

An overview of innovative financing mechanisms for education in development contexts¹

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Question

1. What are the different examples of use of innovative finance mechanisms such as Social Impact Bonds (SIBs) and Development Impact Bonds (DIBs) in India or other low- and middle-income country settings to deliver results in primary and secondary education?
2. What are the nature of technical supports offered to implement these mechanisms?

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¹ This paper is the first part of a two-part study on innovative financing undertaken for DFID. The second paper is 'An overview of evidence of the impact of innovative financing mechanisms in education'.

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1. Executive summary

Traditionally, financing for social development in development settings has utilised bonds and guarantees. These mechanisms focused primarily on resource mobilization by leveraging the balance sheets of international finance institutions to make loans. However, since the mid-2000s, innovative financing has encouraged alternative models where private sector actors share the risks and rewards. For example through results-based financing mechanisms such as performance-based contracts or awards and prizes (Innovative Financing Initiative 2014: 1).

Innovative financing mechanisms such as those above have a dual role of, firstly, enabling a broad range of approaches to mobilizing resources. And secondly, increasing the effectiveness and efficiency of financial flows that address global social and environmental challenges (Lampert 2014: 5). Innovative financing is designed to complement traditional international resource flows, including aid, foreign direct investment, and remittances, and mobilize additional resources for development including through private investors (Innovative Financing Initiative 2014: v). Such approaches can often be categorised as 'results-based financing' (Innovative Financing Initiative 2014: 4) or 'payment by results' (Floyd et al. 2017).

From a developmental perspective, this emerging 'social development' model encompasses two recent and clearly-defined global trends: firstly, an increased focus on programmes that deliver results and, secondly, an increased drive to support collaboration between the public and private sector (Innovative Financing Initiative 2014: v). Among such approaches, 'impact investment' is a recent and growing model, implemented through multi-partner mechanisms such as Social Impact Bonds and Development Impact Bonds (Terway 2018; Floyd et al. 2017).

Evidence suggests that, in recent years, there has been a significant growth in the application of impact bonds in a range of global settings, including for education in LMICs. These mechanisms are seen to be particularly valuable when operating in complex, fluid contexts (REACH 2017), and, with appropriate design, can also contribute towards the development of wider systemic capacity. There is also an emerging literature offering guidelines for the development and implementation of these models. These form the basis of a range of technical support interventions that can be used to assist in their development. However, due in part to their relative newness, there also exist a number of issues over the perceived value of these models from a market perspective (Lampert 2014: 13; Innovative Financing Initiative 2014: 20), plus a lack of evidence on their effectiveness from a social development perspective (Terway 2018).

This study undertook a broad review of recent surveys on innovative finance mechanisms, with a particular focus on education in LMICs. This produced a longlist of approximately 20 different currently-used innovative financing mechanisms mentioned in documents published between 2010-2018. These include mechanisms associated with both international finance (i.e. for global education and/or donor-led finance) and domestic finance (i.e. country-specific mechanisms). In addition, across the documents reviewed, there is a large diversity of models featured: innovative financing is a complex area of research, with many possible variable models. In addition, there is a broad diversity of terminology used by different analysts and service providers to refer to largely similar mechanisms. As a result, the process of gathering and reviewing the documentation required to present a clear picture of the innovative financing field can be quite time consuming.

In terms of content, much of the literature on innovative financing for development discusses the mechanisms and procedures from the perspective of financial management rather than from the perspective of social development. In this context, the primary measures of effectiveness are in terms of each mechanism's ability to attract investment, mobilise resources and provide a return on investment (see, for example, Lampert 2014; Terway 2018; Innovative Financing Initiative 2014; Leading Group 2012; Loder et al. 2013). As a result, the literature places a particular focus on key developmental sectors seen as 'high-yield' (e.g. global health, agriculture and food security, and climate, environment and energy), and limits the discussion of education.

Finally, across the majority of documents looking at innovative financing, there is no substantial mention made of those specific mechanisms included in the request question itself: Social Impact Bonds (SIBs) and Development Impact Bonds (DIBs). Any information on these mechanisms comes from a small number of documents published since 2013 which look specifically at SIBs and DIBs. Within this, these documents are either associated with small number of education projects launched in development contexts within last 3 years, or draw on programmes previously launched in the UK or US (e.g. Floyd et al. 2017).

2. An overview of innovative financing for development

Introduction

This section provides a summary overview of literature on innovative financing for development, establishing the historical background for the emergence of innovative financing for development over the last decade, and outlining the current context for the application of such mechanisms at a general level. The section goes on to outline some of the challenges associated with innovative financing for development, as identified in the existing literature, and provides some further comment on the findings.

A historical overview of innovative financing for development

The use of innovative financing mechanisms for development has been an emerging trend in a range of global and domestic contexts for approximately the last decade.

Historically, developmental financing has utilised bonds and guarantees. These mechanisms focus primarily on resource mobilization by leveraging the balance sheets of international finance institutions to make loans: donors and national governments either promised to repay those loans in the future or accepted the risk that projects may not succeed. However, since the mid-2000s, innovative financing has encouraged alternative models where private sector actors share the risks and rewards, for example through results-based financing mechanisms such as performance-based contracts or awards and prizes (Innovative Financing Initiative 2014: 1).

In general terms, analysts present innovative financing in development, such as the mechanisms above, as having a dual role of, firstly, enabling a broad range of approaches to mobilizing resources and, secondly, increasing the effectiveness and efficiency of financial flows that address global social and environmental challenges (Lampert 2014: 5). This might include, for example, new mechanisms for using existing funds in an innovative manner to improve developmental results and to make the funds go further, and/or new mechanisms for raising and managing additional funds from new sources (Bellinger, Terway & Burnett, 2016, cited in Terway 2018). In short, innovative financing is designed to complement traditional international resource flows, including aid, foreign direct investment, and remittances, and mobilize additional resources for development (Innovative Financing Initiative 2014: v).

In terms of developmental sectors, much of the literature discussing innovative financing for development places a particular focus on financing mechanisms associated with key sectors including global health, agriculture and food security, and climate, environment and energy (Burnett and Bermingham 2010: 13). This focus has come about primarily because such sectors are seen by analysts to have strong potential for investment through technical innovation, and for high returns on investment. A number of analysts acknowledge that, in comparison with these high-investment-potential sectors, education in general requires long-term investment and offers only low financial returns for investors (Terway 2018; Innovative Financing Initiative 2014; Leading Group 2012).

Current and emerging trends in innovative financing for development

In terms of approach, it is suggested that innovative financing for development is shifting its goals away from a focus on mechanisms for the mobilization of resources through innovative fundraising and investment approaches, and towards a focus on mechanisms for the delivery of positive developmental outcomes through market-based instruments (Innovative Financing Initiative 2014: iv). As evidence of this, approaches to innovative financing for development over the last decade have seen a growth of mechanisms for investment in social development models, with current examples of targeted investment opportunities within agriculture, energy and infrastructure in particular (Lampert 2014: 11).

From a developmental perspective, this emerging 'social development' model encompasses two recent and clearly-defined global trends: firstly, an increased focus on programmes that deliver results and, secondly, an increased drive to support collaboration between the public and private sector (Innovative Financing Initiative 2014: v). Some argue that, in a development context, the third role of innovative financing is to encourage private sector or entrepreneurial expertise and knowledge, in order to help address specific sectoral, state-based or market-led failures in delivery and overcome institutional barriers (DFID 2015: 3).

Based on the above, Lampert (2014: 11) anticipates an increase in outcomes-based approaches to innovative financing within the development sphere. In particular, risk-sharing and incentives can attract private capital and private-sector engagement in developmental contexts, otherwise regarded as 'emerging markets'. Such approaches can be categorised as 'results-based financing' (Innovative Financing Initiative 2014: 4) or 'payment by results' (Floyd et al. 2017). These terminologies refer to mechanisms which use incentive-based payments to increase the performance of investments and to transfer risk from the investor that funds the delivery of goods and services to the company or NGO that provides the goods and services. Most results-based financing mechanisms, such as performance-based contracts and advance market commitments are direct contracts between the public sector and a non-state implementer, who may be a private sector partner, a CSO, an NGO, or a consortium of different stakeholder types.

