

Bertha Centre for Social Innovation & Entrepreneurship

# Impact Bond (IB) Landscape Study

An Exploration of Impact Bonds for Results Focused SME/SE Development



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## 1. Introduction

This document forms part of the broader research conducted by the Bertha Centre for Social Innovation and Entrepreneurship (University of Cape Town, Graduate School of Business) under the Programme to Support Pro-Poor Policy Development (PSPPD) II, a partnership between the Presidency, South Africa, and the European Union (EU).

The title of this programme is “Working Towards Eliminating Poverty and Reducing Inequality: Addressing the Implementation Challenge”, and the over-arching aim of this research is to investigate the use of Impact Bonds (IB) for results-focused SME (Small and Medium Enterprise)/SE (Social Enterprise) development with the goal of alleviating poverty and inequality in South Africa (SA). In addressing this goal, the research will look to include insights into the use of innovative financing mechanism such as IBs to support SMEs, drive employment creation and improve the livelihoods of the less fortunate.

The purpose of this landscape study is two-fold. Firstly, it aims to provide an understanding of the current state of Impact Bond (IB) work in South Africa and on the rest of the African continent and how it pertains to Small, Medium and Micro-Enterprises, especially those involved in social impact (i.e. Social Enterprises). Secondly, by reviewing Impact Bonds globally, the research strives to provide insights into future applications of IBs involving small businesses in South Africa across various sectors. This research will hopefully assist government officials and researchers in using and generating evidence to inform policy making, as well as addressing the implementation challenge of more inclusive and sustainable economic growth and job creation in our country.

To aid in the understanding of the concepts involved in this study, the document will also provide background information on Impact Bonds and other Outcomes-Based Funding mechanisms (including what they are, how they work, and how to develop them). A primer on the topic of Social Enterprises as well as a section on how Broad-Based Black Economic Empowerment (B-BBEE) may apply to the area of Impact Bonds has also been included as Appendices to this report (as these pertain directly to socio-economic transformation in SA).

In conducting this landscape study, a number of key stakeholders were consulted, including public servants, academics and practitioners from both the for profit and not-for-profit sectors. A list of these respondents can be found in Appendix IV: List of Stakeholders Engaged.

Lastly, this document has been produced with the financial assistance of the European Union. The contents of this document are the sole responsibility of the University of Cape Town (Bertha Centre, GSB) and can under no circumstances be regarded as reflecting the position of the European Union.



## 2. Background to Impact Bonds (IBs) and Outcomes Based Funding/Pay for Performance Contracts

“An outcomes-based agreement is a contract or grant between a funder and a service provider where payment (including extra incentives to reward increasing levels of success) and financial rewards are contingent upon the achievement of agreed and measurable outcomes. In contrast, traditional contracts and grants link funding to the completion of a set number of activities, services, or individuals served, regardless of whether or not the underlying goals and outcomes—which were the reason for the project in the first place—were achieved.” (Georgetown University & Beeck Centre, 2014)

Outcomes-based contracting (OBC) is not a new concept and is in fact used regularly in infrastructure procurement. Governments around the world are becoming interested in the model as a tool for procuring services as well as goods. This shift in thinking and practice from compliance to performance is enabling policy makers to spend their shrinking budgets more efficiently and accelerate the improvement of services to disadvantaged communities.

The advantages of outcomes-based contracting are numerous and include:

- Increasing innovation in public service delivery. Inputs and activities are not prescribed so as long as outcomes are achieved in a legal and ethical manner providers have scope to innovate.
- Gradually reducing the reporting burden as governments move from compliance to performance, which enables service providers to be nimble and flexible in achieving results.
- Developing financial values for social outcomes as service providers compete for contracts building efficiency into their models of delivery.
- Accelerating learning about what works because of the financial incentives, clear definitions of and transparency around success and rigorous M&E, which allow for accurate assessment of programmes against similar criteria.
- Breaking down traditional funding silos as departments recognise joint responsibilities towards population cohorts and have a mechanism whereby they can pool funding.

There are various ways government could incorporate outcomes-based contracting into procurement practices such as:

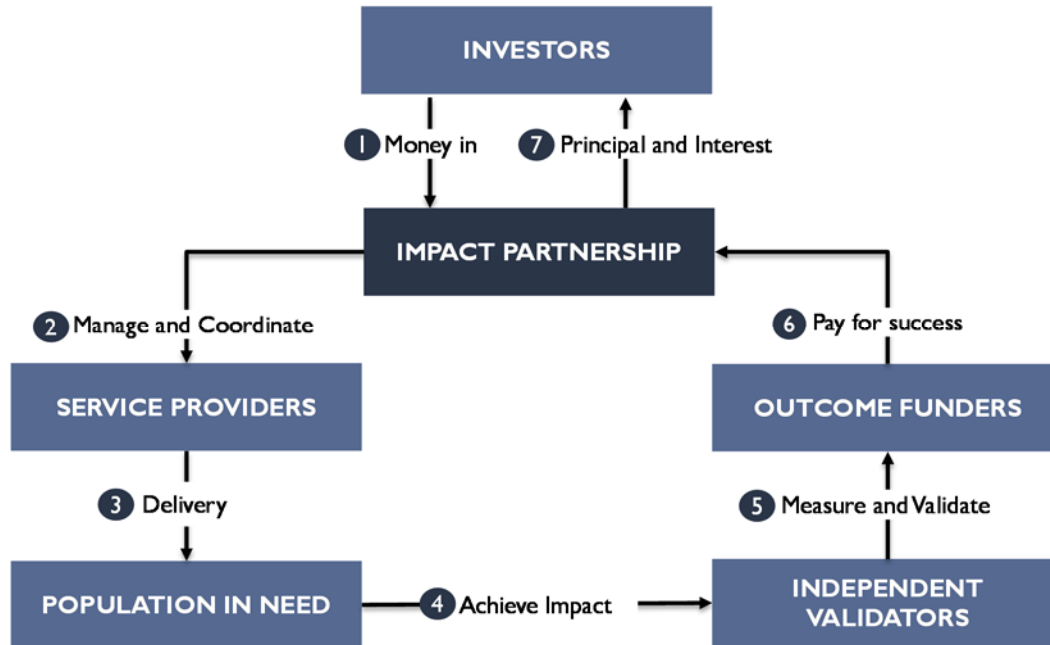
- Bringing outcomes into budgeting, financial planning and management processes
- Bringing outcomes into contract renewals
- Building feedback loops into procurement and contracting models
- Building a framework of outcomes and their financial values by starting out small with two or three pilot projects in a policy area.
- Including a third party investor in the contract to avoid financial risk of failure as for Impact Bond models.

### Impact Bond Model

Impact Bonds aim to improve the effectiveness of social interventions. They do so through establishing an outcomes-based contract where private investment is used to scale up interventions, especially early intervention and preventative services, implemented by specialised service providers. These private investors then receive repayments from an outcomes funder – usually a government or donor – only if independently verified evidence shows that the intervention has been successful in delivering the pre-agreed outcomes. Accordingly, Impact Bonds can assist governments and donors in risk-free or risk-mitigated exploration and expansion of effective early intervention and preventative programmes. Figure

1 below outlines the operations of an Impact Bond, with the numbering reflecting the approximate sequencing of activities, once an outcomes-based contract has been formalised.

Figure 1: Impact Bond Operation



Ultimately a (social) impact bond (SIB) can provide the following benefits to government:

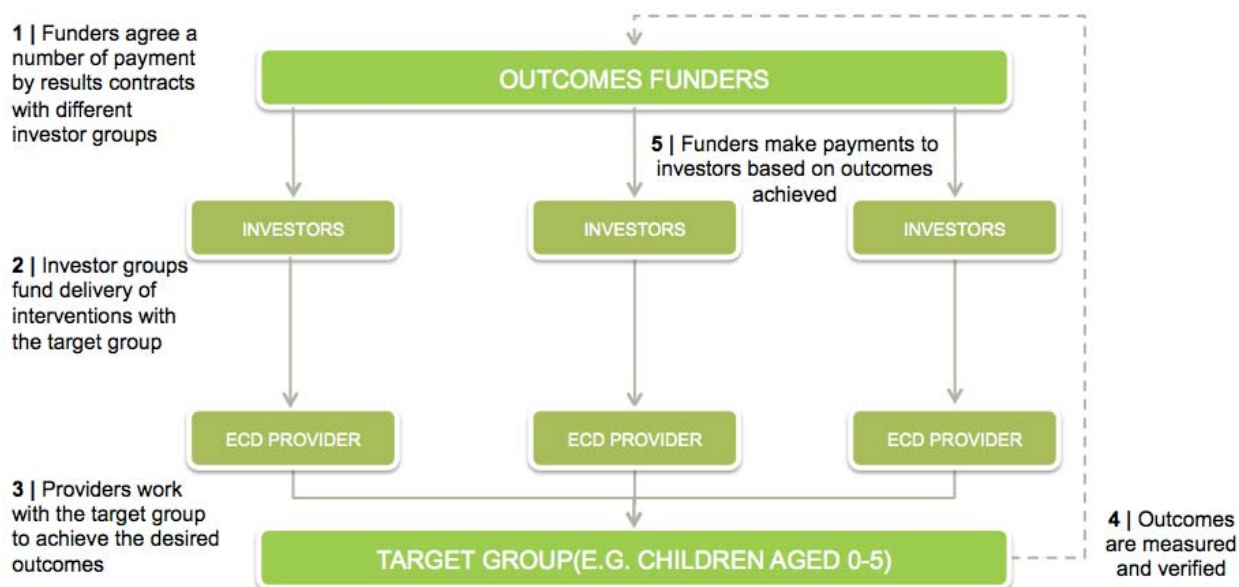
- Provision of upfront and relatively immediate funding to set up and provide the identified intervention(s)
- Reduced risk to government if interventions are unsuccessful, as initial investment risk lies with the impact investors
- Assist in reducing overall expenditure, and in the management of limited government funding
- Provide an opportunity to co-operate and work across different sectors, and make use of any relevant skills which may not currently be available within the public sector
- A strong Monitoring and Evaluation component is included in the structure of the impact bond, and this provides the government with extremely useful data and outcome metrics for further planning and implementation models
- The funding structure of the impact bond, and the associated monitoring and evaluation of service provision, keeps service providers accountable and engaged in the process

An Innovation Fund is an outcomes based procurement fund where the government only pays for successful social outcomes. The government sets the price of those outcomes or “rate card”<sup>1</sup> according

<sup>1</sup> See this webpage as an example of a rate card drawn up for the DWP Innovation Fund  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/212328/hmg\\_g8\\_factsheet.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/212328/hmg_g8_factsheet.pdf)

to the cost of the service provided, the long term social value created and the amount of savings accrued. Multi-stakeholder partnerships consisting of social investors and service providers (to carry out the intervention) bid into the fund to provide a specified number of outcomes. The government selects partnerships based on a prearranged set of criteria in a competitive two-stage procurement process. The resulting contracts are known as Social Impact Bonds (SIBs).

Figure 2: Innovation Fund Operation for a SIB focused on Early Childhood Development (ECD)



In the four years since the first Impact Bond was launched by Social Finance<sup>2</sup>, more than twenty Impact Bonds, raising in total approximately US\$100 million, have been launched around the world (see Figure 3 for a selection of SIBs launched between 2010-2013). Growth of the Impact Bond market is accelerating with progress on policies to set aside significant funding for Impact Bonds and a growing number of organisations involved in developing Impact Bond policy and transactions, including the Taskforce on Social Impact Investment<sup>3</sup>, the UK's Centre for Social Impact Bonds and the Harvard Kennedy School Social Impact Bond Lab.

<sup>2</sup> This Impact Bond was targeted at reducing reoffending rates among ex-offenders leaving Peterborough prison in the UK. Social Finance is the global leader in developing and launching Impact Bonds. Together with its sister organisations, it has launched a further 5 Impact Bonds in areas as diverse as children's services, homelessness and youth unemployment, and provided advice and guidance on transactions and initiatives both to Government and social sector organisations in various countries including Australia, New Zealand, Canada, Ireland, Denmark, Germany.

<sup>3</sup> Established following the G8 Social Impact Investment Forum in June 2013.

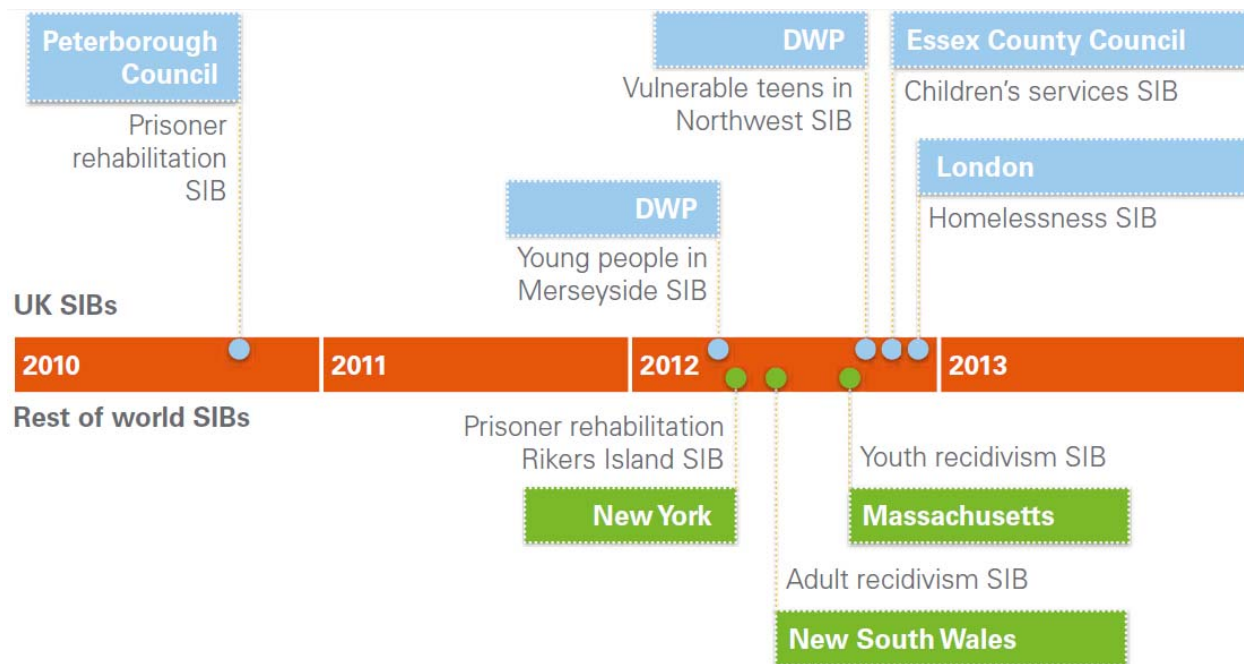


Figure 3: A plotted history of SIBs (KPMG, 2013) - Note: this is a timeline of launches and not final commissioning

There are three Innovation Funds totaling £60 million in the UK with the majority of Impact Bonds financed through this outcomes funding.<sup>4</sup> Each of the funds finance between five and ten Impact Bonds each and in this way, different interventions in different geographies and socio-economic groups can be compared and contrasted during the same period of time.

