaluation has been based on the following methodologies:

- (i) **Learning gains** (accounting for the 80% of the total). The overall sample was composed by ~12,000 students in grades 3–5 across 332 schools in 282 villages. Half of these villages were randomly assigned to receive Educate Girls' program, while the other half formed the comparison group. The impact was calculated as the sum of learning gains of children in treatment villages minus the sum of learning gains of children in control villages.

- (ii) **Enrollment of out-of-school girls** (accounting for the 20% of the total). Percent of eligible out-of-school girls in treatment villages enrolled by the end of the program (IDinsight 2018).

The intervention was based on the identification of out-of-school girls through door-to-door surveys, explanation of the value of schooling to their parents, multichannel engagement with households with unenrolled girls, and multiple interventions to improve school attendance and prevent dropouts. Overall, 7,300 young girls were enrolled. The outcomes metrics were set around two main indicators: (i) learning gains and enrollment; and (ii) yearly evaluation by IDinsight, a nonprofit evaluation firm specialized in supporting policymakers and practitioners to make more socially impactful decisions and initiatives (Gustafsson-Wright and Gardiner 2016).

Table 2: Educate Girls: Key Facts

<i>Launch date</i>	2015	<i>Service Provider</i>	Educate Girls
<i>Raised amount</i>	\$270,000	<i>Impact investor</i>	UBS Optimus Foundation
<i>Duration</i>	36 months	<i>Type of investment</i>	Philanthropic
<i>Cohort size</i>		<i>Project IRR</i>	15%
<i>Policy area</i>	Education and early years	<i>Maximum outcome payments</i>	\$994,282
<i>Target population</i>	18,000 marginalized school-age girls	<i>Outcome funder</i>	Children's Investment Fund Foundation
<i>Financial intermediary</i>	Instiglio	<i>Independent evaluator</i>	IDinsight
<i>Overall objective</i>	The project reached 166 schools across 140 villages in Bhilwara		
<i>Outcome metrics</i>	<p>Outcome 1: Learning Gains: Aggregate learning gains for all students in grades 3–5 as measured by ASER test scores relative to control group.</p> <p>Outcome 2: Enrollment: Student enrollment defined by the out-of-school girls (between age 7 and age 14) enrolled in school by the end of the third year).</p>		
<i>Outcome targets</i>	<p>Outcome 1: >5,592 ASER learning levels above control group gains</p> <p>Outcome 2: 79% of all eligible out-of-school of girls</p>		
<i>Outcome achieved</i>	<p>Outcome 1: >8,940 ASER learning levels above control group gains</p> <p>Outcome 2: 92% of all eligible out-of-school girls enrolled</p>		

ASER = Annual Status of Education Report, IRR = internal rate of return.

Source: Author's elaboration based on publicly available information.

From the final evaluation report, impressive results emerge: 116% of the enrollment target and 160% of the learning target in its final year (IDinsight 2018; and UBS 2018).

At the end of the program, UBS Optimus Foundation recouped the initial funding plus a 15% internal rate of return, which equals US\$144,085 (UBS 2018; and Gustafsson-Wright and Boggild-Jones 2019).

VI. HOW TO GROW THE INTERESTS IN SOCIAL IMPACT BONDS AND DEVELOPMENT IMPACT BONDS?

Since SIBs and DIBs focus on outcomes, flexibility, and innovation in service delivery may represent the key approach for the achievement of the UN SDGs, especially in developing countries through the implementation of programs with greater impact and strong evidence to take the risk of investing. Under this perspective, investors may require evidence from rigorous experimental, quasi-experimental, or historical data-based evaluations to be able to attribute outcome achievement to the intervention.

Currently available information, based on SIBs launched and closed to date, show differences in both outcome metrics and evaluation methodologies. Recent academic literature and practitioner's reports indicated that SIBs and DIBs have the potential to increase social innovation in service delivery by strengthening the participation of all the involved stakeholders in the program monitoring through complex and expertise-intensive deals. By nature, the structure of SIBs and DIBs, based on an incentive-system scheme, is designed to promote the financing of project with high social (or environmental) impacts. However, even though the desired social impact is determined at the beginning of the deal, some important aspects influence their ability to achieve the desired goal. The following considerations should be considered to improve impact and scale of DIBs and SIBs:

- (i) **Right level of innovativeness.** Even though the academic narratives of SIBs and DIBs highlight their ability to strengthen innovation in social policy, impact investors may be more interested in the development of programs with previous evidences of success that are able to provide strong support, both for outcome metrics identification and measurement.
- (ii) **Increase standardization in evaluation methodologies.** Cases developed around the globe highlight a high variability in terms of methodologies used to measure and evaluate the outcomes of the projects. Under this perspective, by building a database of SIBs and DIBs, outcome metrics would facilitate the growth of the market by stimulating the interest of private investors that would be more willing to be engaged in investments for which returns can be clearly identified and measured.
- (iii) **Create a new approach to social impact and clarify the differences with the concept of program/project evaluation.** As highlighted before, the concept of social impact refers to the effects

that a program may have on a selected target of population. The desired social impact is identified at the beginning of the project and refers to the change in the life of the involved people that may be achieved. By using the case of the Educate Girls DIB, more than 7,000 young girls changed the course of their lives by obtaining scholar education. This result, that is the real social impact, should be analyzed separately by the program results that tell us the percentage of success and the outcome payments made. Similarly, in the case of Cambodia, the overall increased well-being of population after the sanitation program should be considered as a groundbreaking initiative to bring safe sanitation to some of the poorest and most vulnerable households in Cambodia.

In conclusion, SIBs and DIBs can make a real impact in the lives of vulnerable people, especially in developing countries where these kind of outcome-based programs can be a useful support for the achievement of development goals. These new funding models can attract private investors who are looking to get the best social return from their investment. However, there is an aspect that should be clarified: any investment made in social services create social value and positive impact in the lives of people touched by the service provided.

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