As evidence supporting Lampert's anticipated increase in outcomes-based approaches, results-based or payment-by-results financing implemented through public-private partnerships has grown rapidly in value as a proportion of financing for development, from \$4 million in 2003 to \$1.3 billion in 2012 (Innovative Financing Initiative 2014: 4).

At the level of developmental policy, evidence of the adoption of this approach is present within, for example, DFID's 2015 strategic model focussing on 'development capital' (DFID 2015). This presents the private sector as 'a driver of growth and development' (DFID 2015: 1) and a key contributor of capital for the support of development (DFID 2015: 2). DFID's development capital strategy focusses on public investment in the private sector to achieve development objectives (DFID 2015: 1) rather than vice-versa. In this context, it is the public investor that is taking the risk, rather than the private sector partner. Under DFID's model, any investment returns are paid back from the private sector recipient to the public sector borrower, thereby releasing those funds for further public investment. DFID also argue that this model encourages the further engagement of private investors by using public funds to demonstrate the 'feasibility of private investment in geographical areas and sectors' (DFID 2015: 3).

As an aside made from the perspective of this study, it is important to note that DFID's development capital strategy makes no specific mention of education as a sector for investment, and instead focusses on those sectors already identified by commentators cited in this study as high-yield investment areas, namely: agriculture, infrastructure, climate and energy, and health (DFID 2015: 6). This is also reflected in the cases cited in DFID's strategy document.

Challenges associated with innovative financing for development

Despite its benefits, innovative financing for development, as represented by a range of results-based or payment-by-results models involving partnerships between public and private-sector stakeholders, currently remains a small component of public sector development assistance, whether at a global or a national level. Innovative financing mechanisms such as these represent only a small component of ODA, and an even smaller percentage of government expenditures in developing countries and foreign direct investment (Innovative Financing Initiative 2014: viii). While, in a developmental context, the public sector and the donor community has expressed strategic interest in engaging with the private sector, to date few successful and long-term partnerships have been formed.

Analysts suggest that there are a number of factors that are seen to contribute to this.

Firstly, at a global level, among a range of global development financing bodies there is no common, clear definition of innovative financing for development, and the language involved remains 'opaque and imprecise' (Lampert 2014: 13; Innovative Financing Initiative 2014: 20).

For example, the World Bank describes innovative financing as involving:

'non-traditional applications of solidarity, PPPs, and catalytic mechanisms that (i) support fund-raising by tapping new sources and engaging investors beyond the financial dimension of transactions, as partners and stakeholders in development; or (ii) deliver financial solutions to development problems on the ground'

(World Bank 2009, cited in Lampert 2014: 13 and Innovative Financing Initiative 2014: 3)

On the other hand, OECD describes innovative financing as comprising of:

'mechanisms of raising funds or stimulating actions in support of international development that go beyond traditional spending approaches by either the official or private sectors, such as: 1) new approaches for pooling private and public revenue streams to scale up or develop activities for the benefit of partner countries; 2) new revenue streams (e.g. a new tax, charge, fee, bond raising, sale proceed or voluntary contribution scheme) earmarked to developmental activities on a multi-year basis; [or] 3) new incentives (financial guarantees, corporate social responsibility or other rewards or recognition) to address market failures or scale up ongoing developmental activities'

(OECD 2009, cited in Lampert 2014: 13 and Innovative Financing Initiative 2014: 3)

The Leading Group on Innovative Financing for Development describe innovative financing as:

'mechanisms for raising funds for development, which are complementary to official development assistance and are 'aimed at correcting the negative effects of globalisation.'

(Leading Group on Innovative Financing for Development, cited in Lampert 2014: 13 and Innovative Financing Initiative 2014: 3).

While there is clearly some overlap between the concepts outlined above, there is substantial scope for misinterpretation of what the practicalities of innovative financing might actually involve. Some analysts argue that, in the context of international and global development, few institutions have the capacity, mandate, or experience with innovative financing mechanisms necessary to create new products or to evaluate the risks of existing ones (Innovative Financing Initiative 2014: 20). In a development context, the same issues may also exist at state or national as well as institutional level (DFID 2015: 3).

Secondly, analysts suggest that current innovative financing mechanisms lack the clear and compelling product definition that private sector investors require. Lack of standards, data, liquidity, and performance metrics makes it difficult for investors to assess innovative financing opportunities (Innovative Financing Initiative 2014: 23), and thus the opaque language and limited understanding of innovative financing business models seen in development financing contexts is seen to reduce the supply of private capital.

Thirdly, analysts suggest that innovative financing for development is hampered by what is described as an 'inefficient market'. For example, a lack of investment in design limits innovation and increases the costs associated with introducing new instruments. Creating new innovative financing mechanisms - especially mechanisms without evidence-based track records - can be very costly (Innovative Financing Initiative 2014: 24). The cost of developing and deploying new mechanisms, the limited participation of investors beyond the traditional aid community, and the lack of effective feedback loops have thus far prevented innovative financing from reaching its potential (Innovative Financing Initiative 2014: viii).

Fourthly, many current innovative financing mechanisms for development, particularly those still in the nascent stage, fail to offer risk-return profiles that fit investor requirements. Similarly, many models do not have enough performance data to establish a mature asset class. Newer mechanisms, including SIBs and DIBs, are still being developed and will require substantial support from concessional donors before they can attract private capital and scale beyond the pilot stage. As of 2014, no known DIBs had been successfully issued, although many were under development (Innovative Financing Initiative 2014: 7-8).

In commenting on the issues outlined above, it is noteworthy that these challenges are presented primarily from the perspective of *financial investment* actors rather than *social development* actors. As indicated by the availability of evidence in this field, the current literature on innovative finance is dominated by publications produced by bodies or institutions engaged with global finance and investment rather than those concerned with international development, and to a certain extent, it is their concerns that are reflected in any analysis of the challenges associated with innovative financing for development. There are some exceptions to this (see, for example Floyd et al. 2017; Drew & Clist 2015), but such considerations should be kept in mind.

3. An overview of innovative financing for education in developmental contexts

Introduction

The previous section set out the historical background for the emergence of innovative financing for development, and the current general context surrounding the application of such mechanisms.

Building on this, the following section looks in particular at discussions of innovative financing for education in a development context. It starts with a brief overview of what commentators suggest innovative financing might seek to achieve within the education sector, and goes on to outline the range of innovative financing mechanisms that analysts have associated with educational interventions since 2010. It concludes with some further commentary on the findings.

The objectives of innovative financing for education

In discussing the use of innovative financing mechanisms within an educational context, Burnett & Bermingham (2010) identify five possible objectives that any mechanisms might seek to achieve. These include:

- i. resource mobilization, to address financing gaps in education;
- ii. improving educational effectiveness, efficiency and equity, in particular relation to issues such as high levels of repetition and dropout, teacher absenteeism, regressive patterns of spending at secondary and higher levels, and inefficient private spending especially on tutoring;
- iii. profile raising, to ensure education receives appropriate levels of policy prioritisation;
- iv. meeting the educational needs of fragile and conflict-affected countries;
- v. stimulating innovation in education, in particular through exploiting the increased availability of new information and communication technologies to transform educational delivery by opening up the sector to new delivery mechanisms.

(Burnett & Bermingham 2010: 9, 14-15)

While Burnett & Bermingham are discussing the use of innovative financing for education at the level of global development, the majority of the objectives cited above are equally applicable as objectives for the use of innovative financing in a domestic or national context.

Potential models and mechanisms for innovative financing for education

Across the contexts of both international and domestic development, the literature cites a broad range of possible models of innovative financing for education, including payment-by-results and public-private partnerships alongside a number of other approaches. While both global and domestic financing models are cited, across the literature there is a particular focus on those that operate between parties operating at global or international levels.

Burnett and Bermingham (2010: 15-20) present over 20 different options for innovative financing for education, arranged according to various functional categories including: resource mobilisation at both international and domestic levels; effective international financial delivery; and effective domestic resource delivery. Examples of models cited include:

- Education Venture Funds (EdVFs)
- Conditional Cash Transfers (CCTs)
- Cash On Delivery aid (COD)
- Fast Track Initiatives (FTIs)
- Public-Private Partnerships (PPPs)
- Diaspora Bonds
- Debt Swaps
- International legacy funds

Refining these options further, CABRI (2012: 19) presents case studies associated with the following models:

- Cash on Delivery aid (COD), as an example of innovative finance from an international donor;
- The Education Venture Fund (EdVF), as an example of innovative finance from an impact investor in equity finance;
- Indian School Finance Company (ISFC), as an example of innovative finance from an impact investor in debt finance;
- The 2010 FIFA World Cup Legacy Trust, as an example of innovative finance from a philanthropic organisation;
- Diaspora bonds, as an example of innovative finance from the diaspora community.