#### *Pay-for-performance mechanisms in Impact Bonds*

There are 3 main Payment-for-Performance (PFP) mechanisms that current SIBs have adopted. They are as follows (see Table 1 further on):

- 1) **Principal-at-risk:** this is where no annual coupon payments (similar to a zero-coupon bond) are made and investors stand to gain more than their principal back should the SIB prove successful (i.e. capital return above principal invested would constitute the financial return), whilst investors stand to lose a portion of their original funds invested (say 30-50%) should the intervention fail.
  - a. Example: NYC-Goldman Sachs SIB deal
- 2) **Return-at-risk (Standard):** annual coupon payments are made (like a traditional bullet bond with regular coupon payments plus a return of the principal at maturity), with the principal repaid back to the investor at the end of the bond's life.
  - a. Should the SIB not reach all its performance targets (or outright fail) however, the maximum amount of capital returned to the investor over the life of the bond would equal their initial investment (i.e. cash returned to the investor at maturity would equal funds invested less any coupon payments received).

<sup>4</sup> Department for Work and Pensions (DWP) Innovation Fund has financed 10 SIBs and the Youth Engagement Fund and Fair Chance Fund expect to finance between 5-10 SIBs each.



- 3) **Return-at-risk (Annual Bonus):** similar to the “Standard” Return-at-risk mechanism, expect that additional payments above the coupon amount could be paid to investors annually triggered by specific outperformance of the SIB (above predetermined outcomes payment thresholds).
- This would mainly occur in a bond wherein performance is measured every year against annual targets.
  - Again, should the bond fail, the maximum amount of capital returned to the investor over the life of the bond will equal the principal (original invested amount), i.e. the investor would be “made whole”.
  - Should most of the bonus returns be paid at maturity (due to outcomes metrics being measured near the end of the bond’s life), then the mechanism will more closely exhibit the Principal-at-risk setup detailed above (Nicola, 2013).

Table 1: PFP Forms and Description (Nicola, 2013)

		Principal-at-Risk	Standard Return-at-Risk	Annual Bonus Return-at-Risk
<b>Investment (“Bond Principal”)</b>		\$10 mm	\$10 mm	\$10 mm
<b>Annual Coupons</b>		None	Yes (e.g., 5% of principal)	Yes (e.g., 5% of principal)
<b>Annual Bonus</b>		None	None	Yes
Performance Targets Are Met	<b>Payment at Maturity</b>	>\$10 mm ( \$ figure specified in contract)	\$10 mm	\$10 mm
	<b>Investor Return on Investment (ROI)</b>	Positive	Positive	Positive
Performance Targets Are Unmet	<b>Payment at Maturity</b>	<\$10 mm ( \$ figure specified in contract)	<\$10 mm ( \$10 mm less the nominal value of prior coupon payments)	<\$10 mm ( \$10 mm less the nominal value of prior coupon and bonus payments)
	<b>Investor Return on Investment (ROI)</b>	Negative ( <0.0%)	0.0%	0.0%

Table 2: PFP Mechanisms – Contract Details, Cash Flows & Investor Returns (Nicola, 2013)

PFP Mechanism	% Reduction Homelessness	Original Investment	Annual Payments	Payment at Maturity	Cash Return to Investor <sup>18</sup>	Investor IRR
Principal-at-Risk	15.0%+	\$10.0	\$0.0	\$18.0	1.80x	12.5%
	10.0 - 15.0%	\$10.0	\$0.0	\$16.0	1.60x	9.9%
	5.0 - 9.9%	\$10.0	\$0.0	\$10.0	1.00x	0.0%
	0.0 – 4.9%	\$10.0	\$0.0	\$8.0	0.80x	-4.4%
	< 0.0%	\$10.0	\$0.0	\$6.0	0.60x	-9.7%
Return-at-Risk (standard)	15.0%+	\$10.0	\$0.5	\$13.0	1.55x	9.9%
	10.0 - 15.0%	\$10.0	\$0.5	\$11.0	1.35x	6.7%
	5.0 - 9.9%	\$10.0	\$0.5	\$7.5	1.00x	0.0%
	0.0 – 4.9%	\$10.0	\$0.5	\$7.5	1.00x	0.0%
	< 0.0%	\$10.0	\$0.5	\$7.5	1.00x	0.0%
Return-at-Risk (annual bonus)	15.0%+	\$10.0	\$0.7	\$13.0	1.65x	11.7%
	10.0 - 15.0%	\$10.0	\$0.7	\$11.0	1.45x	8.7%
	5.0 - 9.9%	\$10.0	\$0.5	\$7.5	1.00x	0.0%
	0.0 – 4.9%	\$10.0	\$0.5	\$7.5	1.00x	0.0%
	< 0.0%	\$10.0	\$0.5	\$7.5	1.00x	0.0%

Table 2 above shows indicative returns that each of the 3 PFP options could result in. The key takeaway here is that a Return-at-risk structure (i.e. capital guaranteed) would be more suited to risk-averse financiers, whilst philanthropic capital (i.e. impact first investors) will more easily be convinced to invest in a Principal-at-risk IB. Finally, it is assumed that financial first investors would probably be more inclined to invest in a Return-at-risk SIB with an Annual-Bonus component (for relative outcomes target outperformance, e.g. >10% reduction in homelessness in the above table) in order to ensure a quicker return of capital (potential for larger regular cashflows).

#### SIBs vs DIBs

DIBs differ from SIBs in that the former includes donor agencies in the role of Outcomes Funder as opposed to solely the government, in the latter case. Both arrangements bring together a wide array of development constituents including philanthropists/foundations, impact/social investors, developing country governments, donor agencies, and service providers with the common goal of achieving meaningful, positive and systemic social change (Philanthropy Impact, 2013).

#### Other (non-IB) types of Outcomes Based Funding/Pay for Performance Contracts

In July 2013, US President Barack Obama proposed an almost \$500m investment in Pay for Success initiatives, including a \$300m Incentive Fund administered by the Treasury Department, and a further \$195m spent on 9 programs across 3 federal Agencies (Departments of Justice, Education and Labour) (Van Roekel S, 2015). Governments are increasingly partnering with private and philanthropic investors to fund proven programs that deliver results and economise on the use of tax payer money. The



Department of Labour is looking to adopt a Pay for Success approach through its Workforce Innovation Fund. The Department aims to fund innovative workforce development initiatives and preventive social services that are not only less costly over the long run, but also more effective, increasing job placement and retention rates (Piper, Value-Based Payment: Accountability for Health Spending and Outcome, 2014). These pay for success programs utilize an evidence-based approach, are highly creative, adhere to strict monitoring and evaluation protocols and hold service providers accountable for high quality delivery by only paying for results. At the moment, Pay for Success initiatives are currently underway in about 14 states across the country (USA).

Many examples of outcomes based funding are being explored in the healthcare sector, especially in the United States. The traditional Fee-For-Service (FFS) model has been critiqued by some as rewarding inefficiency, and encouraging healthcare providers to chase volumes. There is a gradual move towards paying for value instead of activity, so that competent physicians and hospitals are rewarded based on both quality of care as well as affordability. The need to focus on quality in addition to cost savings is in order to avoid creating perverse incentives whereby healers provide an inferior level of service merely to take advantage of potential financial gains. Value-based models are meant to be built around evidence, patient-centricity, coordination and team-work, aligning financial incentives with positive patient outcomes, safety and efficiency (Piper, Value-Based Payment: Accountability for Health Spending and Outcome, 2014).

Whilst Pay-for-Success approaches may sound attractive, there are a number of potential risks that they may possess, including:

- Non-performance of or poor execution by lead service provider (Third Sector Capital Partners, 2013)
- Inability to measure/lack of accuracy around performance
- Lack of clarity around/viability of outcomes targets
- Lack of (upfront) working capital for contractor to perform duties

These risks can largely be mitigated by:

- Choosing contractors that have a good track record,
- Adopting rigorous evaluation methodologies carried out by a competent, preferably independent third party M&E firm,
- Benchmarking against historical results achieved using best practice, and
- Getting the payer to provide a portion of the fee upfront as working capital (non-performance based portion).

What follows is a selection of pay for success models that have been adopted by various organisations, especially corporates (in partnership with healthcare providers, e.g. hospitals) looking for better, more affordable medical care for their employees (in the case of illness, hospitalisation etc).

#### *Population-Based Payments and Shared Savings*

In the shared savings model, providers form a group to deliver a service and get to share in the savings that may accrue due to minimizing wasteful spend (Latkovic, 2013).



Similarly, with population-based payments, providers team up and are usually paid a set fee to perform a service, again, with the chance of sharing in the upside should any cost savings be achieved. Providers may sometimes also be held liable for any cost over-runs that may occur.

An example of population-based payments in Albuquerque, USA is Intel Corporation's agreement with Presbyterian Health System wherein the provider would receive outcomes-based payments for performing well or stand to lose revenue if it underperformed, thus sharing the financial risk attached to caring for Intel's 10,000 staff members (Piper, Payment Reform Models: Employers Explore Population-Based and Bundled Payment, 2013). In another instance, The California Public Employees' Retirement System (CalPERS) saved \$20m in costs after adopting a 2-year population-based payment pilot program in 2010 in collaboration with Blue Shield of California and providers Catholic Healthcare West (CHW) and Hill Physicians (Hill). Blue Shield consented to paying CHW and Hill a pre-determined rate to provide care to 41,500 CalPERS staff and dependents. By incentivizing the providers through shared savings for keeping patients healthy, there was a shift towards population health management, namely minimizing unnecessary care, and focusing instead on high risk patients such as those with chronic diseases and complex medical conditions. \$15.5m of over 75% of savings were used to prevent hikes in health insurance premiums for CalPERS employees, with the remaining quarter shared among the tri-partite alliance. In the first 3 years of the program, the partners witnessed a significant reduction in facility utilization, including a 13% drop in surgeries, as well as a 15% reduction in both inpatient readmissions and days (Bailit Health Purchasing, 2013).

#### *Bundle/episode-based payments*

Bundle payments are when a provider gets paid a lump-sum for all the services related to a specific episode, e.g. in the case of a healthcare sector, a hospital may receive a fixed, pre-defined amount of money to perform brain surgery on a patient, which may entail preparation as well as rehabilitation services. Providers are thus incentivised to contain costs, as remuneration is fixed, so any savings can be viewed as additional revenue.

There are two main forms of episode-based payments: the first is prospective bundled payments and the second is Retrospective Episode-Based Payments (REBP).

In prospective bundled payments, a single healer is paid a fixed, lump-sum for a specific episode, and they in turn re-imburse constituent providers for their involvement in carrying out the care required. With REBP, healthcare providers are paid separately, filing claims for delivering their services as per usual under a fee-for-service arrangement in the event of an episode. However, the average cost (and quality) of treatment is measured at regular intervals and compared to predetermined thresholds, with excess costs or savings shared between the payer/patient and the healer (Piper, Value-Based Payment: Accountability for Health Spending and Outcome, 2014).

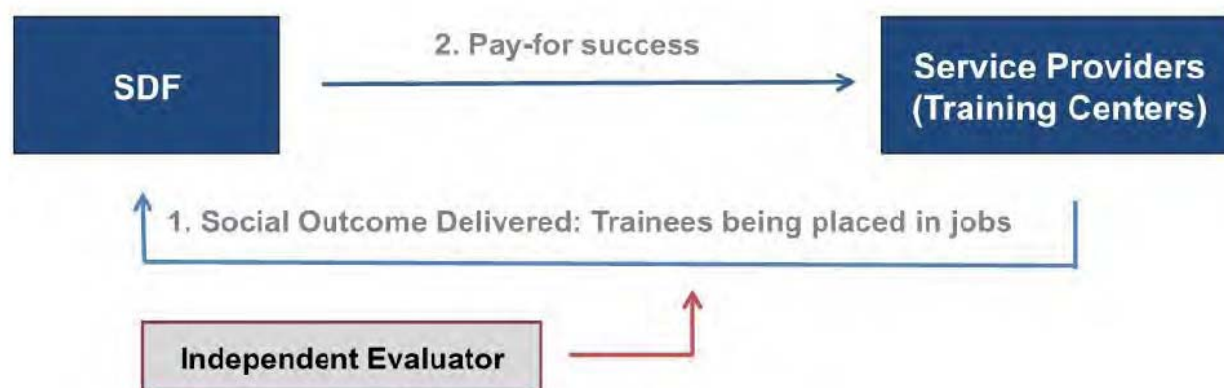
An example of bundle payments is Baptist Health Care System Acute Care Episode's (ACE) program in which hospitals and physicians are paid fixed fees for groups of services including 28 orthopaedic (musculoskeletal) and cardiac services. The healthcare providers are also able to earn up to 25% of normal fees in a shared savings scheme, and to date the arrangement has saved Baptist Health \$2,000 per case and earned doctors up to \$280 per case in bonus payments (Piper, Payment Reform Models: Employers Explore Population-Based and Bundled Payment, 2013).

### *Fee-for-service (FFS) payments including pay for performance elements*

In this arrangement, the healer (in the case of the healthcare sector) and payer enters into a conventional FFS agreement but with the inclusion of bonus payments, either based on the quality of treatment, or efficiency (or both) (Eric C. Schneider, 2011). This type of arrangement is best suited to providers that don't have much influence on upstream or downstream costs, but who may be able to efficiently deliver a high quality product or service. In this instance, the healer may be incentivized to offer value (high quality, efficient service) through an FFS structured with a pay for performance aspect.

In Ghana, the Skills Development Fund (SDF) is looking at funding workforce training programs using Pay-for-Success (see Figure 4: Vanilla pay-for-success mode

) in order to increase the number of trainees that enter and stay in fixed term employment. Key to the Pay-for-success contract is rigorous (reliable, timeous) evaluation of outcomes in order to trigger performance payments.



### **Pay-for-success contracting: Impact first, money second**

*Figure 4: Vanilla pay-for-success mode (Ning Fu, Innovations in Workforce Training Programs in Ghana: Using Pay for Performance Contracts, 2013)*

A Pay-for-Success model in which 100% of the payment is made only after successfully meeting all targets may inadvertently disqualify smaller contractors who may not be able to fund working capital needs from their own reserves. To counter this risk, smaller bidders could approach external funders for capital (the bank, investors) or the contract awarder could pre-finance a portion of the project (based on the reputation of the service provider) (Ning Fu, Innovations in Workforce Training Programs in Ghana: Using Pay for Performance Contracts, 2013).

Another example of Performance Based Financing (PBF) is Belgium based NGO Cordaid's efforts to improve health outcomes in 2 districts in Burundi. The aid organization established a number of Local Fund Holding agencies (FHAs) that contracted individual health facilities to deliver a set of clearly defined services using a PBF model. In order to release a payment to the healthcare facility, the quality and degree of service being offered had to be verified by auditors (independent of the government or the local health system) from the FHAs. These auditors visited the public health facilities (and any sub-contractors), verifying the reports of the provider by recounting services registered versus performance indicators. The



FHAs also contracted local NGOs to track patients registered as being helped by the public health facilities to ensure that they existed and received the treatment specified by the provider (Social Finance, 2013).

#### *Loan Conversion or “buy down”<sup>5</sup>*

This is a loan extended to a developing country to execute a development program, and which a donor (e.g. private foundation) agrees to pay back to the lender on behalf of the recipient should their program prove successful. Thus, should the beneficiary successfully implement developmental reforms, the loan acts as a grant (no payback required by the borrower), but in the event of failure, the instrument remains a form of debt that requires repayment. This innovative form of financing is sometimes referred to as outcomes-based aid.

In 2003, the World Bank approved a \$28m no-interest loan to the government of Nigeria for the purchase of oral polio vaccines (OPVs). The loan was provided through the World Bank’s International Development Association (IDA) arm, a body that provides soft capital to some of the world’s poorest countries. As part of an innovative financing arrangement, the Investment Partnership for Polio (comprising the World Bank, Gates Foundation, United Nations Foundation and Rotary International) has established a \$50m fund that will look to buy down IDA loans globally, reducing the cost of successful interventions combatting disease in many Least-Developed Countries. In this way, loans offered by the World Bank under this scheme will convert into grants should the health program being financed prove effective in delivering results (The World Bank, 2003). In a similar vein, as recently as 2013, the Japanese International Cooperation Agency (JICA) provided the government of Pakistan with a \$65m ODA (Official Development Assistance) loan to support the country’s polio eradication efforts. Under this arrangement, the Gates Foundation will pay back the loan to JICA should Pakistan succeed in rolling out the polio eradication program (David Wilson, 2014). Adopting output based aid and/or innovative financing mechanism such as loan conversions may be a unique way to tackle (if not completely eliminate) the moral hazard of developing countries expecting to receive debt forgiveness for borrowed funds without prudent management thereof (Michael Klein, 2005).

To conclude, there are many ways to build performance based elements into contracting arrangements with service providers in addition to those seen in an Impact Bond arrangement. Firstly, population-based payments and shared savings could be used to incentivize a provider/s to minimize wasteful spend and focus on preventative activities to ensure the target group they are serving remain in an optimal state (whether it be health, shelter, employment etc), whilst ensuring cost savings. Potential drawbacks could include sacrificing the needs of beneficiaries who need moderate to minimal assistance by focusing on high-risk cases only.

Secondly, bundle/episode-based payments can be used to encourage contractors to collaborate to ensure that services involved in a specific “episode” are provided for at the most cost-effective rate, by optimizing all the activities along the value-chain (and then share in the savings accrued). Potential pitfalls could include lack of quality control due to the potential involvement of multiple (potentially unvetted) service providers (some of whom may be sub-par) or due to “cutting corners” (economizing to the detriment of quality). The quality problem should be largely mitigated by the performance based element of the financing mechanism, provided the monitoring and evaluation is rigorously and accurately conducted.

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<sup>5</sup> (Leading Group, 2014)



Thirdly, adopting Fee-for-service (FFS) payments including pay for performance elements is a useful way to contract with service providers without bearing all the risk of non-performance. A potential disadvantage of this approach is that smaller contractors with tighter cashflows may not be able to take on the project without an upfront payment to fund initial working capital requirements. One way to mitigate this is to offer a portion of the project fee upfront, with the rest contingent on satisfactory performance milestones being reached.

Fourthly, in the case of a donor looking to ensure that their development spend is not misused, there is the option of structuring their grants as soft loans that will be bought down (by another donor) or left unpaid (to the lender) should the beneficiary implement successful reforms, i.e. the loan converts into a grant. Potential downsides of this problem could include penalizing Least-Developed Countries (LDCs) that are poorly managed (e.g. due to weak political institutions) but in desperate need of aid, by burdening them with further debt. Another potential weakness of the system is “moral hazard”, where a country that has benefitted from aid before and gotten away with debt forgiveness assumes that any further loans will not have to be repaid back despite unsuccessful reforms. Potential ways to limit these dangers include:

- lending to countries that have low corruption and efficiently run governments,
- providing a Technical Assistance (TA) facility to beneficiary countries with each loan to aid with financial and project management of programs
- vetting/conducting due diligence on potential implementing partners to ensure program efficacy
- taking out insurance against loan non-performance, e.g. through HUGinsure, social impact insurance entity<sup>6</sup>

As explained above, there exist performance-based procurement options other than Impact Bonds (IBs). In the case where an IB may be too complex to arrange, service providers do not need upfront working capital, and/or existing interventions are generally known to work, commissioners (government or donors) can turn to episode/bundled disbursements, population based payments, fee-for-service arrangements with performance bonuses or loans with conversion options in order to make contractors more accountable to ensure successful project outcomes.

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<sup>6</sup> HUGinsure is a specialist insurance initiative started by Hollard and Dalberg, and underwritten by AON and Lloyd’s of London which looks to measure and manage risks associated with funding social impact organisations. HUGinsure aims to assess the creditworthiness of organisations with a social goal, helping donors to lend to beneficiaries with confidence and understand where best to deploy financial aid. Policies offered are expected to catalyse up to \$400m of developmental spend to assist in disaster relief and critical sectors such as agriculture, health, water, energy and inclusive banking/business (among others) (HUGinsure, 2015)

### 3. Framework for developing IBs

Developing an IB concept requires an in-depth analysis of key factors, which are laid out along the development framework below<sup>7</sup>. A clear, analytical understanding of each of these elements is essential to designing robust SIB concepts. This framework guided the work of this research project and is reflected in the following sections of this report.

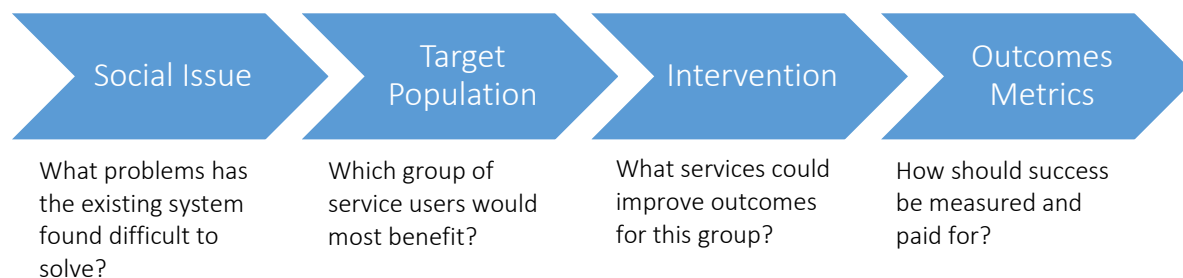


Figure 5: Development framework for a SIB (Bertha Centre, Social Finance, Genesis Analytics, 2014)

#### Defining the Social Issue

As the first step to any IB is the definition of the social issue. This looks to answer the question, “what problems have the existing system found difficult to solve?” This step of the IB development framework is best illustrated with a real world example. Since this study focuses on using IBs for results-focused SME development, the challenges facing small business in SA will be the starting point for an example of the definition of a pressing social issue prevalent locally.

#### Low SME survival rates and high unemployment in SA

South Africa’s unemployment rate is approximately 24% (Rene Vollgraaff, 2014). The country is also known to have the world’s third highest unemployment rate for people between the ages of 15 to 24, with more than 50% of young South Africans unemployed (James, 2014). High unemployment, poverty and inequality are a triple challenge that South Africa is continuing to try address.

In South Africa, one study (Abor, 2010) estimates that 91% of formal business entities in the country are SMEs and that these enterprises account for approximately 55% of GDP and 61% of employment. This is corroborated by recent stats from South Africa’s Department of Small Business Development (SBD), which asserts that 57% of the country’s GDP and 56% of its employment (77% if you include the informal sector) are derived from SMMEs (Small, Medium and Micro Enterprises) (Zulu, 2014). In a recent budget vote, SBD Minister Lindiwe Zulu stated that *“the NDP envisages a treble sized economy by 2030 with a target of 11 million job opportunities and SMMEs & cooperatives can make a meaningful contribution to this objective...SMMEs and Cooperatives are a critical means to empower our people, a mechanism to draw new entrants into the economy, strengthen inclusive growth, build the social economy, encourage solidarity and create large numbers of jobs. In short, potential exists to generate employment opportunities and economic growth through a vibrant and well-functioning SME sector.”* (Zulu, 2014)

Despite this ebullience towards SMEs, the 2012 Global Entrepreneurship Monitor report estimates that only 2% of South Africans own businesses that have been established for over three and a half years,

<sup>7</sup> See Appendix V: Steps involved in developing a SIB for a more detailed description of the SIB design process



indicating a high failure rate among South African start-ups (Small Business Project, 2009). This compares to a global failure rate of approximately 50% within 5 years (Bouri, 2011). The reasons for failure are variable: the 2010 Finscope South Africa Small Business Survey found that 39% of respondents cited money-related issues, 34% strategy related issues and 17% infrastructure-related issues as obstacles to growth<sup>8</sup>. The survey also revealed that 42% of small business owners do not use any type of financial products but rely on family and personal capital. In addition, the Global Entrepreneurship Monitor report supported by the Branson Centre of Entrepreneurship (Branson Centre of Entrepreneurship, 2011) revealed that many young entrepreneurs do not have any business mentors to turn to for advice.

### Defining the Target Group

A key component of a SIB is that it seeks to have some defined, measurable impact on a specified target population or group. Developing a SIB concept therefore requires consideration of the people or organisations for which the desired impact is intended. This will help ensure that a suitable intervention is identified that caters to the specific needs of that target group and will make it easier to assess the relevance of the evidence-base that exists for that intervention – i.e. if there is strong evidence that an intervention has worked well for a specific target population in the past, then that evidence is relevant where the SIB is targeting a population with similar characteristics.

Key aspects of defining the target group also include an understanding of the groups that outcomes funders are seeking to benefit, and also the interest of investors in investing in the outcomes of that group.

### Geography

SIBs are typically focused around a particular location, where target beneficiaries share common characteristics, which facilitates the definition of desired outcome metrics. Consideration needs to be given to ensuring there would be a sufficient volume of beneficiaries who could be reached efficiently and which are not too widely dispersed, as this would increase transaction costs.

### Defining the Intervention

An intervention is the service or set of services that will be provided to the target group under a SIB. Services will depend on the outcomes that a SIB aims to achieve and the needs of the target group. Accordingly, it is necessary to establish the likelihood of the intervention having an effect on target outcomes. This is dependent on two considerations:

- The degree to which interventions are well understood and their effectiveness is evidenced with sound data.
- Whether there is a gap or scarcity of service provision to the target group such that the SIB is likely to lead to a significant change in desired target outcomes.

To answer these questions, an assessment should be undertaken of interventions under consideration for the target group that includes: reviewing the qualitative and quantitative evaluations available on the interventions; interviewing service provider staff members and target beneficiaries; and, mapping out the theory of change for the interventions and analysing how these interventions are likely to meet the needs and improve the outcomes of the target group.

### Choosing a service provider to deliver the intervention

As a pre-cursor to selecting a service provider to deliver the intervention in an IB, it is useful to run the potential contractor through the following exercise which tests the relative fit of their program in such a

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<sup>8</sup> These include lack of access to telecommunication infrastructure, electricity, roads etc. (Grundling, 2011)

structure. It is advisable for intermediaries to run this SIB-ability test with potential service providers (e.g. in the form of a workshop or roundtable discussion) before contracting stages begin.

### Is your intervention SIB'able?

#### The Intervention

1. What is the social value of the intervention?
  - Does the intervention create high social impact in disadvantaged group
  
2. What evidence exists to prove that the intervention works?
  - Has this intervention been trialed in this population?
  - Has this intervention been trialed in another population locally or internationally?
  - What is the quality of the evidence that exists?
  
3. Is the intervention innovative?
  - Is the service already being provided in the public sector?
  
4. Who are the beneficiaries?
  - Are they easy to identify and distinct from the rest of the population?
  - Are they a large enough group with which to generate meaningful outcomes and returns?
  - Is there a reliable referral pathway into the service?

#### The Outcomes

5. What are the outcomes?
  - Is the evidence linking the input/output to the outcome robust?
  
6. Can the outcome/s be measured?
  - Is the data source reliable?
  - Is the information already being captured on an existing database?
  - Does the measure correspond with the outcome?
  
7. Is there a clear counterfactual that can be used for comparison purposes?
  - Is an historic baseline that is comparable?
  - Is there a cohort that could be ethically used as the control group?
  - Will you be able to prove that the outcomes would not have happened without the intervention?
  
8. What perverse incentives are present and how can they be mitigated?

#### The Commissioner

9. Who is willing to ultimately pay for the intervention?
  - Is there a specific department you have identified?
  - Is there more than one department that will benefit from the outcomes?
10. What is the value created for the public sector?
  - Are there actual cost or cashable savings generated?

- Can cost savings be calculated?
- Is the public sector mandated to achieve these outcomes currently?

### The Investment

#### 11. Is the intervention investable?

- Does investment contribute to target outcomes?
- Does the investment contribute to target outcomes vs what would have happened anyway?
- Is this the best available comparable option?
- Does the investment generate sustainable returns?
- Is there proof of commitment to mission?

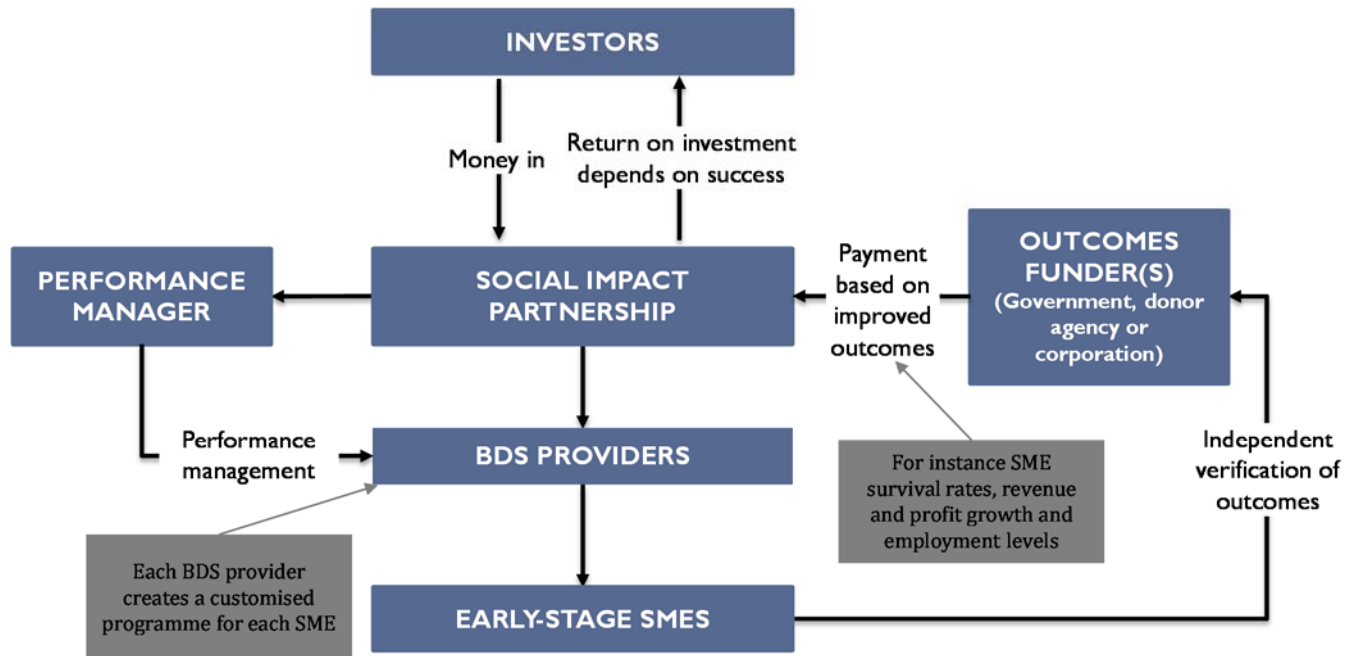
### SIB Structures

Two models for development of a SIB in have emerged in the course of our work. One – the traditional model – is primarily focused on building an intervention and measurement framework which, through performance management and a rigorous approach to capturing and responding to data, builds up the evidence base for an intervention which is effective to deliver the target outcomes. The second – potentially simpler approach – would be to pilot a number of SIBs across a spectrum of different service providers (but targeted at comparable outcomes and target groups) to determine what type of intervention is most effective at delivering those outcomes.