In 2010, The Leading Group's Task Force for Education published a first report ('2+3=8, Innovating in Financing Education', 2010) which outlined 9 possible innovative financing mechanisms to broaden the fundraising base. In 2012, a further Leading Group report focussed on 4 of these mechanisms which were assessed as most likely to efficiently raise money for education in low-and middle-income countries as well as being best suited to overcoming inequalities in education. Although the 2012 report goes on to discuss a number of further initiatives, the 4 mechanisms identified as the most efficient were:

- the Education Venture Fund;
- Debt Conversion Development Bonds;
- Diaspora Bonds;
- Travellers Savings Fund for Development

(The Leading Group 2012: 8)

More recently, in addressing the issues facing out-of-school children and youth in particular, UNESCO (2016) summarise a broad range of 12 innovative financial mechanisms that may operate in providing access to primary and lower-secondary education. They also look at

examples currently used in specific low- and middle-income countries from around the world to enable access to primary and lower-secondary schooling. Those cited include:

- Education Impact Bonds;
- Debt Swaps;
- Corporate Social Responsibility (CSR);
- Diaspora Bonds and various forms of tax and excise.

Bellinger et al. (2016) assessed 18 innovative financing mechanisms for education against a range of criteria, including: positive impact on educational outcomes (access, equity, learning) globally; potential volume of additional finances; replicability and scalability; cost-effectiveness at scale; sustainability and predictability; and feasibility, ease, speed and cost of implementation.

Based on this, they then endorse 5 mechanisms as 'currently ready for implementation'. These include:

- *A global financing facility for Education (GFFE)*

An instrument that aims to raise the profile of a particular issue and to crowd in sustainable and scalable funds from donor, domestic government and private sources using both traditional and innovative financing mechanisms, as well as providing technical support to accelerate improvements in the relevant systems at country level (Bellinger et al. 2016: 5).

- *Outcomes-based financing*

Contractual arrangements where a principal (for example, multi or bilateral donor, foundation, etc.) transfers funds to the agent (for example government, NGO etc.) in exchange for the delivery of specified outcomes. For example, they cite the Education Outcomes Funds proposed by Social Finance (Bellinger et al. 2016: 6). It is assumed that this model is largely aligned with the models of 'results-based' or 'payment-by-results' financing cited elsewhere.

- *Education bonds*

A debt investment instrument that links resource mobilization to education development objectives. Investment is used to provide a sizeable amount of initial capital that can be re-paid over time (Bellinger et al. 2016: 6).

- *Loan buy-downs*

Arrangements where a third party buys down all, or a part of, either or both the interest and the principal of a loan between a country and a lending organization, thereby releasing the borrowing country from all or some of its future repayment obligation. That generates fiscal liquidity, which can be used to fund development (Results for Development Institute, 2013, cited in Bellinger et al. 2016: 6).

- *Student financing*

Funding provided directly to students or their families to fund educational access. Innovative elements include income-share agreements; the provision of student financing by non-banking institutions, and income-contingent loans. As a relevant example, they cite the African Student

Finance facility (ASff) developed by D. Capital Partners, a Dalberg company, which combines student financing with advanced market commitments (Bellinger et al. 2016: 6).

Finally, Terway (2018) focuses in particular on the emerging model of Impact Investment, an outcomes-based or payment-by-results model which is presented as a specifically socially-driven approach to private investor financing, rather than an investment-driven model. Impact investment is described as offering 'a middle way between pure philanthropy (grant-making) and pure financial investment (maximizing financial return)' and as such has the potential to drive financial value and social impact simultaneously (Terway 2018: 10).

According to Terway, there are high levels of interest in impact investment in education in 'emerging markets' around the world, making it highly attractive to businesses in general. Cited evidence includes:

- Edtech startups received approximately \$1.3 billion in funding in 2013 through venture funds and other sources (Winters & McNally, 2014, cited in Terway 2018);
- Merrill Lynch-Bank of America calculating in 2014 that the value of the education sector, globally, is \$4.3 trillion (Robertson and Komljenovic, 2016, cited in Terway 2018: 11);
- 2018 Business in Africa report calculating that the private investment opportunity for education in Sub-Saharan Africa in the next 5 years is worth \$13-15 billion in direct service provision, and \$3-4 billion in ancillary services (Terway 2018: 11).

Terway presents the following as current examples of impact investment mechanisms operating at different levels:

- The IDP Foundation: profitable microfinance lending to low-cost private schools in Ghana that are serving populations not reached by public schools, provided through a delivery model that includes extensive training in financial literacy and school management;
- Educate Global Fund, which raised £25m to invest in grassroots social businesses that significantly improve education outcomes;
- Kiva, a platform for non-profit microfunds that allows individuals to directly lend money via the internet to students and low-income entrepreneurs;
- The Education, Youth, Employment Bond launched by Inter-American Development Bank that raised over \$600 million (2014-15) from Wall Street, of which 81% was allocated to education projects.

(Terway 2018: 12)

Some conclusions

Firstly, in discussing the efficiency and effectiveness of these financing models associated with education, the majority of analysts cited above still focus on an assessment of the mechanisms in relation to the achievement of largely financial- or resource-based objectives e.g. raising, mobilising or distributing capital; procuring and supplying resources; providing a financial return on investment. Exceptions are Bellinger et al. (2016), who include 'a positive impact on educational outcomes (access, equity, learning)' as part of their assessment of mechanisms, and Terway (2018), who presents impact investment approaches as driven by social rather than financial outcomes.

Secondly, as discussed elsewhere, a number of analysts acknowledge that, in comparison to other developmental sectors with high investment potential, education in general requires long-term investment and offers only low financial returns for investors (Terway 2018; Innovative Financing Initiative 2014; Leading Group 2012). This is largely due to sector-specific factors in terms of outcomes, such as the importance of delivering at scale in order to attain impact and increase the value of investment-return margins, and the long time-horizon on yielding impact-based returns in the form of quality educational outcomes. As a result, it is difficult to encourage private investment in initiatives associated with the education sector in a development context (Innovative Financing Initiative 2014: 24).

However, in terms of reaching some conclusions on models and mechanisms, we can see that there is a certain amount of overlap on those financial mechanisms for education which are given particular priority by analysts. Specifically, there is a general consensus around the potential of Education Venture Funds (EdVF), Cash-On-Delivery aid (COD), and Diaspora Bonds.

However, the extent to which this consensus selection represents agreement over the best options for innovative financing in education is potentially undermined by the extensive variety of models and mechanisms cited. Furthermore, across the literature as a whole we find the same issues raised in relation to the discussion of innovative financing above (see Innovative Financing Initiative 2014: 23; Lampert 2014), where opaque language and the use of differing terminologies by analysts presents a potentially confused picture of a field with a proliferation of possible mechanisms.

In seeking to address this, when looking more closely at the models cited, many can be fit into two or three broader categories of financing types. Of greatest relevance to this study is the category termed as results-based financing (Innovative Financing Initiative 2014: 4) or payment-by-results (PbR) (Floyd et al. 2017: 1). Examples of mechanisms associated with results-based financing cited by the analysts above include:

- Education Venture Funds
- Cash-On-Delivery aid
- Various forms of Private-Public Partnerships

However, more recent examples of innovative results-based financing mechanisms for education that have combined these three approaches include Terway's (2018) impact investment approach, and the two mechanisms currently associated with it: Social Impact Bonds and Development Impact Bonds. As the specific focus of this study, these mechanisms will be discussed in the following sections of this study.

4. An introduction to impact investment and impact bonds

Introduction

This section looks specifically at those innovative financing mechanisms for education associated with the socially-driven approaches to financing known as ‘Impact Investment’. The section starts with a brief overview of the principles and practices associated with impact investment. It then goes on to discuss in more detail the forms of financing mechanism associated with impact investment: impact bonds, including Social Impact Bonds (SIBs) and Development Impact Bonds (DIBs).

An overview of impact investment

Terway (2018) presents Impact Investment as an investment approach that is driven specifically by social objectives, while still operating according to the more standard investment-and-return models offered by other approaches. Impact investment is described as offering ‘a middle way between pure philanthropy (grant-making) and pure financial investment (maximizing financial return)’ and as such has the potential to drive financial value and social impact simultaneously (Terway 2018: 10). Floyd et al. (2017) present this as one form within ‘Payment-by-Results’ (PbR) financing, but highlight the fact that, while most PbR contracts are delivered by large private companies, socially-orientated impact investment finds socially-minded investors paying the upfront cost of delivering a social intervention and receiving a return based on the success of that intervention.

The main mechanisms used under impact investment are Impact Bonds. These are described as results-based financing tools that help link socially conscious private investors with enterprises that aim to deliver social outcomes. In general terms, these mechanisms combine elements of investment against outcomes, public private partnerships and payment-by-results financing (REACH 2017: 6).

Key stakeholders

Typically, there are 3 key actors in an Impact Bond:

- a) An Investor
- b) A Service Provider
- c) An Outcome Funder

The Investor provides upfront capital to the Service Provider, who then delivers the identified services to a population in need. Upon the achievement of pre-agreed targets metrics, the Outcome Funder will repay the Investor their initial capital, plus a return. If the impact metrics are *not* met, the Investor is not repaid. The Outcome Funder only pays in the case that desired results are delivered (REACH 2017: 6).

The Investor is frequently a private business or individual with a specific interest in financing social development outcomes, or financial institutions operating on their behalf (REACH 2017: 5). As investors, they might operate at either a global or domestic level. The Impact Bond provides them with both a socially-driven and externally-verified investment opportunity, together with the

potential for a financial return. They regain their investment from the Outcome Funders, potentially with interest, but only if the outcomes are reached by the Service Providers (REACH 2017: 8).

The Service Provider is typically a local non-governmental or civil society organization (NGOs or CSOs). They are often small-scale agencies who work closely with the target community, and frequently don't have the revenue to take risks connected to new innovations. At a practical level, impact bonds provide them with upfront capital to deliver identified inputs that otherwise might not happen without the external financing. At a programmatic level, impact bonds can provide them with: flexibility over programme design and delivery, with no funder-dictated inputs or prescribed activities; an opportunity to demonstrate their effectiveness in design and delivery against results; an opportunity for external evaluation and audited evidence of impact. At an institutional level, impact bonds provide them access to capacity building support and technical assistance from private sector investors and intermediaries, including around delivery, cost effectiveness, and data collection and monitoring (REACH 2017: 5). It is also argued that the service providers are motivated to ensure delivery as a result of potential reputational risk: through the bond, more external attention is paid to their project, so if it does not go well, they may lose investors in the future (REACH 2017: 9).

The Outcome Funder is the institution or agency with a specific strategic or policy-led interest in seeing the agreed outcomes being achieved. The Outcome Funder will vary depending on the precise type of impact bond - a Social Impact Bond or a Development Impact Bond. In a Social Impact Bond, the Outcome Funder is the national government. In a Development Impact Bond, the Outcome Funder will be a third-party agency, usually operating in the sphere of social development at an international level: they might be a donor agency (e.g. DFID; USAID etc.), a foundation (e.g. Gates Foundation), or a private investor (REACH 2017: 6; Gustafsson-Wright et al. 2017: 8). Impact bonds provide them with the means of achieving specific developmental outcomes, but delivered, firstly, on a payment-by-results model, and secondly, with a reduced level of risk since the initial financial investment is provided by the Investor (REACH 2017: 6). It is also argued that the engagement of external investors frees up finances for the Outcome Funder to invest elsewhere.

However, in addition to the 3 primary stakeholders, impact bonds are usually supported by two further partners. Firstly, there is **the Evaluator**, an external body who assesses the project and verifies that the agreed outcomes have been achieved.

Secondly, there is **the Intermediary**: these are usually institutions with a particular focus on finance for social development. In the first instance, they work with the Outcome Funders to structure and design the bonds, raise capital and arrange negotiations. Secondly, depending on the capacity of the Service Provider, Intermediaries may also provide the service provider with technical support or capacity development related to financial management, or may also manage the programs on behalf of the primary stakeholders (Gustafsson-Wright et al. 2017: 9). This arrangement is particularly attractive to those institutions who operate as Outcome Funders, since it reduces the levels and complexity of their required input into programme delivery and management (REACH 2017: 6). However, in practical terms, the current limited field for impact bonds means that there are only 3 organisations known to be currently operating as Intermediaries: Instiglio, Social Finance UK and Dalberg Capital (Drew & Clist 2015: 11).

Finally, each impact bond may also involve other actors providing technical assistance, and/or legal advisors knowledgeable in this form of contracting (REACH 2017: 5).

The current status of Impact Bonds

As of January 2018, evidence suggests there are 107 impact bonds contracted globally. 104 of these are Social Impact Bonds, and 4 are Development Impact Bonds. The social sectors with the greatest number of impact bonds are (in order of frequency): 1. Health, 2. Agriculture, 3. Employment, 4. Education and 5. Social welfare.

At a national level, the UK hosted the first impact bond in 2010, and currently has the most impact bonds (36 SIBs), followed by USA with 16 bonds. The first impact bond in a low- or middle-income country (LMIC) was launched in 2015 in India. There are currently 28 impact bonds (27 DIBs, 1 SIB) in LMICs, most operating at a design stage. South Africa is the LMIC with the most impact bonds; other countries have 1-3 each (Gustafsson-Wright et al. 2017: 15-16; Social Finance 2019).

Social Finance (2018) state that there is an increasing application of Impact Bonds in low-income and developing countries, with a particular focus on health issues worldwide. They cite the International Committee of the Red Cross program in Congo, Mali and Nigeria, and the Overseas Private Investment Corporation investment in Cameroon as an example of this trend (Social Finance 2018: 3). They also state an increased growth of SIBs in Latin America, operating with the support of the Inter-American Development Bank: Mexico, Brazil and Argentina each launched new bonds in 2018 (Social Finance 2018: 2), although the sectors of focus are not given.

An assessment of the strengths and weaknesses of impact investment approaches

There are a number of described advantages to the approaches taken under impact investment and impact bonds. Firstly, this model is described as useful to governments or donors who, as Outcome Funders, need to access external risk capital. Secondly, since the model brings external private-sector investors into the mix, it is argued that that such partners bring a market-led approach and a different drive to achieving outcomes. Thirdly, since the programme activities are usually based on models previously verified by agencies involved in social development, it arguably reduces the levels of risk that usually limit the engagement of external investors (REACH 2017: 6; Gustafsson-Wright et al. 2017: 13). Floyd et al. (2017: 10) suggest that the benefits of impact bonds also include: testing innovative new approaches to tackling persistent issues, particularly where public sector bodies have a clear idea how much the problem currently costs to manage; and scaling up existing models when backed by a strong evidence base where providers can demonstrate the likely cost savings.

More specifically, as a model for delivery of social development outcomes, impact bonds are regarded as a suitable tool where there is a clear outcome identified. In general, in both design and implementation terms, there is a strong focus on outcomes: outcome funders see impact bonds as a way to draw attention to certain results by placing greater incentives to reaching them. The focus on results which emerges from the financing mechanism encourages service providers to adapt approaches in light of feedback, ensuring that interventions are focused on the achievement of the pre-agreed outcomes (REACH 2017: 11; Gustafsson-Wright et al. 2017: 13).

In terms of context, impact bonds are also regarded as suitable for programmes where there are a range of anticipated complex contextual factors to negotiate. For example, they are regarded as particularly useful in settings where there are a range of specific factors at play, where the results chain is not clear beforehand, and where a flexible and adaptive approach to programme design and service delivery may be required (REACH 2017: 6). Impact bonds are designed to allow for learning and programme change along the way.

At a systemic level, impact bonds are seen to have the capacity to improve existing performance management systems and encourage the establishment of new sector-wide systems in order to meet the need for the focus on outcomes and adaptation. The role of Intermediaries and Evaluators within the framework is central to this (Drew & Clist 2015). They are also seen to help build a sector-wide culture of systemic monitoring and evaluation (REACH 2017: 11; Gustafsson-Wright et al. 2017: 13).