The first of these – the traditional SIB model – is most appropriate where there exists a relatively well-defined intervention with some track record of delivering desired results, and where the SIB structure could help improve the quality of intervention delivery. Investors' interests and the interest of outcomes funders are both aligned to outcomes achieved. In order to drive performance, the intermediary appointed by investors would manage performance of service delivery by providers. It would collect real-time data and use this information to guide improvements in service delivery to enable achievement of outcomes.

Figure 6 outlines how a SIB providing Business Development Services (BDS) to early-stage SMEs adopting the traditional structure operates.

Figure 6: Structure of traditional SIB providing BDS to early-stage SMEs



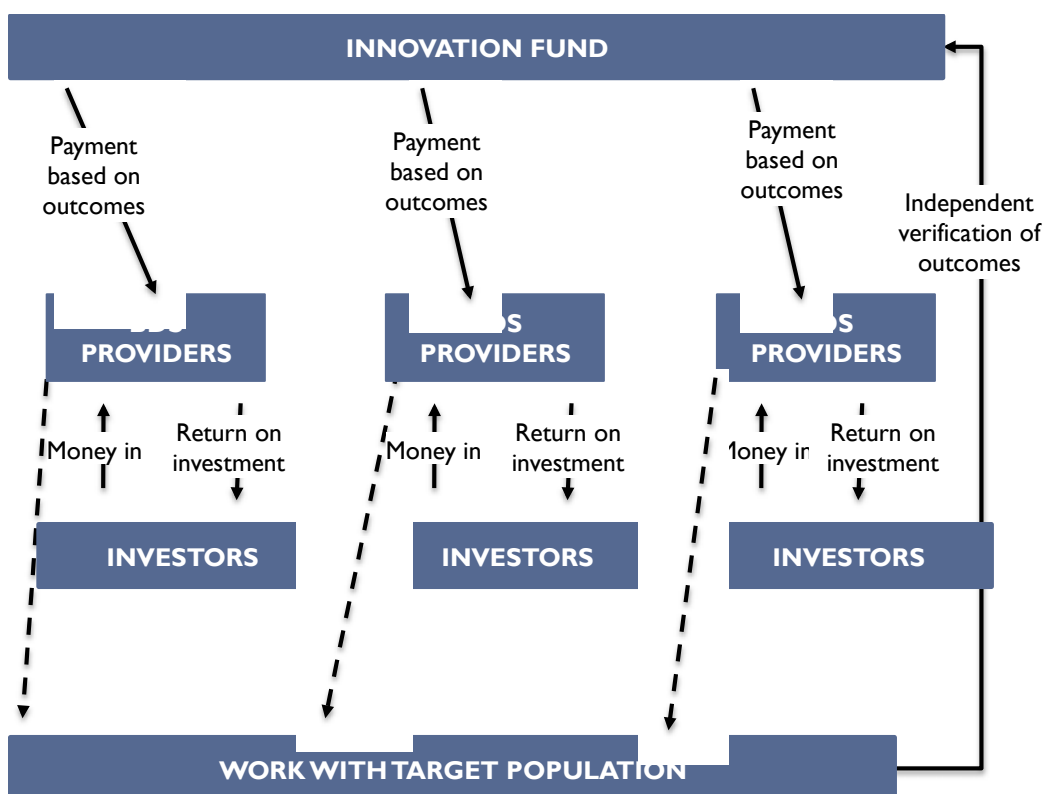
The simplified tariff-based SIB model is potentially preferable in cases where there is a lack of robust evidence on what might be most effective, and where the objective is to test out different types of services/interventions to see which have the most impact on target outcomes among comparable target intervention groups.

Let us again take the example of an IB offering BDS to support and strengthen SMEs. Under a simplified tariff-based model, the outcomes funder would set aside a challenge (or innovation) budget, which specifies what outcomes they are willing to pay for and the maximum tariff they are willing to pay for each outcome achieved.

BDS providers would then be invited to tender and those interested in participating would bid, outlining their proposed intervention and the tariff they wish to be paid for the relevant outcome(s) – not exceeding the tender maximum. Clearly, it would be necessary at the outset to know that there is appetite from investors to support service providers with working capital under a simplified tariff-based SIB, and this will need to have been considered by the outcomes funder during the design phase of the tender. The outcomes funder would select several providers, enabling different projects to be piloted in parallel and enabling it to develop a view on the most effective providers and types of BDS. This simplified tariff-based SIB model has been used by the UK’s Department of Work and Pensions, under its Innovation Fund – which is targeted at programmes for disadvantaged youth, and is outlined in Figure 3.

Given the lack of evidence that exists in the BDS space on what types of interventions are effective, our recommendation would be to pilot several different forms of BDS under such a simplified tariff-based SIB model.

Figure 7: Structure of Simplified Tariff-Based SIB providing BDS to early-stage SMEs



### Defining the Outcome Metrics

Outcome metrics form the foundation of the contract between the outcomes funders and investors in a SIB as they determine what outcomes are rewarded, which in turn provides a flow of income that enables investors to be repaid. The most important criterion for the identification of outcome metrics is whether the metrics incentivise a service that improves outcomes for those who use it. Once the outcome metrics are defined, a system of measurement that all stakeholders trust must be developed in order to provide objective measurement of the degree to which the SIB intervention has achieved the target social outcomes.

**Developing appropriate outcome metrics:** An outcome metric must be objective and improvement in the metric must be desirable, measurable and achievable within a reasonable timeframe.

SIBs should also be carefully structured so as to avoid the creation of perverse incentives. For instance in the Peterborough SIB, which focused on reducing re-offending, there was a need to mitigate against the ‘cherry picking’ of those least likely to reoffend and to ensure that providers are encouraged to work with those offenders who are responsible for the highest volume of crime. Accordingly, a frequency metric was adopted, based on the ‘number of reconviction events’ for members of the target group. This was preferred to a binary metric, such as whether an individual has re-offended or not, as there would not be an incentive to continue to work with an individual once he had reoffended, and in consequence little incentive to work with the most prolific offenders who are responsible for the most crime. Various other terms were included within the contract, also with the purpose of mitigating against the risk of perverse

incentives – for example, forbidding the use of funding to provide direct monetary incentives to the target group.

A combination of output metrics, which measure whether services have been delivered, and outcome metrics, which measure the impact achieved by these services, can also be used in appropriate circumstances. Allocating some payment for outputs enables capital to be returned to investors sooner than if payments are only made for outcomes which are only measurable a long time after service delivery. Where there is a strong relationship between service delivery and achievement of outcomes but a long delay before measurement of outcomes it may be desirable to use of mix of output and outcome metrics. It should be acknowledged, however, that payment for outputs has the disadvantage that there is likely to be less flexibility for service delivery and also has the risk that some payments may be made for activities that do not lead to outcomes.

**Establishing a measurement framework:** The measurement framework sets a benchmark against which SIB outcomes are compared. The benchmark reflects outcomes in the absence of SIB interventions, enabling the calculation of benefits generated by the SIB-funded interventions. There are three common ways of generating a benchmark:

- *Historical benchmarks for an equivalent population:* Outcomes achieved for the SIB target group are measured against historical data for a similar target group.
- *Pre- and post- intervention for the target group:* Outcomes for beneficiaries in the SIB target group prior to the intervention start date are compared to a point after they have received the intervention service.
- *Control group or live baseline:* Outcomes achieved for the SIB target group are compared to a contemporaneous control group that is monitored during the period of intervention.

The advantages of historical benchmark and pre- and post- interventions approaches are that they do not exclude individuals or organisations from receiving the SIB intervention and are simpler to apply. However, they are less able than the control group approach to identify and take into account the impact of external factors on the outcomes achieved by the SIB intervention. Accordingly, the selection of a benchmark will depend on the outcome metrics and preferences of stakeholders.

Metrics that focus on both outputs and outcomes place weight on incentivising successful interventions (the outcomes element), but also remunerate provision of the underlying service (paying for doing, regardless of success). Whether or not this approach is appropriate will depend on how comfortable outcomes funders are to pay for outputs, given that many outcomes are only measurable some time after interventions have been carried out (e.g. ECD interventions often yield tangible benefits many years after programs have been completed, due to their early stage).

The outcome metrics of a potential SIB will also need to be measured over a long enough timeframe to capture the impact of the intervention. For example, in the case of a SIB concept focused on reducing SME failure at the 18-month “tipping point”, outcome metrics could be measured when the SME has reached a lifespan of three to four years. Measurement at this point would be appropriate as this is the time by which the majority of SMEs that pass the “tipping point” have failed. This is also a reasonable timeframe for a SIB, which needs to run for long enough to demonstrate sustained change and build resilience into the delivery model so that there is clear evidence of the effectiveness (or not) of the intervention. The terms of SIBs which have been launched to date vary from two years to just under ten years, although the



longer-term SIBs incorporate some early repayments based on intermediate outcomes or outputs such that capital can be recycled to fund later years of the SIB programme.

Finally, it is also important that selected outcome metrics for a SIB minimise the risk of perverse incentives as outlined above. For instance, a metric such as job creation (in the case of a BDS for SME IB) may create incentives for multiple hires, but on short-term contracts, or to incentivise recruitment of lower skilled workers when the optimal requirement is for skilled workers. To combat this, the chosen metric would need to be one focused on the creation of new but sustainable jobs – for example, a requirement that an employment opportunity spans a guaranteed minimum period and that contracts be based on a definite, sufficient number of hours per week.

#### *Measurement framework for a SIB*

Use of a control group is a typical approach to attribution in a traditional SIB. The primary challenge in setting a control group is to identify the key characteristics of the target group, which should be matched with members of the control group.

An alternative approach could be to make payments for outcomes achieved regardless of attribution. This is the approach to outcomes measurement that is typically used in the simplified tariff-based SIB structure. Under this approach, a tariff for outcomes would also be set. This tariff would be informed by a variety of data including the social value of the outcomes, the historical results for an equivalent population of beneficiaries, past results of participating target groups and predictions on the impact of external factors on outcomes. While this approach reduces the complexity of measuring outcomes achieved, it does introduce further risks and thus may deter outcomes funders and/or increase investor returns required to achieve buy-in. For instance, under this model, outcomes funders risk making payments for outcomes achieved due to external factors, and not the intervention itself, and investors face the risk of external factors preventing the achievement of outcomes and consequently, preventing the disbursement of payments. Overall, whether or not this is a preferable approach will depend on the preferences of outcomes funders and investors.

#### 4. Overview of Impact Bonds Globally (excluding Africa)

As a precursor to this section, it is important to make a distinction upfront about the differences between a Development Impact Bond (DIB) and a Social Impact Bond (SIB). Social Impact Bonds typically have Government as outcomes funder (and commissioner), whilst in Development Impact Bonds (DIBs) donors (e.g. developmental/aid agencies, foundations etc) are responsible for making success payments (solely or jointly).

#### Some statistics on (mostly “active”) Impact Bonds

In terms of active<sup>9</sup> Impact Bonds (IBs) around the world (excluding Africa)<sup>10</sup>, there are about 75 projects across 7 regions, from 17 countries. The regions are:

1. Asia
2. Australasia

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<sup>9</sup> An active IB is defined as one that has progressed past mere case study phase, i.e. is undergoing concerted investigation for possible development, i.e. at least in a “serious” (not purely hypothetical) exploratory phase

<sup>10</sup> Most African IBs are only in (early) exploratory phase (often hypothetical case study, i.e. dormant/non-starter); the separation of African IBs (to be dealt with in the next section) has also been done so as to be able to draw comparisons with IBs from the rest of the world

3. Europe (ex-UK)
4. Middle East (Israel<sup>11</sup>)
5. North America
6. South America
7. United Kingdom (UK)

The vast majority of IBs in regions outside of Africa are in developing countries (92% or 62), most of which are Social Impact Bonds (SIBs).

#### Geographical spread of Impact Bonds (IBs) by major region (see Figure 8 below)

1. **UK dominates:** Almost half (~49%)
2. **North America next:** Roughly a quarter – mostly US (1 Canada, 1 Mexico)
3. **Middle-East (all Israeli) and Europe (ex-UK):** ~7% each
4. Asia, Australasia and South America: 4% each

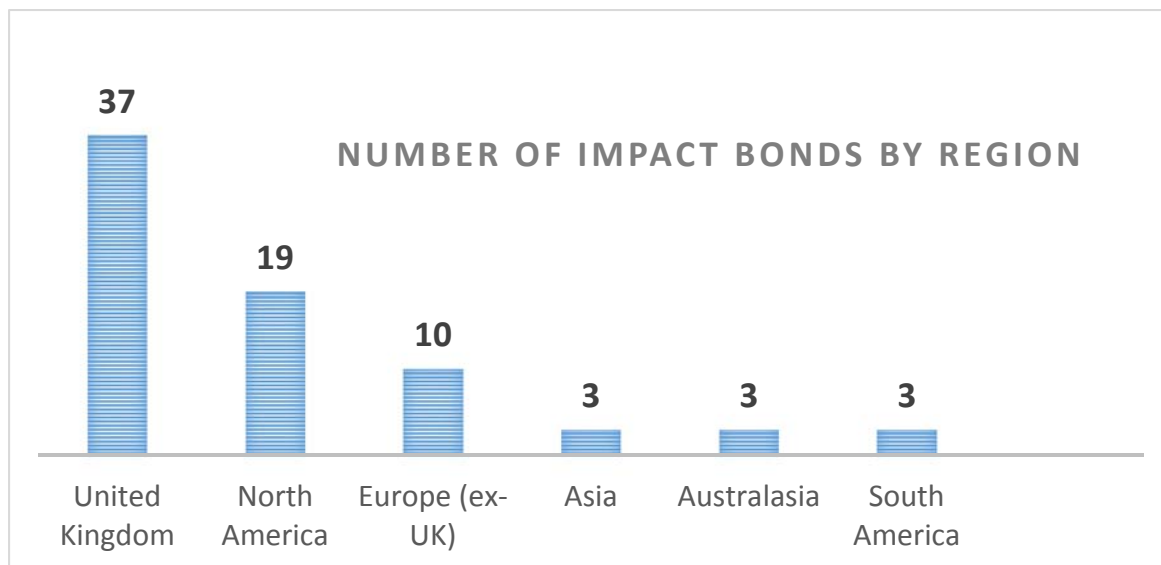


Figure 8: Impact Bond Distribution by Major Region (2015 data)

The bulk of non-African IBs are in implementation phase (~70%), with ~29% in Design Phase, and only 1 in advanced exploratory phase<sup>12</sup>, see Figure 9 below.

<sup>11</sup> There are no other Middle Eastern IBs in existence (yet)

<sup>12</sup> There are obviously a plethora of IBs that are being considered globally, but for the sake of this scan, only projects that are actively being pursued from a non-purely theoretical standpoint are included

The total value of these global IBs amount to ~\$267m<sup>13</sup> or ~R3.3bn, with an average value of ~\$4.76m or ~R60m, a range of \$130k - \$39m, and a middling duration of 4.43 years.

### Stages of Global Impact Bonds

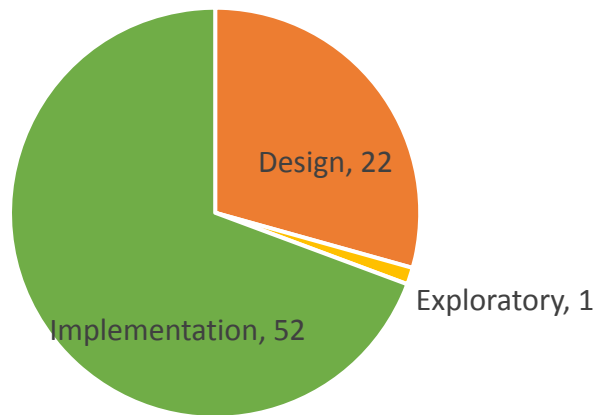


Figure 9: Graph showing the distribution of IBs by development stage

Social focus areas of global Impact Bonds (see

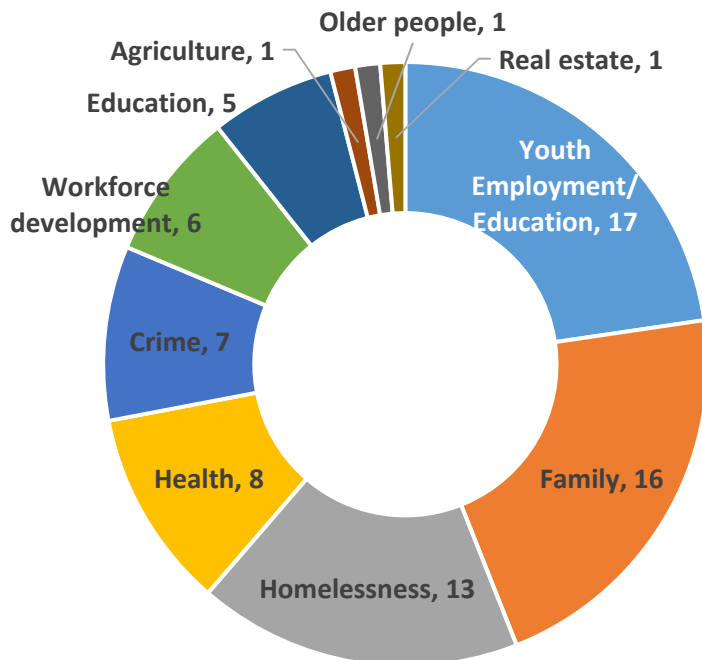


Figure 10 below)

- Youth and family (e.g. mother & child) related social issues dominate (>20% each), with a large focus on *employment* and *education & foster care* (avoidance)

<sup>13</sup> As measured by outcomes payment or investment required

- Homelessness is the next largest priority with ~17% of IBs
- Lastly, Health, Crime, Workforce and Education together total ~35% of the focus areas of IBs worldwide

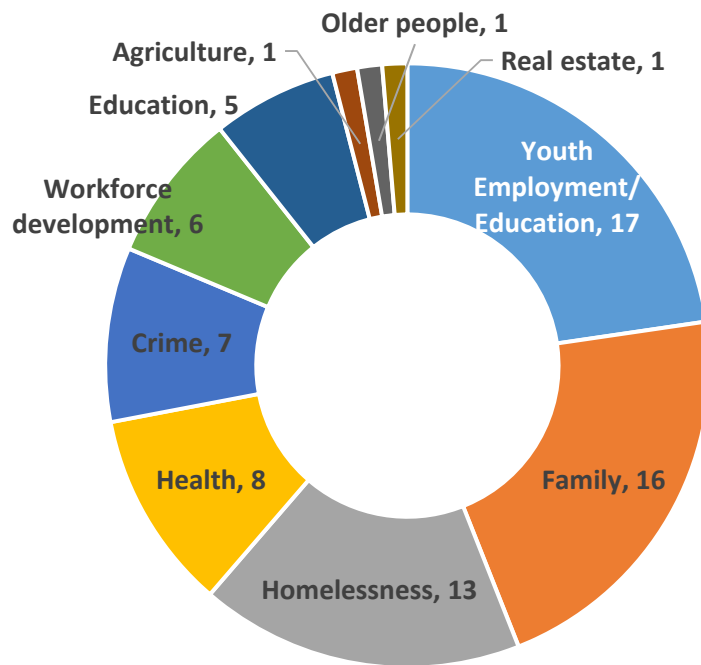


Figure 10: Distribution of Impact Bonds by Broad Social Issue

## 5. Existing African Impact Bonds (IBs) and global trends

This section will look at existing IBs in Africa, and strive to provide insights into global IB trends, opportunities and challenges facing the use of these instruments as they pertain to development objectives in emerging markets.

In order to designate the development stage of each IB, a relative maturity scale has been created and used. This scale consists of the following four phases, beginning with the earliest stage, and progressively becoming more advanced (ending with actual execution):

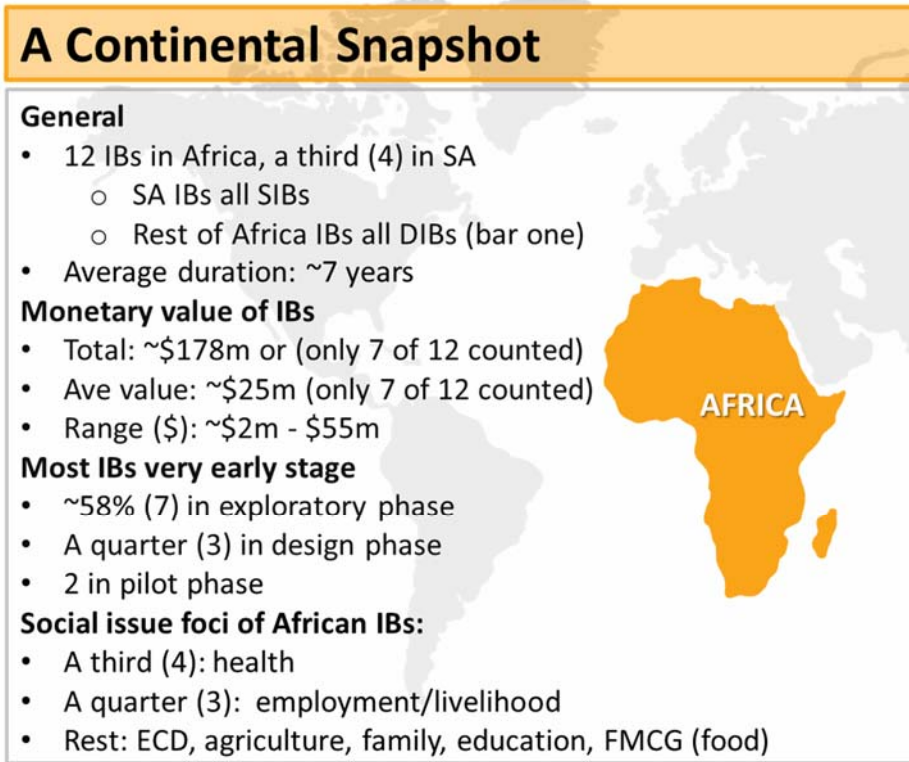
- Exploratory – case or initial scoping study
- Design – feasibility study followed by blueprint for pilot
- Pilot – running an actual small-scale IB proof of concept, and
- Operation – full scale IB taken to market (none in Africa).

To date there are roughly twelve<sup>14</sup> Impact Bonds (IBs) in Africa, with most in the early stage (pre-full implementation), with an average duration of over 7 years, and an average monetary value of around \$25m or R318m. The most frequently occurring social area of focus for the IBs are in health, followed by employment/livelihood strategies – see

<sup>14</sup> Dalberg is working on an additional Development Impact Bond (DIB) focused on youth employment in Morocco, and GRM Futures Group is looking at a national unique identifier DIB for Sub-Saharan Africa

Figure 11 and Figure 12 below.

Figure 11: Statistics on African Impact Bonds



In South Africa, there are 4 SIB projects that are in development, although again, most of them are some time away from being fully launched/taken to market. The four SA IBs span four different sectors including health, Early Childhood Development (ECD), SME support (of which this project is a part of) and justice/correctional services, and all of them are SIBs (rather than DIBs).

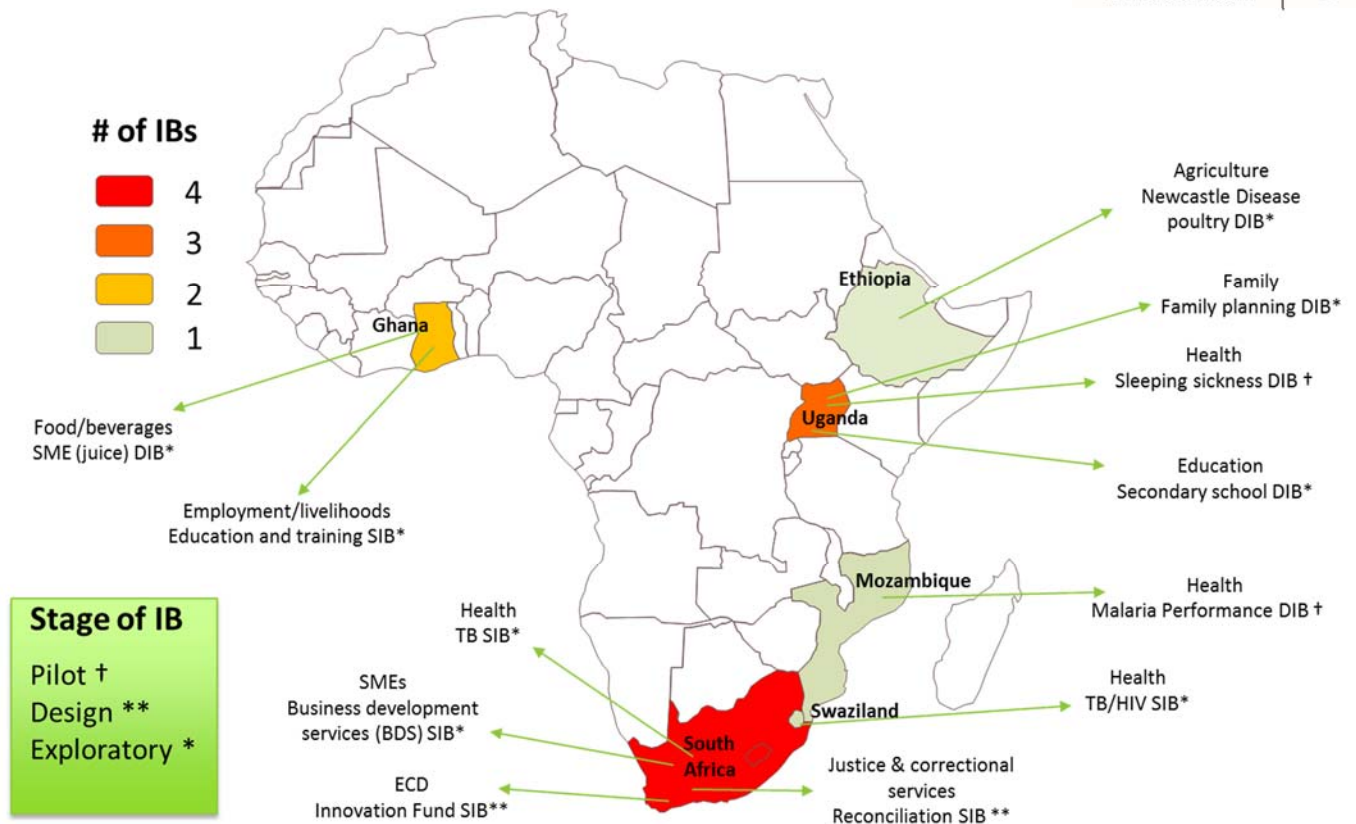


Figure 12: Impact Bonds in Africa

The following one page summaries aim to highlight the salient features of the abovementioned (African) IB initiatives. Where data is missing, approximations based on existing IBs in other geographies have been used, where applicable (e.g. if interventions in similar/same industry etc).

## South African Impact Bonds

### 1. Impact Trust's SA Reconciliation Social Impact Bond

<b>Country/Region</b>	<b>South Africa</b>
<b>Sector</b>	Justice and Correctional services
<b>Developmental issue</b>	
Overcrowded prisons (SA has over 112,000 prisoners <sup>15</sup> , 30% awaiting trial); over-burdened correctional services department; recidivism; inefficient judiciary; SA has highest ratio of prisoners/population in Africa (348 per 100k <sup>16</sup> ), 9 <sup>th</sup> in the world	
<b>Site/location</b>	3 courts across SA
<b>Size (monetary)</b>	Not disclosed
<b>Intervention</b>	Alternative Dispute Resolution
<b>Target group</b>	Petty offenders
<b>Bond structure</b>	SIB – Simple
<b>Stage</b>	Design (on hold for now)
<b>Outcomes</b>	Reduction in court backlogs
	Improved service delivery (justice, social development, correctional services)
	Reduce court, prison and welfare costs
<b>Indicators/payment metrics</b>	Reduced number of magistrates, clerks, guards etc
	Quicker case turnaround time; shortening/avoiding awaiting trial prison stays; lessen prison over-crowding
	Reduction in repeat offending; less guard time; reduced board and lodging for prisoners
<b>Service provider</b>	Khulisa Social Solutions (NGO)
<b>Investors</b>	Impact investors (e.g. Cadiz, Atlantic Asset Management)
<b>Outcomes funder/s</b>	Department of Correctional Services; other government agencies; donors
<b>Commissioner</b>	Department of Justice and Constitutional Development
<b>Partners</b>	Department of Social Development; National Prosecuting Authority (NPA)
<b>Intermediary/ies</b>	Impact Trust; Instiglio
<b>Duration (yrs)</b>	c.3-5 years
<b>Returns/Payment profile</b>	Not disclosed; Peterborough SIB: investors earn return (up to 13%) if reoffending rates drop by $\geq 7.5\%$
<b>Benchmark</b>	Control (non-participatory court)
<b>Guarantees</b>	Unknown (Riker's Island SIB: Bloomberg Philanthropies guaranteed 75% of investor capital)
<b>Guarantor</b>	Government or donor (aid agency, foundation, HNWI philanthropist)
<b>Contact</b>	Tamzin Ractliffe (Impact Trust); Avnish Gungadurdoss (Instiglio)
<b>Benefit/social opportunity</b>	Costs R8,000/month to keep a prisoner in jail <sup>17</sup>
<b>Data sources</b>	Stats SA; Department of Correctional Services archives; reports - National Institute for Crime Prevention and the Reintegration of Offenders (NICRO)
<b>Cost of program</b>	Unknown (Peterborough: expected payments to investors < 50% of savings) <sup>18</sup>

Table 3: ADR SA Reconciliation SIB (Ractliffe, 2015)

<sup>15</sup> (Jules-Macquet, 2014)

<sup>16</sup> (Independent Online, 2008)

<sup>17</sup> (News24, 2013)

<sup>18</sup> (Dharmendra Kanani, 2014)