It is argued that the multi-partner nature of Impact Bonds can encourage collaboration across the public and private sectors, and also across government both vertically and horizontally. For Outcome Funders, there is also the potential to increase collaboration between service providers working in the same sector and/or serving the same populations (REACH 2017: 12).

However, there are also some reservations over such claims. Firstly, in terms of programme design, Impact Bonds can work well in conditions where there is scope for innovation, including through the participation of new collaborative partners and stakeholders beyond state agency (REACH 2017: 6). However, in light of both the needs of investors as well as existing questions over the extent to which impact bonds can actively foster innovation while still attracting capital investments, any innovation also needs to be balanced by some evidence of the model working to deliver outcomes, e.g. by introducing interventions or practices that have worked somewhere else in the world (REACH 2017: 12; Gustafsson-Wright et al. 2017: 13; Drew & Clist 2015: 10). Further to this, Drew & Clist (2015: 10) point to an inherent tension within the impact bond model, in that investors have two separate incentives to invest - social and financial returns – and it is not always possible to ensure a positive correlation between the two, given that people often evaluate market-based and non-monetary transactions according to different criteria (Gneezy & Rustihini 2000, cited in Drew & Clist 2015: 10).

Secondly, while there are a range of hypotheses about why impact bonds may be preferable to other models of financing in particular situations, so far there is not an evidence-based case for choosing impact bonds over other funding models (Floyd et al. 2017: 12). More specifically, at a delivery level, there is not yet enough evidence available to show that Impact Bonds can be used to deliver projects at scale, or can be used to sustain impact beyond the project lifetime (REACH 2017: 12; Gustafsson-Wright et al. 2017: 13). In addition, while one of the rationales for impact bonds, particularly in a development context, is that they lead to better coordination between different parties, there is nothing inherent in their structure that guarantees better coordination (Drew & Clist 2015: 14).

Finally, from a financial perspective, it is not yet clear whether Impact Bonds actually reduce the risk of investment for government. Nor is there enough evidence that, by securing private investment in specific areas, Impact Bonds enable funding to be released to support initiatives elsewhere (REACH 2017: 12; Barder & Perakis 2014, cited in Drew & Clist 2015: 10). With this in mind, Drew & Clist (2015: 10) suggest that, in some cases, a better comparison may see impact bonds as an alternative to Corporate Social Responsibility (CSR) activities.

5. An overview of Social Impact Bonds

Social Impact Bonds (SIBs) are an innovative mechanism associated with an impact investment approach to financing for social development. They are commonly used in high-income settings, or settings with strong government-led public sector financing. Under a Social Impact Bond, you have 3 principle stakeholders:

- a) An Investor: a private sector party who provides the capital to fund attainment of specific outcomes
- b) A Service Provider: an NGO or CSO who undertakes the design and delivery of the programme that will deliver the specific outcomes
- c) An Outcome Funder: in a Social Impact Bond, the Outcome Funder is the national government, who repays the Investor their capital investment plus a proportional return at the point where the specific outcomes have been attained.

The principle stakeholders in any SIB are usually supported by two further partners: the Evaluator, an external body who assesses the project and verifies that the agreed outcomes have been achieved, and the Intermediary, a social financing institution who works with the Outcome Funders to structure and design the bonds, arrange negotiations and provide technical support (REACH 2017: 6).

An SIB is described by Loder et al. (2013: 43) as a payment-by-results contract where the financial risk is transferred to a consortium of investors. In an investment context, Loder et al. present SIBs as being 'sold on the basis that they will pay for themselves': namely, that the social development outcomes that will result from the bond will reduce long-term government spending, and thus cover the costs of the payment-by-results. Loder et al. (2013: 43) claim, firstly, that all large-scale SIBs to date have operated according to this logic and, secondly, that this is a powerful marketing point in a climate of financial austerity.

Social Finance (2018) present SIBs as working to overcome the challenges that governments have in investing in addressing particular social or developmental issues through prevention and early intervention (Social Finance 2018: 1). SIBs are seen to help governments mitigate against the financial and design-based risks of failure by engaging investors who want to test innovation and scale successful programmes. Investors provide flexible funding to programmes that are designed to be responsive to the needs of vulnerable groups to improve their lives (Social Finance 2018: 2). This perspective is also echoed by Loder et al. (2013: 43), who state that, since the government is typically the Outcome Funder, the outcome in question will generally be a socially valuable one - as a result, this makes SIBs attractive to social investors, combining a return on risk capital with social impact.

Further to the above, Floyd et al. (2017: 3-4) state that advocates of SIBs believe that they increase the availability and extent of resources to support social interventions, through the engagement of external investors, and support the delivery of better social interventions, since service providers have the freedom to prioritise outcomes rather than pre-set processes. SIBs are also seen to enable governments and other agencies to understand the extent to which specific interventions are effective, as well as 'paying for success' rather than funding interventions that do not work.

The current scope and scale of SIBs

Historically, SIBs were pioneered in the UK, and continue to have a strong presence both in the UK and the US working across a broad range of social sectors. In this context, much of the evidence cited by commentators (e.g. Floyd et al. 2017; Social Finance 2018; Innovative Finance 2017) is drawn from UK-based contexts.

In terms of SIBs and education in particular, according to the Social Finance SIB database (<https://sibdatabase.socialfinance.org.uk/> accessed 16.01.19), there are currently 9 SIBs with a particular focus on education and early years learning. Countries include: United Kingdom (1); United States (2); Canada (1); Portugal (1); Germany (2); South Korea (1); Sweden (1). From the perspective of this study, it is important to note three points in relation to this:

- Firstly, the number of education-focussed impact bonds are relatively low in comparison with those from other sectors (e.g. Workforce development – 37 SIBs; Housing – 23 SIBs; Health – 22 SIBs; Family welfare – 15 SIBs).
- Secondly, there only 2 impact bonds for education operating in contexts that might be described as low- and middle-income or as emerging economies, but both are *Development* Impact Bonds, rather than *Social* Impact Bonds, and as such will be discussed in another section of this study.
- Thirdly, both DIBs for education are operating only in a single country context - India.

We can conclude from this that, while there may be evidence of a growth in the use of SIBs in low- and middle-income country contexts, primarily due to the need for strong government financial capacity, their role in supporting education outcomes in such settings is still at a very early stage indeed.

Approaches to the design of Social Impact Bonds

Loder et al. (2013: 43) set out a number of conditions for a SIB as a payment-by-results contract to work. These include the following:

- An objectively measurable selection of outcomes on which to base the contract.
- Confidence that attainment of the measured outcomes come about as a result of the programme interventions delivered by the service provider, rather than by other actors or contextual factors.
- A fair balance of risk and return, so that both investors and the government as Outcome Funder find the arrangement attractive.
- Reasonable transaction costs, to ensure that the SIB offers value-for-money

(Loder et al. 2013: 43)

While the above indicates a clear strong alignment with the criteria set out by REACH (2017: 6-7) in relation to impact bonds more generally, it is worth noting that, unlike REACH, Loder et al. do not place a particular priority on alignment with government social policy priorities.

In terms of design and implementation, Floyd et al. (2017: 5-6) place a particular emphasis on the role of intermediary agencies in the creation and management of SIBs. Compared to funding models traditionally open to charity and non-profit organisations, such as grants and small fee-for-service contracts, many operating within the market regard this performance management aspect as the most important element of a SIB, challenging service providers to focus on specific outcomes targets or prove that these outcomes have been achieved.

As with REACH's 2017 assessment of impact bonds in general, Loder et al. (2013) present SIBs as relatively complex to implement. However, as with REACH, Loder et al. also point towards a number of enabling trends that are making SIBs and similar payment-by-results contracts simpler to deliver in practice.

Firstly, practical knowledge about how to set up a SIB is increasingly available. Loder et al. describe the first SIBs as involving considerable legal support to develop the contract and determine the roles and requirements of each participant. Standard format contracts and guidance on best practice in procurement and managing processes have since been developed, making the process smoother to replicate (Loder et al. 2013: 34).

Secondly, and related to the above, increased familiarity with SIBs among social development funders is leading to a more pragmatic attitude. In particular, measurement is approached in a more pragmatic way. In the early SIBs, measurement was done in a precise but complex way involving large databases and a carefully matched control group. There is now greater recognition and value placed on simpler indicators as measures of attribution (Loder et al. 2013: 34).

Thirdly, there is an increased availability of data from central government departments that enables outcomes to be designed, tracked and accurately priced. As a sector, education in particular is data-rich in the tracking of attainment, progression and attendance. Access to such databases has the potential to provide comparative base line performance data against which an intervention with a particular cohort could be assessed. While Loder et al. are discussing educational financing from a UK-focused perspective, the same principles of data access might also apply in other contexts (Loder et al. 2013: 33).

Finally, from Loder et al.'s largely UK-facing perspective, a final enabling factor is the outcomes of on-going investment in a series of well-evidenced interventions, the results from which are then used to inform subsequent design (Loder et al. 2013: 33). Looking at approaches to the design of their application for educational outcomes in particular, in the UK at least the focus has been on interventions in two key areas: addressing issues of educational equity for pupils from poorer families; and addressing issues of quality in the field of post-16 vocational education (Loder et al. 2013). Key to the success of these interventions were ensuring the buy-in of school-level stakeholders - teachers, headteachers and school governors – and ensuring that any interventions were developed to address identified educational priorities and were delivered in keeping with key pedagogic principles (Loder et al. 2013: 31-32).

6. An overview of Development Impact Bonds

Development Impact Bonds are an innovative mechanism associated with an impact investment approach to financing for social development. To date, they are exclusively implemented in low- and middle-income countries, where weaknesses in government capacity and finance can necessitate the engagement of external donor agents to underwrite social development interventions.

In terms of basic design and approach, Development Impact Bonds are very closely related to Social Impact Bonds, to the extent that key implementors of social finance do not necessarily make a clear distinction between SIBs and DIBs when discussing existing bonds (see, for example: Social Finance 2018; Terway 2018: 10; Loder et al. 2013; Social Finance SIB database <https://sibdatabase.socialfinance.org.uk/> accessed 16.01.19). As discussed elsewhere in this study, this issue of clarity over terminology, particularly when combined with the relatively recent emergence of DIBs, can contribute to some of the general confusion or misunderstandings associated with innovative financing mechanisms, particularly within the international development sector. However, within this, Drew & Clist (2015: 2) state that DIBs are recognised by DFID as one of three different and specific types of Payment by Results (PbR) financing, alongside results-based aid (RBA) and results-based financing (RBF).

Under a Development Impact Bond, there are 3 principle stakeholders:

- a) An Investor: a private sector party who provides the capital to fund attainment of specific outcomes
- b) A Service Provider: an NGO or CSO who undertakes the design and delivery of the programme that will deliver the specific outcomes
- c) An Outcome Funder: in a DIB, the Outcome Funder is a third-party agency, usually working in partnership with the national government. The difference in Outcome Funders is the key distinction between DIBs and SIBs. Under DIBs, Outcome Funders generally operate in the sphere of social development at an international level: they might be a donor agency (e.g. DFID; USAID etc.), a foundation (e.g. Gates Foundation), or a private investor (REACH 2017: 6). The Outcome Funder repays the Investor their capital investment plus a proportional return at the point where the specific outcomes have been attained.

As with a SIB, the principle stakeholders in any DIB are usually supported by two further partners: the Evaluator, an external body who assesses the project and verifies that the agreed outcomes have been achieved, and the Intermediary, a social financing institution who works with the Outcome Funders to structure and design the bonds, arrange negotiations and provide technical support (REACH 2017: 6).

In discussing DIBs from a developmental perspective, Drew & Clist (2015: 2) also cite a further, sixth stakeholder whose input is to be considered – the target population of beneficiaries. They place this group as a 4th ‘principle stakeholder’, alongside the above agents.

In essence, DIBs operate through private investors providing upfront financing for social development programs. Once evidence shows that the programs have achieved pre-agreed outcomes, the private investors are then remunerated by the third-party agents (e.g. donors,

foundations and/or other private investors) and earn a return (Terway 2018: 10). As with SIBs, DIBs differ from standard grant mechanisms because investor returns are based on the achievement of a pre-determined outcome (Innovative Financing Initiative 2014: 18). In assessing the delivery of project activities, Drew & Clist present the implementation of a DIB as a cyclical process of exchange that moves through 6 stakeholder groups: Investor > Intermediary > Service Provider > Target Population > Evaluator > Outcome Funder (2015: 8). However, it is worth noting that this model is a hypothetical rather than actual approach to DIB delivery in a development context, and that all Drew & Clist's cited examples come from UK or US contexts.

The current scope and scale of DIBs

In the sphere of innovative financing for development, Development Impact Bonds are regarded as a very new concept (REACH 2017: 15). They have only been conceptualised in the last 8 years, and there have only been practical examples in operation within the last 4-5 years.

Key examples of relevance to this study include, in 2014, the first DIB for education, supporting the work of Educate Girls, an NGO operating in government-run schools in Rajasthan, India, to enrol and retain girls as well as improve learning outcomes for all children (Innovative Financing Initiative 2014: 4; Terway 2018: 10). This DIB was followed by the Quality Education DIB, commenced in 2018. See the box below for an overview.

Commentators state that this decision to roll out and upscale the use of DIBs for education within the same national context is specific to a number of enabling factors unique to India. India is seen as a good context in which to pilot DIBs as a model for innovative financing. Quality Education India (2019) cites the increase in entrepreneurialism in India, the willingness of government to work with business and others, the increased levels of financial transparency, and the fall in international-aid funding as India's economy has strengthened, as key factors that make the country a good setting in which to explore new ways to approach the financing of social development.

Development Impact Bonds for Education

1. Educate Girls, Rajasthan, India 2015-2018

The Educate Girls DIB was launched in Rajasthan, India in June 2015. It ran for 3 years, and final outcomes were announced in Nov 2018. The project objective was to help improve education and learning outcomes for 18,000 children in 166 government primary schools in the Indian state of Rajasthan. The project targeted enrolment and learning among 9,000 girls not currently enrolled in government primary schools, and a further 9,000 children in Grades 3-5 (Social Finance 2019; REACH 2017: 3). The project also had a particular focus on marginalized girls and boys in remote rural districts. The Educate Girls DIB was the first to be piloted in a low- or middle-income country with a non-governmental organisation as Outcomes Funder (Social Finance 2019).

2. Quality Education, India 2018-2022

The Quality Education India DIB was launched in September 2018, and will run for 3-4 years until 2021-2022. The project objective is to drive learning outcomes for 300,000 primary school children in India through a range of interventions focussed on improving the quality of learning rather than on school enrolment and attendance. While it is anticipated that the range of service provider inputs will evolve over the project lifetime, initial interventions will include: high-quality privately-operated free schooling in urban slums; leadership training for principals and teachers; teacher training in remedial education and multiple-ability classes.

The design and focus of Quality Education DIB draws heavily on the design, approaches and impact of the Educate Girls DIB 2015-2018. In this context, the service provider on that contract, the NGO Educate Girls <http://www.educategirls.org/>, is also contributing to this DIB in an advisory capacity during 2019 (Social Finance 2019ii).

In comparison with the Educate Girls DIB, the Quality Education India DIB involves a significantly larger initial investor contribution: \$3m compared with the \$297,000 for Educate Girls 2015-2018. Similarly, the current total outcome fund is set at \$11m, with a view to enabling the size of the DIB to double over the 3-4 year lifetime (Quality Education India 2019).

At a global level, there are currently 27 development impact bonds in LMICs, plus 1 SIB (in Columbia), most operating at a design stage. Social Finance (2018) state that there is a particular focus on health issues worldwide, citing the International Committee of the Red Cross program in Congo, Mali and Nigeria, and the Overseas Private Investment Corporation investment in Cameroon as an examples of this trend (Social Finance 2018: 3). The handful of other examples of DIBs actually operating in LMICs include Dalberg Capital launching a DIB to support malaria prevention and control in Mozambique in 2013 (Innovative Financing Initiative 2014: 4), workforce development (Workforce Development, Colombia), community income and poverty reduction (Village Enterprise DIB, sub-Saharan Africa), and infant health (Kangaroo Mother Care, DIB, Cameroon). South Africa is the LMIC with the most DIBs; other countries have 1-3 each (Gustafsson-Wright et al. 2017: 15-16; Social Finance 2019).