## 2. Bertha Centre's ECD Innovation Fund SIB

<b>Country/Region</b>	South Africa
<b>Sector</b>	Early Childhood Development (ECD)
<b>Developmental issue</b>	Poor quality ECD provision; poor maternal and child nutrition; environmental toxins, stress, substance abuse, unresponsive caregiving, limited stimulation & opportunities for early learning; 33% of parents working & 15% chronically ill or disabled
<b>Site/location</b>	Western Cape (WC)
<b>Size (monetary)</b>	Unknown
<b>Intervention</b>	Health, nutritional and early learning outcomes in children
<b>Target group</b>	Disadvantaged children - first 1,000 days (conception to 2 years); 500,000 children 0-4 years old in WC
<b>Bond structure</b>	SIB - Innovation Fund
<b>Stage</b>	Design
<b>Outcomes</b>	Higher-quality ECD programs for more children Superior long-term education, health, social and economic outcomes
<b>Indicators/payment metrics</b>	Improved visual-motor perceptual development; Improved numeracy Improved motor development; Improved cognitive development; Early Childhood Environmental Rating Scale (ECERS) Improved language development; Improved readiness to learn $\leq 3$ months prior to or on entry to Grade R
<b>Service provider</b>	Various non-profit ECD providers (e.g. Ilifa Labantwana, Philani)
<b>Investors</b>	Impact investors
<b>Outcomes funder/s</b>	Department of Social Development (DSD); Department of Health; Private Funder
<b>Commissioner</b>	Provincial Government of the Western Cape (PGWC)
<b>Partners</b>	WC Department of Health, Department of Social Development, Lego Foundation; DG Murray Trust; Brookings Institute
<b>Intermediary/ies</b>	Social Finance UK; Bertha Centre for Social Innovation & Entrepreneurship
<b>Duration (yrs)</b>	3 (corresponding with SA's Medium Term Expenditure Framework)
<b>Returns/Payment profile</b>	Unknown (Salt Lake ECD SIB pays investors \$2,470 + 5% interest for each year a high risk student avoids special education; additional success payments of 40% of avoided costs)
<b>Benchmark</b>	Possible control group
<b>Credit enhancement</b>	Unknown (Salt Lake ECD SIB: 34% of investment in form of subordinated loan – downside protection for senior lender)
<b>Guarantor</b>	Government; donor (aid agency, foundation, HNWI philanthropist)
<b>Contact</b>	Aunnie Patton; Susan de Wit (Bertha Centre)
<b>Benefit/social opportunity</b>	Spending on early childhood development offers the highest rate of return to education <sup>19</sup>
<b>Data sources</b>	South African Child Gauge; Scorecard for Monitoring Obligations to Young Children; Annual National/Provincial Assessments (Maths and home languages from Grade 1-6), DHIS, DSD
<b>Cost of program</b>	Unknown (Salt Lake ECD SIB: Granite School District estimates it will save \$2,600/student)

Table 4: ECD Innovation Fund SIB (Source: Bertha Centre, Social Finance research)

<sup>19</sup> (Carneiro P, 2003)

### 3. BDS for SME SIB

<b>Country/Region</b>	South Africa
<b>Sector</b>	Business Development Services (BDS) for SMEs
<b>Developmental issue</b>	SMEs account for 55% of GDP & 61% of employment yet possess low survivorship rates; lack of affordability by SMEs for high quality BDS
<b>Site/location</b>	Johannesburg, Durban or Cape Town (SME hubs)
<b>Size (monetary)</b>	R60-80m
<b>Intervention</b>	Multiple BDS: mentoring, training, access to networks/finance, incubation
<b>Target group</b>	High growth potential and/or early stage, black empowered SMEs
<b>Bond structure</b>	Simplified, tariff-based SIB
<b>Stage</b>	Design
<b>Outcomes</b>	More financially sound, productive, profitable and growing SMEs
	Quality, permanent (> 1 year) jobs created on a sustained basis
<b>Indicators/payment metrics</b>	Growth in SME survival rates
	Increased revenue and profitability of SMEs; tax paid by SMEs
	Increase in number of employees; proportion of black-owned and managed SMEs
<b>Service provider</b>	Various BDS providers (e.g. Aurik, Raizcorp, Shanduka Black Umbrellas)
<b>Investors</b>	Impact investors (Cadiz, Atlantic); ESD funds (e.g. FNB Vumela; PPC Ntsika)
<b>Outcomes funder/s</b>	Jobs Fund; DTI
<b>Commissioner</b>	National Treasury
<b>Partners</b>	Flanders (Belgium Developmental Agency)
<b>Intermediary/ies</b>	Social Finance UK; Bertha Centre for Social Innovation & Entrepreneurship; Genesis Analytics
<b>Duration (yrs)</b>	5-8
<b>Returns/Payment profile</b>	First payment within 6-9 months
<b>Benchmark</b>	Control group (non-participatory SMEs)
<b>Guarantees</b>	Could include catalytic first loss capital provisions from a donor
<b>Guarantor</b>	Government; donor (aid agency, foundation, HNWI philanthropist)
<b>Contact</b>	Aunnie Patton; Susan de Wit; Alex Rodrigues (Bertha Centre)
<b>Benefit/social opportunity</b>	Only 2% of SA SMEs established for over 3.5 years; BDS can help increase this figure
<b>Data sources</b>	BDS providers; SME operations/financial records; GEM reports; Small Business surveys/index
<b>Cost of program</b>	+/- R30,000 per person per intervention for 5% increase in revenue (anecdotal, large variations)

Table 5: BDS for SME SIB (Bertha Centre, Social Finance, Genesis Analytics, 2014)

#### 4. Tuberculosis (TB) SIB

<b>Country/Region</b>	South Africa
<b>Sector</b>	Health
<b>Developmental issue</b>	South Africa is a high-burden TB and MDR-TB country.
<b>Site/location</b>	Initially Durban, Johannesburg, Cape Town, rolling out to rest of country
<b>Size (monetary)</b>	Unknown (Swaziland HIV/TB TaSP DIB: US\$10m; Fresno's Asthma Health Impact Bond pilot: \$1.1m)
<b>Intervention</b>	DOTS (Directly Observed Treatment, Short-Course) treatment over 6-9 months with incentives, lotteries, commitment devices and process improvements to encourage treatment completion
<b>Target group</b>	TB/MDR-TB sufferers: 490,000/10,000 in 2010
<b>Bond structure</b>	SIB – Simple
<b>Stage</b>	Exploratory
<b>Outcomes</b>	Improved health for TB sufferers
	>85% success rate in treating TB (WHO target)
<b>Indicators/payment metrics</b>	Community-wide infection rates
	Reinfection rate (of either TB or MDR-TB)
	Treatment Success (cure rate + completion rate)
	Patient compliance (default rate)
<b>Service provider</b>	Private clinics and non-profit providers of DOTS
<b>Investors</b>	KL Felicitas, Omidiyar and Rockefeller Foundations
<b>Outcomes funder/s</b>	SA government with donor co-sponsorship
<b>Commissioner</b>	SA government (DoH)
<b>Partners</b>	Various
<b>Intermediary/ies</b>	Instiglio
<b>Duration (yrs)</b>	Unknown (Swaziland HIV/TB TaSP DIB: 3 years)
<b>Returns/Payment profile</b>	Could be paid annually out of savings from avoiding treatment of MDR/XDR TB
<b>Benchmark</b>	Using propensity score matching, time-trend analysis or randomized control trials
<b>Guarantees</b>	Could include catalytic first loss capital provisions from a donor
<b>Guarantor</b>	Government; donor (aid agency, foundation, HNWI philanthropist)
<b>Contact</b>	Michael Belinsky (Instiglio)
<b>Benefit/social opportunity</b>	\$90 m in TB treatment costs saved p.a.; MDR-TB and XDR-TB are 20x and 1,000x costlier to treat than regular TB (respectively); In SA, MDR-TB makes up 2% of cases, but requires 55% of the TB control budget.
<b>Data sources</b>	Stats SA; DoH/WHO/MRC data; Hospital/clinical data
<b>Cost of program</b>	SA government spends US\$300-400 m on its national TB program. 1st-line TB treatment costs only \$437 per case, but MDR-TB treatment costs \$17,164

Table 6: TB SIB (Eddy, 2012)

Rest of Africa IBs

## 5. Economic Development Impact Bond (EDIB) Funding Facility for SMEs

<b>Country/region</b>	Ghana
<b>Sector</b>	Food and beverages
<b>Development issue</b>	Local fruit juice processing SMEs face high cost of capital to scale their operations to provide high quality juice pulp at scale for Coca Cola
<b>Size (monetary)</b>	USD 2.1m (or USD 500k - 10m)
<b>Intervention</b>	Finance capex and working capital expansion for pulp producing SMEs
<b>Target group</b>	Fruit juice pulp producing SME/s
<b>Bond structure</b>	DIB
<b>Stage</b>	Exploratory
<b>Outcomes</b>	
<b>1</b>	Capacity development of local firms (influx of knowledge, technology, and human capital)
<b>2</b>	Creates jobs
<b>3</b>	Adds to tax base, and provides local services
<b>Indicators/payment metrics</b>	
<b>1</b>	SME able to produce a predetermined quantity of pulp by a specific date
<b>2</b>	Pulp quality metrics: percent soluble solids, sugar, and acidity
<b>Service provider</b>	Technoserve (\$0.1M of the Bond is used to finance capacity building consulting services)
<b>Investors</b>	Institutional investors
<b>Outcomes funder/s</b>	Coca Cola
<b>Commissioner</b>	Coca Cola
<b>Partners</b>	USAID, DFID, GTZ, Gates Foundation
<b>Intermediary/ies</b>	Unknown
<b>Duration (yrs)</b>	5
<b>Returns/Payment profile</b>	20% coupon; option for Coca Cola to take equity in the SME (by covering a greater portion of the Bond) and limited time duration exclusive purchase rights.
<b>Benchmark</b>	Time-trend analysis; performance comparisons with sector averages
<b>Guarantees</b>	If SME not able to achieve the set thresholds, it is forced to repay the entire Bond itself
<b>Guarantor/s</b>	Funded SME
<b>Contact</b>	Center for Global Development
<b>Benefit/Social opportunity</b>	SMEs: Access to subsidized growth capital; access to capacity building services
<b>Data sources</b>	Food and beverage sector reports; stock market sector data; internal company reports
<b>Cost of program</b>	Unknown

Table 7: Economic Development Impact Bond (EDIB) Funding Facility for SMEs (Haas School of Business, University of California, Berkeley, 2012)

## 6. Workforce Training Programs DIB

<b>Country/Region</b>	Ghana
<b>Sector</b>	Multiple
<b>Development issue</b>	
Workforce concentrated in low-productivity industries (e.g. agriculture) and informal economy; high youth unemployment, as well as female under-employment; small enterprises and training providers in Ghana struggle to access bank credit due to lack of collateral, high interest rates (in excess of 30% p.a.); lack of outcome measurement and lack of Incentives for training providers to perform; economy over-dependent on commodities (shrinking manufacturing industry);	
<b>Site/location</b>	Workers in SMEs in poor urban areas
<b>Size (monetary)</b>	Unknown (Globally, workforce development SIBs between US1.5m-5m)
<b>Intervention</b>	Technical and Vocational Education and Training (TVET)
<b>Target group</b>	Working population as well as SMEs in urban Ghana
<b>Bond structure</b>	Challenge fund
<b>Stage</b>	Exploratory
<b>Outcomes</b>	
<b>1</b>	Increase in skilled or qualified workforce
<b>2</b>	Reduction in unemployment
<b>3</b>	Improved livelihoods for trained graduates from poor backgrounds
<b>Indicators/payment metrics</b>	
<b>1</b>	Certificates obtained by trainees
<b>2</b>	Time taken to find full-time employment
<b>3</b>	Average salary of TVET graduates compared to non TVET cohort
<b>Service provider</b>	Vocational Training for Female (VTF); Second Imagine International; Accra Technical Training Institute (ATTC); National Vocational Training Institute (NVTI)
<b>Investors</b>	Impact investors
<b>Outcomes funder/s</b>	Skills Development Fund (SDF)
<b>Commissioner</b>	Ghanaian government
<b>Partners</b>	Council for Technical and Vocational Education and Training (COTVET)
<b>Intermediary/ies</b>	Examples: Social Finance, Instiglio, Dalberg
<b>Duration (yrs)</b>	Unknown (Average for workforce development SIBs currently is 3 years)
<b>Returns/Payment profile</b>	Unknown (Globally, workforce development SIBs max outcomes payments ~ US1.8m-6.8m)
<b>Benchmark</b>	Using propensity score matching, time-trend analysis or randomized control trials
<b>Guarantees</b>	Could include catalytic first loss capital provisions from a donor
<b>Guarantor/s</b>	Danish International Development Agency (DANIDA); World Bank
<b>Contact</b>	Ning Fu and Shunde Tu (Harvard Kennedy School)
<b>Benefit/Social opportunity</b>	Better funded TVET graduates earn 58% more than those from less well-funded schools. Formal sector TVET graduates with well-recognized TVET certificates earn 94% more than those who don't have any certificates (58% more in informal sectors i.e., as self-employed).
<b>Cost of program</b>	TVET estimated to cost over 450 GHC (2006)
<b>Monitoring agency</b>	Innovations for Poverty Action (IPA) Ghana

Table 8: Workforce training DIB (Ning Fu, Innovations in Workforce Training Programs in Ghana: Using Pay for Performance Contracts, 2013)

## 7. Mozambique Malaria Performance Bond (MMPB)

Country/Region	Mozambique
Sector	Health
<b>Development issue</b>	
Over 57% of all paediatric admissions, 44% of outpatient consultations and 23% of all hospital deaths in Mozambique; child mortality rate: 103/1,000 (Malaria Consortium, 2011)	
Site/location	Maputo
Size (monetary)	USD 25-30m
Intervention	Integrated malaria control programme: prevention, diagnosis, treatment
Target group	High risk populations (up to 8 million people country wide)
Bond structure	Corporate IB
Stage	Pilot
<b>Outcomes</b>	
1	Reduce malaria by 30% in targeted regions (by year 3)
<b>Indicators/payment metrics</b>	
1	Reduction in malaria prevalence rates
2	Reduction in hospital admissions/medical costs related to malaria
3	Increased productivity/lower absenteeism of workforces due to decreased morbidity
Service provider	Local NGOs
Investors	Impact investors
Outcomes funder/s	Corporates in Mozambique: Anglo American, Nandos, Coca Cola (Foundation)
Commissioner	Government of Mozambique
Partners	Ministry of Health, donors
Intermediary/ies	Dalberg Capital
Duration (yrs)	3
Returns/Payment profile	Capital + 5% (capped at 10% above principal)
Benchmark	Using propensity score matching, time-trend analysis or randomized control trials
Guarantees	50% of capital if SIB fails
Guarantor/s	Donors
Contact	Lily Han (Dalberg)
Benefit/Social opportunity	Africa loses more than \$12bn in costs (including indirect) due to malaria
Source	Dalberg Global Development Advisors
Data sources	National Malaria Indicator Survey Mozambique; hospital records; corporate employee surveys/statistics

Table 9: Mozambique Malaria Performance Bond (Task Force on Innovative Financing for Malaria, 2011), (Han, 2014), Dalberg