In terms of outcome funders, to date foundations have been the first-movers in investing in DIBs, as they tend to be 'social-first' investors, and are able to take on more innovative, higher risk investments (REACH 2017: 15). However, more development-impact bonds are now under way or under discussion with support from donors including DfID, as well as some involvement from the World Bank and USAID (The Economist 2018). Nevertheless, within the development sphere, there have also been critiques of DIBs (e.g. Oxfam, 2013, cited in Drew & Clist 2015: 17), arguing that they are being introduced based on limited experience of SIBs and with an extremely thin evidence base.

In terms of investors, within the private sector there have been many investment fora featuring DIBs, and there is an increasing level of awareness amongst investors about the instrument (REACH 2017: 15). However, investors in the private sector find it challenging to evaluate the performance risks of social programs. Investors with a stronger focus on financial returns would only likely come into transactions when there is a more substantive track record of DIBs achieving financial results and when deals are of larger scale (REACH 2017: 15). Since DIBs are a very new concept, continued sharing of data and lessons learnt from existing DIBs will be important to raise awareness and confidence among potential new investors (REACH 2017: 15).

Approaches to the design and delivery of DIBs

While there is no standard structure, the design of DIBs frequently involve inputs from investors that provide capital at the beginning of the project, outcome funders that provide financing if the project succeeds, and a service provider to provide inputs related to development goals. Critically, they also include a framework for monitoring and evaluation to determine if the service provider is successful (Innovative Financing Initiative 2014: 18).

As outlined above, in the delivery of project activities from a developmental perspective, Drew & Clist present the DIB operating mechanism as a cyclical process of exchange that moves through 6 stakeholder groups: Investor > Intermediary > Service Provider > Target Population > Evaluator > Outcome Funder (2015: 8). However, they also state that the possible range of different contractual arrangements is huge, so the above is a necessarily simplified model.

In terms of design and implementation, Drew & Clist (2015: 21-27) present an overall framework that could be used for the evaluation of DIBs within the context of international development. Key features of this framework are that it provides a model that can be used to evaluate both processes and impact of DIBs, mapped according to the key criteria of relevance, effectiveness, efficiency, impact and sustainability. A further discussion of the key areas where stakeholders might benefit from technical support in the design and implementation of DIBs and other innovative financing mechanisms is provided in the final section of this report.

Drew & Clist also highlight in particular the multiple roles of the intermediary (2015: 11). These roles include: in design, coordinating the identification of the opportunity as an investable opportunity and getting it to market; in delivery, frequently operating as the main source of innovation and monitoring; in implementation, monitoring activities with a strong focus on service improvement and delivery of results.

In discussing the remaining partners, Drew & Clist (2015: 11) state that there is not necessarily any change in roles for a service provider operating within a traditional aid project or a DIB, although they may be expected to demonstrate greater contractual flexibility and use inputs in different ways. With regard to the outcome funder, Drew & Clist (2015: 13) state that, while the logic of impact bonds reduces funder risk through payment based only on measured outcomes, in practice, it seems that the outcome funder will sometimes pay in advance for piloting and scoping at the early stages of a DIB. Since these investments could lead nowhere, such practices do not enable DIBs to completely remove the risk of funding.

Finally, while Drew & Clist highlight the importance of the target population as a key stakeholder within impact bonds in a developmental context, they also go on to state that the target population is generally 'the silent partner' in any actual DIB (2015: 12). In fact, their agency in design terms is reduced to the point where a DIB only needs to satisfy the outcome funder's requirements that 'the target population will be heard, that there are no significant negative consequences of the agreement, and that positive effects are likely and achievable'. From a social development perspective, it is suggested the implications of this standpoint require some further significant scrutiny.

7. Areas of possible technical support to innovative financing

Introduction

This section commences with an overview of those aspects of innovative financing in a development context where the stakeholder institutions are likely to benefit from technical support. It goes on to look in more detail at the specific aspects of design and implementation where technical support might be required, as well as the specific inputs or approaches to support that might be provided.

Aspects of innovative financing requiring technical support

In looking at the areas of possible technical support for innovative financing, UNESCO (2016) set out a number of inputs or design elements that they see as prerequisite for the successful implementation of innovative financing in a development context.

Firstly, country-level ownership over innovative financing is necessary to ensure successful results over the long term. This includes putting in place mechanisms for stakeholder engagement in the governance structures of innovative financing initiatives; ensuring full alignment of any financing with nationally devised education strategies and plans; the inclusion of direct budget and/or sector-wide support as part of any innovative financing; and processes for the development and management of country-devised project proposals (UNESCO 2016: 5).

Secondly, any innovative financing mechanism must include stakeholder capacity development as part of intervention design. Any innovative financing intervention must, therefore, balance 'quick wins' in terms of results and outcomes with long-term capacity development goals (UNESCO 2016: 5).

Thirdly, the establishment of any innovative financing initiative must ensure complementarity and effective coordination with parallel initiatives. Without such an approach, the creation of new financing structures to deliver education financing will only stretch capacity and reduce overall effectiveness of delivery (UNESCO 2016: 5).

Fourthly, and closely related to the above, donors in particular need to ensure clarity on how innovative financing should be 'counted', for example as part of country-level commitments, in order to reduce substitution risks and 'double-counting'. Although many forms of external finance have dual development and education objectives, they each need to be counted and assessed separately next to different international commitments, such as the UN target of 0.7 percent ODA, or commitments to SDG 4 (UNESCO 2016: 5).

Finally, innovative financing programmes should be designed to deliver predictable finance so as to ensure maximum aid effectiveness. Multiple mechanisms will tend to generate more revenues in good economic times compared to bad, and this holds particular issues for financing partnerships with private investors. Such mechanisms will be procyclical, or grow simultaneously with the economy. Thus it may be useful to consider ways in which some instruments could deliver resources in a countercyclical setting - i.e. provide financing while moving in the opposite direction of the overall state of an economy (UNESCO 2016: 5).

In partial response to the above, and looking at innovative financing at a macro level, Terway (2018) highlights the need for technical support to ensure responsible engagement and equitable partnership, based on a hybrid model of social and financial return. Firstly, this will involve operating across multiple agencies including businesses, philanthropists, non-profits, governments, civil society, social entrepreneurs, researchers, and aid agencies. Secondly, it will involve co-ordinating a range of activities, including:

- rigorous research on engagement processes and outcomes;
- further debate on motivations for participation in investment the education sector;
- defining desirable outcomes and outcome indicators;
- seeking clarity over regulation over private sector contributions to public benefit;
- development and provision of guidelines for responsible investment and engagement

(Terway 2018: 13)

Finally, looking at results-based financing in general and impact investment in particular, Gustafsson-Wright et al. (2017: 7) identify five key issue areas in the design and implementation of impact bonds where technical support is likely to be required:

1. Identifying appropriate interventions and service providers.
2. Managing relationships with government and donor outcome funders.
3. Identifying metrics and structuring payments.
4. Developing the operating model, structuring the vehicle, and raising capital.
5. Implementing the impact bond and measuring impact.

Approaches to providing technical support to innovative financing in a development context

When designing and implementing innovative financing mechanisms in a development context, a key difference compared to operating in a high-income context is the greater need for risk management. This involves the development of contextual understanding about the needs of outcome funders and investors in a riskier environment. For impact bonds in high-income countries, one of the driving forces has been the idea that the payment by government – as seen in SIBs – is drawn from the future cost savings provided by successful preventive interventions. In developing contexts—and particularly in DIBs, where the outcome funder is not the government—quantifying the value of interventions to each organization is more complicated, and in these cases future savings are less likely to be a strategic driving force (Gustafsson-Wright et al. 2017: 9).

In the provision of technical support, Drew & Clist highlight the multiple roles of the Intermediary (2015: 11). These roles include: in design, coordinating the identification of the opportunity as an investable opportunity and getting it to market; in delivery, frequently operating as the main source of innovation and monitoring; in implementation, monitoring activities with a strong focus

on service improvement and delivery of results. Many investors have indicated they are happy to delegate much of the active monitoring to the intermediary (Deloitte, undated, cited in Drew & Clist 2015: 11) who, as a result, takes on the role of managing and monitoring the implementing agencies. With this in mind, we might assume that, within an impact investment model, the intermediary agency is the main source of technical support and advice to other stakeholders.