## 8. HIV/TB Treatment as Prevention (TaSP) DIB

<b>Country/Region</b>	Swaziland
<b>Sector</b>	Health
<b>Development issue</b>	Swaziland has the world's highest HIV prevalence rate (26% of the population aged 15-49 (approximately 200,000 individuals are estimated to be living with HIV); Swaziland also has the world's highest TB incidence rate per capita (1,317 cases per 100,00 people in 2011
<b>Size (monetary)</b>	\$10m
<b>Intervention</b>	HIV/AIDS Treatment as Prevention (TasP) programme: uses early antiretroviral treatment (ART) to reduce morbidity, mortality & prevent transmission among people living with HIV
<b>Target group</b>	200,000 infected individuals; Pregnant women are a particularly vulnerable population: 41% are HIV-positive. Minimum sample size of approximately 3,400 for pilot
<b>Bond structure</b>	DIB
<b>Stage</b>	Exploratory
<b>Outcomes</b>	
<b>1</b>	Reduce number of new HIV infections
<b>2</b>	Increase the proportion of HIV-positive individuals alive and on antiretroviral treatment and ultimately to reduce HIV incidence.
<b>Indicators/payment metrics</b>	
<b>1</b>	Uptake of HIV testing
<b>2</b>	Acceptance of ART
<b>3</b>	Retention of individuals in care, and viral suppression
<b>Service provider/s</b>	MaxART programme in Swaziland (Maximizing ART for Better Health and Zero New HIV Infections): Clinton Health Access Initiative (CHAI) and STOP AIDS NOW!, Networks of People Living with HIV, University of Amsterdam, South African Centre for Epidemiological Modelling & Analysis (SACEMA), Southern Africa HIV/AIDS Information Dissemination Service (SAFAIDS)
<b>Investors</b>	Impact investors
<b>Outcomes funder/s</b>	UK Department for International Development (DFID)
<b>Commissioner</b>	Ministry of Health
<b>Partners</b>	Clinton Health Access Initiative
<b>Intermediary/ies</b>	Examples: Social Finance, Instiglio, Dalberg
<b>Duration (yrs)</b>	3
<b>Returns/Payment profile</b>	Unknown
<b>Benchmark</b>	To date, 80% of individuals in need of treatment (as defined by the national guidelines) in Swaziland are receiving it but more is needed.
<b>Guarantees</b>	Could include catalytic first loss capital provisions from a donor
<b>Guarantor/s</b>	Government; donor (aid agency, foundation, HNWI philanthropist)
<b>Contact</b>	Rita Perakis (Centre for Global Development)
<b>Benefit/Social opportunity</b>	Able to prevent up to 95% of new infections if sufferers are moved onto treatment early enough; Some governments & donors spend up to \$1300/person p.a. on ARV drugs; early ART for HIV patients reduced transmission of virus by 96%, decreased morbidity and mortality by 30% and reduced the incidence of TB by 83%.
<b>Cost of program</b>	\$10 m for a 3-year implementation study of TasP in a selected community in Swaziland

Table 10: HIV/TB Treatment as Prevention (TaSP) DIB (DIB Working Group, 2013)

## 9. East African sleeping sickness control DIB

<b>Country/Region</b>	Uganda
<b>Sector</b>	Health
<b>Development issue</b>	
<b>Site/location</b>	32 high risk districts and 18 lower risk districts
<b>Size (monetary)</b>	USD 20-30m
<b>Intervention</b>	Mass cattle injection programme and national community based insecticide treatment spray network; establishment of a network of private veterinary provision across Uganda
<b>Target group</b>	High risk areas of Uganda (possible roll out to Kenya, Tanzania, Sudan, Zambia); 9 million at risk individuals
<b>Bond structure</b>	DIB – Simple
<b>Stage</b>	Pilot
<b>Outcomes</b>	
<b>1</b>	Reduce incidence of acute 'Rhodesian' sleeping sickness in humans
<b>2</b>	Reduce prevalence of the sleeping sickness parasite in cattle to reduce human contraction
<b>3</b>	Improve animal health and productivity
<b>Indicators/payment metrics</b>	
<b>1</b>	Years 1-3: ≥65% of cattle in high risk districts treated; number of cattle treated for Trypanosome brucei parasite (transmitted by tsetse flies)
<b>2</b>	Years 4-8: significant reduction in human infective parasite prevalence from Y0 baseline
<b>3</b>	Reduction in prevalence of human-infective T. brucei in cattle as proxy for morbidity impact
<b>Service provider</b>	Existing veterinary infrastructure
<b>Investors</b>	Health and agriculture focused trusts and foundations; High net worth individuals and Africa focused impact investment funds
<b>Outcomes funder/s</b>	DFID (primary)
<b>Commissioner</b>	Government; Uganda Trypanosomiasis Control Council (UTCC) and its secretariat the Coordinating Office for Control of Trypanosomiasis in Uganda (COCTU)
<b>Partners</b>	UK Department for International Development (DFID); Stamp out Sleeping Sickness (SOS) Alliance: Makerere University Uganda, CEVA, University of Edinburgh, B47 IK Investment Partners/IKARE
<b>Intermediary/ies</b>	Social Finance UK; H20 Ventures
<b>Duration (yrs)</b>	8
<b>Returns/Payment profile</b>	Payments only triggered once 65% cattle treated in high risk districts; Payments at end of years 1, 2 and 3 capped at the cost of intervention plus a modest return; years 4-8, a risk-related return to investors linked to success. Payments triggered by reductions in cattle parasite prevalence in high risk areas, effective delivery of cattle treatment; reduction in parasite prevalence as proxy for human incidence & increase in economic value of livestock; USD 0-40m
<b>Benchmark</b>	Year 0 baseline (before treatment): compare to historical averages; time-trend analysis
<b>Guarantees</b>	Could include catalytic first loss capital provisions from a donor; subordinated investor
<b>Guarantor/s</b>	Government; donor (aid agency, foundation, HNWI philanthropist)
<b>Contact</b>	Jane Newman (Social Finance)
<b>Benefit/Social opportunity</b>	>80,000 DALYs (disability-adjusted life years) averted and >\$70m of social benefit (human and animal health)
<b>Cost of program</b>	Unknown

Table 11: East African Sleeping Sickness DIB (Centre for Global Development and Social Finance, 2012)

## 10. Uganda Secondary School DIB

<b>Country/Region</b>	Uganda
<b>Sector</b>	Education
<b>Development issue</b>	Poor quality education and insufficient number of secondary schools; estimated 75% of secondary school-aged children in Uganda not enrolled in a secondary school with the lowest rates among girls & young people from rural areas; insufficient teaching & learning materials, poor teacher quality, absenteeism, poverty among students, & problems with school management & supervision.
<b>Size (monetary)</b>	USD 35m (GBP 23m)
<b>Intervention</b>	Capital investment to establish new low fee private schools, teacher training, school leadership development and performance-based incentives at the school, teacher and household level.
<b>Target group</b>	Secondary school children (13-18 years old)
<b>Bond structure</b>	DIB - Simple
<b>Stage</b>	Design
<b>Outcomes</b>	
<b>1</b>	Increasing the availability and quality of secondary education
<b>2</b>	Level of UCE (lower secondary) exam results in DIB funded schools achieved, relative to historical district-level performance.
<b>3</b>	Construction of 50 new schools Y1-4; 750 additional student places in each new school
<b>Indicators/payment metrics</b>	
<b>1</b>	Enrolment
<b>2</b>	Increased number of secondary school places resulting from DIB investment – linked to school attendance and potentially verified through unannounced school visits by an independent evaluator;
<b>3</b>	Pupil retention;
<b>Service provider</b>	School management, teachers, community involvement
<b>Investors</b>	Impact investors
<b>Outcomes funder/s</b>	UK Department for International Development (DFID)
<b>Commissioner</b>	Ugandan Department of Education
<b>Intermediary/ies</b>	Social Finance UK
<b>Duration (yrs)</b>	10
<b>Returns/Payment profile</b>	£23 – £35m; repayment of principal with a 3% IRR on basis of school attendance; additional return of up to 5% IRR based on above baseline UCE exam results; additional 50% of quality payments given to providers as performance incentive; total investor returns of 8% IRR
<b>Benchmark</b>	Using propensity score matching, time-trend analysis or randomized control trials
<b>Credit enhancement</b>	Could include catalytic first loss capital provisions from a donor; subordinated investor
<b>Guarantor/s</b>	Government; donor (aid agency, foundation, HNWI philanthropist)
<b>Contact</b>	Jane Newman (Social Finance)
<b>Benefit/Social opportunity</b>	Increasing the availability and quality of secondary education in Uganda gives children access to the knowledge and skills which translate to employment and economic empowerment for themselves and their children.
<b>Source</b>	Social Finance UK
<b>Cost of program</b>	The Ugandan government currently provides payments of around £10 – £11.50 per eligible pupil per term to government and private schools that provide universal secondary education.

Table 12: Uganda Secondary School DIB (Centre for Global Development and Social Finance, 2013)

## 11. Uganda Family planning DIB

<b>Country/Region</b>	Uganda (expanding to Rwanda, Ethiopia, Sierra Leone and rest of Sub-Saharan Africa)
<b>Sector</b>	Health
<b>Development issue</b>	Uganda has the highest unmet need for contraception in East Africa at 41%, with only 18% of currently married women aged 15-49 using modern methods of contraception (Contraceptive Prevalence Rate or CPR).
<b>Size (monetary)</b>	> GBP 35m
<b>Intervention</b>	Use of contraception to avoid unintended pregnancies - combination of education, training, clinics and consumables
<b>Target group</b>	Young (15-19 years old) women living in rural areas/urban slums; women post-abortion and post-partum or accessing emergency contraception
<b>Bond structure</b>	DIB
<b>Stage</b>	Exploratory
<b>Outcomes</b>	
<b>1</b>	Reduce the number of unsafe deliveries and unsafe abortions – two of the main causes of maternal deaths.
<b>Indicators/payment metrics</b>	
<b>1</b>	Contraceptive prevalence and continuation rates; Age of mother at birth of first child
<b>2</b>	Teen birth and fertility rates; Couple Years of Protection (CYP - the estimated protection provided by contraceptive methods during a one-year period, based upon the volume of all contraceptives sold or distributed free of charge to clients during that period);
<b>3</b>	Time between births; Unmet need for family planning;
<b>Service provider</b>	Local clinics and hospitals (public and private)
<b>Investors</b>	Impact investors
<b>Outcomes funder/s</b>	Donor agency
<b>Commissioner</b>	Government/Department of Health
<b>Partners</b>	UK Department for International Development (DFID)
<b>Intermediary/ies</b>	Social Finance UK
<b>Duration (yrs)</b>	5-8
<b>Returns/Payment profile</b>	Unknown
<b>Benchmark</b>	The average CPR for sub-Saharan Africa is approximately 23%, whilst developed country CPR rates lie between 80-85%.
<b>Guarantees</b>	Could include catalytic first loss capital provisions from a donor or subordinated investor
<b>Guarantor/s</b>	Government; donor (aid agency, foundation, HNWI philanthropist)
<b>Contact</b>	Rita Perakis (Centre for Global Development)
<b>Benefit/Social opportunity</b>	By reducing fertility & pressure on services, \$1 invested in family planning saves \$2-6 (saving can be used on health & education for fewer children, maternal health, improved water and sanitation)
<b>Source</b>	DIB Working Group
<b>Data sources</b>	Household surveys, Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), contraceptive prevalence surveys.
<b>Cost of program</b>	DfID ARC (Accelerating the Rise in Contraceptive Prevalence) Programme in Uganda: GBP 35m for 700k women (translates to a unit cost per woman targeted of £50)

Table 13: Uganda Family Planning DIB (Social Finance & the Center for Global Development, 2012)

## 12. Ethiopia Newcastle Disease Poultry DIB

<b>Country/Region</b>	Ethiopia
<b>Sector</b>	Agriculture
<b>Development issue</b>	Newcastle disease (ND) is the single biggest constraint to household poultry production - a single outbreak can result in flock mortality of 50-100%.
<b>Size (monetary, \$m)</b>	\$ 23.40
<b>Intervention</b>	I-2 vaccination of poultry in Ethiopia to prevent the contraction of Newcastle disease, and reduce fowl morbidity and mortality
<b>Target group</b>	Village chickens owned by poor small-scale/subsistence farmers in rural Ethiopia
<b>Bond structure</b>	DIB
<b>Stage</b>	Exploratory
<b>Outcomes</b>	
<b>1</b>	Increase household poultry production, sale and consumption
<b>Indicators/payment metrics</b>	
<b>1</b>	Production, sale and consumption of chickens and eggs in the target communities will increase by 10% p.a. for 10 years
<b>2</b>	Reduce incidence of Newcastle disease
<b>3</b>	Reduce poultry mortality and morbidity
<b>Service provider</b>	GRM Futures Group (now Palladium Group)
<b>Investors</b>	Impact investors
<b>Outcomes funder/s</b>	Donor agency
<b>Commissioner</b>	Government/Department of Agriculture
<b>Partners</b>	Farming co-operatives
<b>Intermediary/ies</b>	GRM Futures Group
<b>Duration (yrs)</b>	10
<b>Returns/Payment profile</b>	Unknown
<b>Benchmark</b>	Historical mean poultry production, sales and consumption household data
<b>Guarantees</b>	Could include catalytic first loss capital provisions from a donor or subordinated investor
<b>Guarantor/s</b>	Government; donor (aid agency, foundation, HNWI philanthropist)
<b>Contact</b>	
<b>Benefit/Social opportunity</b>	By reducing fertility & pressure on services, \$1 invested in family planning saves \$2-6 (saving can be used on health & education for fewer children, maternal health, improved water and sanitation)
<b>Source</b>	DIB Working Group
<b>Data sources</b>	Household/Demographic/Agricultural Surveys (HDAS); Multiple Indicator Cluster Surveys (MICS); farming co-operative sales/inventory records (e.g. poultry feed)
<b>Cost of program</b>	The I-2 vaccine costs on average 4 cents per vaccination

Table 14: Ethiopia Newcastle Disease (ND) Poultry DIB (The Palladium Group, 2015)

## Challenges facing the IB market in developing markets

### *Lack of firm commitment from Outcomes Funders (OFs)*

In Africa, some donor organisations are reticent to fund IB led interventions on a large scale, as in the case of the Malaria Performance Bond. International donors wanted proof-of-concept before committing capital to programs under an IB setup. Reasons could include the fact that developmental organisations are increasingly under pressure to deliver more impact per aid dollar spent, yet are equally cognizant of under-spending budgets and having their finances reduced. According to an analyst at a developmental consultancy, this use-it-or-lose-it situation is why organisations like USAid are reluctant to act as Outcomes Funders in an IB.

A similar problem exists in SA for corporates looking to maximize the social and/or environmental impact of their CSI spend. Big business contemplating acting as an Outcomes Funder (OF) in a SIB may be hesitant to do so given the uncertainty around outcomes payments. If the IB proves unsuccessful, no performance based drawdowns occur and the company can't claim Socio-Economic Development (SED) spend or gain Broad-Based Black Economic Empowerment (B-BBEE) points to improve their empowerment rating.

### *Potential Solutions*

Some solutions to the above problems could include running a pilot IB first instead of a full-blown IB, or reworking the IB on a smaller scale. This would mean the consequences of failure would be less detrimental to donor budgets, and confidence could also be gained in the efficacy of the service provider carrying out the developmental activities. A case in point is the Uganda Sleeping Sickness impact bond which is being run as a pilot and has been restricted to high risk areas within the country, before rolling out to lower risk areas and possibly neighboring countries e.g. Kenya, Tanzania, Sudan etc once proof-of-concept is reached. In the Mozambique Malaria Performance Bond (MMPB), the scope of the IB has been downscaled from country-wide (initially covering up to 8 million sufferers), to mainly being Maputo-based, and focusing on the workforce of the corporate Outcomes Funders involved.