In terms of designing any technical support to assist stakeholders, there are a number of stages involved in the design and implementation of innovative financing mechanisms where inputs might be required. In the case of impact bonds, for example, although each mechanism will vary according to context and need, four major stages have been identified as part of the design and process (Gustafsson-Wright et al., 2017: 10-11), and any technical support can be targeted to help address each these as required:

1. A feasibility study, during which the social challenge is identified and the feasibility of using an impact bond to resolve that challenge is explored;
2. Structuring the deal, during which an outcome funder must agree to enter the contract, capital must be raised, the technical details of the specific intervention and outcome metrics are decided, the service provider is procured, and contracts are finalized;
3. Implementation, during which services are provided and the performance of the service provider is monitored and managed;
4. Evaluation and repayment, during which verification of agreed-upon outcomes takes place and payment to investors occurs contingent upon their achievement.

Under each of these staged tasks, there are a number of approaches where technical support can assist the stakeholders. These are discussed below.

Establishing the feasibility of an intervention

Firstly, as a tool for delivering social development under the approaches used in impact investment, bonds are seen to be most effective when certain basic programmatic conditions are met. In fulfilling this, technical support can help the stakeholders to:

- ensure that programme outcomes are clear and objectively measurable;
- have programme outcomes that can be achieved in a reasonable time horizon, e.g. the demonstration of intermediate or final results within a maximum of 5-6 years;
- have a developmental focus that is both a government and donor priority, and which is also of interest to external investors.

In addition, it is also seen as important to have in place government statutory support and legal structures that can support and enforce programme delivery (REACH 2017: 6-7). This is particularly important in the case where the government, rather than a third party, is the Outcome Funder. In the case that such mechanisms are not in place with appropriate levels of strength, arguably the Intermediary agent or other technical support agent can help the stakeholders identify the issue, and then work with the government to help establish or strengthen them.

Identifying and engaging partners

Engaging with national governments, international donors and others operating in the public sector, particularly in low- and middle-income countries, can add levels of complexity to establishing innovative financing mechanisms. In such settings, it also often takes a long time to engage with and secure commitment an external investor (REACH 2017: 10). However, it is necessary for any intervention to establish these relationships as quickly as possible.

Technical support can work with stakeholders to: identify and secure an outcome funder and engage them in the design process; ensure all are on board with the timeline, costs, and metrics; and ensure that the bond is aligned with stated strategic and policy priorities for all stakeholders (Gustafsson-Wright et al. 2017: 31).

Other challenge areas that technical support can help with include: planning for shifting contextual circumstances e.g. changes of government, or wider political or social instability; addressing institutional capacity for effectively managing multiple programme funding and donor stakeholders; and negotiating power imbalances between national government and international investors or funders (Gustafsson-Wright et al. 2017: 32-33).

Finally, as part of the process of identifying and selecting key stakeholders, particularly service providers, Gustafsson-Wright et al. (2017: 27) also outline a number of criteria that technical support can consider when assessing organisations.

Designing and structuring the intervention

When considering the initial structuring and design process of any innovative financing intervention, firstly, the importance placed on results generates new levels of diligence on all parties when designing the theory of change. Technical support can assist in agreeing realistic incentives and results, and significant time is also spent on developing the monitoring systems and rigorous ways of measuring outcomes (REACH 2017: 12). The role of the key stakeholders – the Investor, the Service Provider and the Outcome Funder - and their institutional experience can be key in helping inform this process.

Secondly, the use of an evidence base in developing a theory of change is helpful, there is a need to have a high degree of confidence in the relationship between the intervention's proposed inputs and outputs, and desired outcomes and impact. All stakeholders—investors, outcome funders, and service providers—must agree that the proposed intervention will deliver the desired outcomes and impact. However, a lack of data can be a challenge in low-income countries. In such contexts, technical support for scoping research to establish an evidence base may be necessary, although it is often expensive and time-consuming. As a result, technical support can also advise on the important trade-off between establishing an evidence base and keeping design costs within reason: for example, in some situations, an evidence base from a similar intervention might substitute. Regardless, it is essential to ensure that evidence is adequate to attract all stakeholders to the proposed intervention (Gustafsson-Wright et al. 2017: 26).

Thirdly, technical support can assist with the identification of metrics for the measurement of outputs and outcomes, a central aspect of the structuring and design process. Clearly these will vary hugely from context to context, although there are a number of basic criteria that can inform their development. In general terms, any metrics must be measurable, in that the data can be easily gathered and the progress tracked. In addition, they must be meaningful, in that they are

aligned with the social development changes that the outcome funders wish to see. Finally, the metrics should be set at an appropriate level, in that they are both achievable based on the service provider capacity, but impactful, in terms of levels of social change that will result. Further to this, the timeframe for delivery must be realistic, at the same time as meeting investor expectations (Gustafsson-Wright et al. 2017: 37).

Finally, from a financial perspective, technical support can assist the structuring and design process to take account of transaction costs. These costs will vary depending on the size and complexity of the deal, as well as the context in which the programme is operating. Key categories for cost items include: service provider inputs; supervision costs; costs associated with provision of technical support and capacity development; assessment and evaluation of project outcomes; levels of return to investors (REACH 2017: 8). Structuring these in terms of payments to both service providers and investors needs to take account of incentives for engagement, timeliness and quality of delivery. However, at the same time, there is a need to ensure that financial incentives do not divert providers from the delivery of the desired developmental outcomes (Gustafsson-Wright et al. 2017: 38).

In addition to technical support, there are a range of materials and learning that can be shared across bonds in order to speed the technical and financial aspect of the structuring and design process. These materials include, for example: key questions to answer during the feasibility scoping process; considerations around IB structuring (financial, legal, governance); contracting templates including key terms for the various contracts; and data and performance management systems, evaluation frameworks etc (REACH 2017: 10). Gustafsson-Wright et al. (2017: 41-48) provide further guidelines associated with the legal and managerial structuring of impact bonds. However, at the same time, there will inherently be differences in terms of the project context, including target population, intervention approach, political and cultural context etc (REACH 2017: 10).

Implementing the intervention

Fourthly, in terms of implementation, technical support can help develop funding solutions when projects are complex and require a flexible design approach, as is often the case with impact investment models. For example, the programme design may involve a form of rapid prototyping, followed by initiating the intervention swiftly, then collecting feedback while allowing for programmatic flaws, followed by a process of redesign and re-iteration. This would take three cycles or more and takes time (REACH 2017: 9). In this context, both the design process and the return on investment can take time.

As a key part of the implementation process, Gustafsson-Wright et al. (2017: 51-52) point towards the importance of performance management to investors, whose capital is at risk, and to outcome funders, who are seeking to achieve lasting social impact. In terms of technical support to assist with this, they outline a range of options for performance management that is led by investors, service providers and/or third-parties, highlighting a range of factors that can assist in decision-making over performance management roles. These include institutional experience and capacity, contextual knowledge and technical experience.

Evaluation

In terms of technical support for evaluation, Gustafsson-Wright et al. (2017: 49) state that the choice of methodology, particularly in impact investment, is dependent on 5 considerations:

1. what the outcome funder is seeking to achieve;
2. contextual issues such as the availability of data or the presence of a comparison group;
3. the timeline of the contract and how much time is available for data collection and analysis;
4. the budget for evaluation;
5. the political sensitivities around the intervention.

They go on to discuss the factors to consider against each of these considerations (2017: 50-51), and also point out that validated administrative data is the most commonly used evaluation method for impact bonds in developing countries, and also in high-income countries, a finding supported by Floyd et al. (2017: 10). Floyd et al. (2017: 10) go on to state that, while administrative data models do not attempt to measure the performance of an impact bond against a counterfactual, some advocates argue that properly-documented expectations of what would happen without the intervention are the *equivalent* of a counterfactual.

While Floyd et al. (2017: 10) also indicate the role of comparative evaluation models, which measure the outcomes achieved by a group of beneficiaries against the outcomes achieved by a comparable group of people, Gustafsson-Wright et al. (2017: 23) argue that the relative absence of this model in practice may be in light of the high cost of quasi-experimental evaluations and experimental designs, or randomized controlled trials (RCTs).

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