Clearly presenting the business case of an IB is another way to gain support of potential Outcomes Funders. In the case of the MMPB, a private sector Outcomes Funder coalition was formed comprising corporates whose bottom line was being adversely affected by the disease through higher staff medical costs and lower worker productivity. By showing the cost savings that would accrue to these companies due to the IB (through reduced absenteeism, decreased morbidity/hospitalization, healthier workers), gaining Outcomes Funding commitments proved much easier.

Partnering with a willing donor organization that has an unshakeable developmental foundation, steady funding and a keen interest in the target country/community (e.g. through political affiliations) can also improve the odds of securing OF commitment. An example is the UK government's Department for International Development (DFID), which is a willing Outcomes Funder in at least two IBs being piloted in Uganda, a former colony. Even in the case of a for-profit only private sector outcomes funder coalition, there is still room for other role-players like international aid organisations, e.g. by providing treatments, diagnostic tools etc to governments of developing countries as in the abovementioned case of the Mozambique Malaria Performance Bond (MMPB), which can help to defray costs linked to IB interventions, assisting the business case behind the instrument via these Payments in Kind (PIK).

Lastly, forming Outcomes Funder groupings consisting of stakeholders as diverse as the private sector, traditional donors and/or the government, may prove more successful in attracting the necessary capital



to cover performance based payments in an IB, by distributing the financial burden among coalition constituents. In the MMPB, more than one corporate was approached to commit towards covering outcomes payments – this coalition is formed from firms as varied as Nandos (food sector), Anglo American (mining industry) and Coca-Cola (beverage market).

#### *Impact investors uncomfortable with risk-reward levels in IBs*

Convincing even impact investors to accept sub-market returns is difficult, especially if they have to bear all or most of the financial risk. Most IBs around the world offer sub 10% returns on capital (some offer returns as low as 3% IRR, sometimes an added 5% for higher levels of success, i.e. max 8% IRR), with only one or two exceptions, and only under extreme over-performance, e.g. Peterborough returns capped principal plus 13.5% and MMPB at 10% above funds invested. Admittedly, these returns are usually in dollar terms, where the cost of funding is cheaper, and so are not directly comparable with SA and its local currency, rands (ZAR). However, even accounting for lower interest rates in developed world capital markets, the spread above the cost of capital is still marginal at 1.5-6.5%<sup>20</sup>, for returns between 3-8% above funds invested.

In SA, with 5/10 year government bond yields around 7%<sup>21</sup>, this translates into a total expected return of between 8.5-13.5% p.a. This assumes that the intervention will yield cashable savings to the commissioner that will allow for such a return in the first place. Whilst the upper end of this return range may seem decent at face value, this level of compensation may be deemed insufficient to cover the amount of risk investors have to bear in an IB. Not only can investors stand to lose all their money in an IB (much like a corporate bond except with no real gauge of credit risk), but the general equity market risk premium (expected return above government bonds) in South Africa is anything between 5-9% (Stern School New York, 2015) (Biljon, 2009), far greater than the 1.5-6.5% spread offered by IBs, with the latter arguably representing similar or greater risk than investing in a broad basket of blue-chip shares for 5-10 years.

When faced between investing in the broad share market versus an IB, even some impact-focused investors may struggle to justify choosing the latter, when an investment in the Johannesburg All Share Index over the medium term can expect to yield 12-16% total return p.a. If one opines that the risk inherent in an IB is more similar to the private equity or Venture Capital (VC) space, expected total returns are even greater (+20% in some instances). An investment officer at one of South Africa's impact investment firms indicated that even though their investment mandate is one of the more modest in terms of financial return expectations, some of their most conservative funds target a 13% RoI which is near the top range of the required returns (if one is to match the existing, global IB return differential) for an IB in SA (albeit the particular fund in question takes on equity risk).

Additionally, the lower end of the expected IB return range is comparable to rates earned on government retail savings bonds, which are in essence extremely low-risk investments in fixed income securities. Local pension funds will generally not accept total returns of less than 8% precisely because this magnitude of return can generally be achieved by taking on little or no default risk.

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<sup>20</sup> Long-term (5 & 10 year) US treasury yield average of 1.5% (see <http://www.bloomberg.com/markets/rates-bonds/government-bonds/us/>) - prices as of January 2015

<sup>21</sup> See Sharenet, <http://www.sharenet.co.za/v3/spot.php> - prices as of January 2015

Whilst a comparison between an equity investment and an IB may not be justified, neither would comparing a blue-chip corporate bond to impact bonds be either. IBs are far less liquid than corporate bonds, and have a less predictable (or riskier) cash flow profile (i.e. they don't possess coupon payments in the traditional sense, but instead have possible outcomes payments linked to the success of a developmental program). Impact investors might be willing to accept a return in the region of capital + inflation, provided their capital is guaranteed and an agreement over value (reward commensurate with the risk involved) can be reached – suggestions for how to achieve this will now be dealt with.

#### Potential solutions

One potential way to crowd in investors in an IB is to provide credit/return enhancements. These can largely take any of the following 4 forms:

- 1) financial guarantees,
- 2) tiered returns,
- 3) subordinated investors
- 4) underwriting investments/insurance

With guarantees, a guarantor will agree to take the first hit in the event of the IB failing. This is sometimes called a first loss capital provision. An example of such an arrangement is the New York Riker's Island SIB where Bloomberg Philanthropies guaranteed three-quarters of investor's money in the IB. This means that if the \$9.6m youth recidivism-focused SIB (aimed at reducing prison time for young short-term offenders) fails, then the foundation will repay Goldman Sachs (as investor) up to \$7.2m of its loan (Olson & Phillips, 2013). See Figure 13 below.

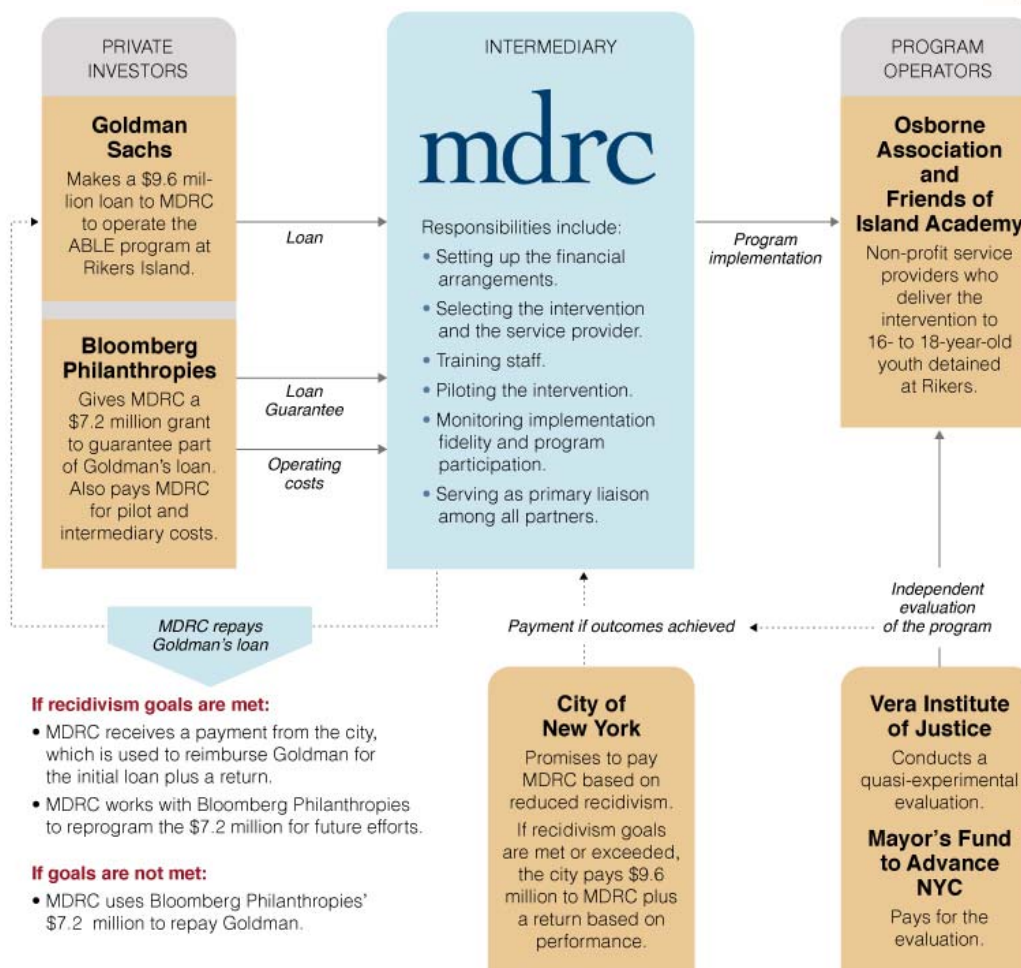


Figure 13: Riker's Island: NYC's Social Impact Bond - Source: (MDRC, 2015)

The second option is to offer tiered returns to different investors, depending on their risk appetite and/or primary investment mandate. There could be multiple investors in an IB, e.g. retail investors, institutions (e.g. asset managers, pension funds), impact investors, venture philanthropists and/or donors, or any combination of these, each qualifying for a different RoI based on the risk-weighted capital structure of the specific tranche invested in (Nicola, 2013). This is often called a layered structure, and JP Morgan has used this approach in its social finance unit: in deals targeting blended value, "Impact First" investors accept sub-market risk-adjusted returns, making an investment via other tranches with superior return profiles attractive to "Financial First" investors. This is a win-win scenario, as it allows traditional investors to participate in the deal whilst earning market related returns, and at the same time allowing social investors the chance to leverage their capital to achieve greater developmental impact (Bridges Ventures & The Parthenon Group, 2010). This recycling of capital (provided positive results get achieved) is particularly appealing to philanthropic organisations who can then channel returned capital back into the same project or a new venture entirely to further their mandates and achieve more system-wide change for the good.

JP Morgan teamed up with the Gates, Gatsby and Rockefeller Foundations to setup the \$25m African Agricultural Capital Fund (AACF), which targets impact investments aimed at developing small holder farmers and their commercial ventures in (largely) East Africa.

The fund (see Figure 14 below), managed by Pearl Capital Partners, involved a two-tier structure, wherein the first tranche consisted of an \$8m loan from JP Morgan (50% of which was guaranteed by USAid), and the second tranche involved Program Related Investments<sup>22</sup> (PRIs) in equity of \$10m, \$5m and \$2m respectively by Gates, Gatsby and Rockefeller. Expected returns for debt holders (JP Morgan) are ~6%, whilst equity investors (the foundations) can expect net returns of ~15% (total expected fund net returns for the fund are expected to be ~12.5% after 3.5% in fees and costs) (Sapna Shah, 2012), (Bank, 2012).

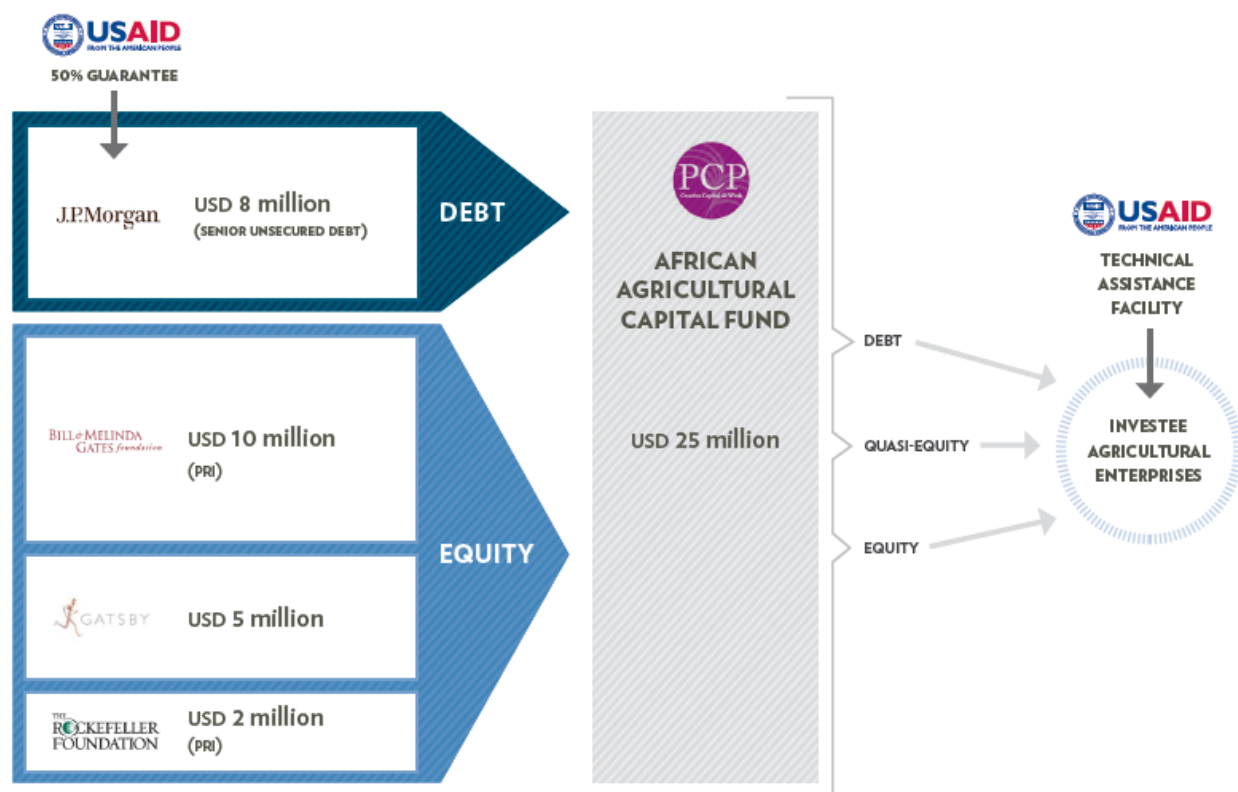


Figure 14: AACF structure

With the third option, there is a senior investor and a subordinated one, with the former having priority when it comes to returns from or claims against the IB. In the Utah Salt Lake City preschool SIB, the JB Pritzker foundation provided a \$2.4m subordinated loan to the service provider, while Goldman Sachs acted as senior lender with a loan of \$4.6m. The investment bank is thus covered up to \$2.4m should anything go wrong with the \$7m United Way SIB.

An example of a shared value (economic and social) investment comprising a combination of option 2 & 3 (a guarantee in the form of subordinated debt and return tranches) is the New York City Acquisition Fund, an investment vehicle setup by the government to cater for the housing needs of New Yorkers who can't afford the high price of property in the city (see Figure 15 below). The fund is worth \$200m, and is

<sup>22</sup> PRIs must target social/charitable purposes and must not be primarily designed to achieve a profit

made up of Financial First investors (a consortium of banks including Bank of America, JP Morgan and HSBC), as well as Impact First investors (City of New York, Ford and Rockefeller Foundations). The former invested up to \$162m earn a market related return whilst the latter earn a lower interest rate (sub-market) and their debt investment ranks below the banks’.

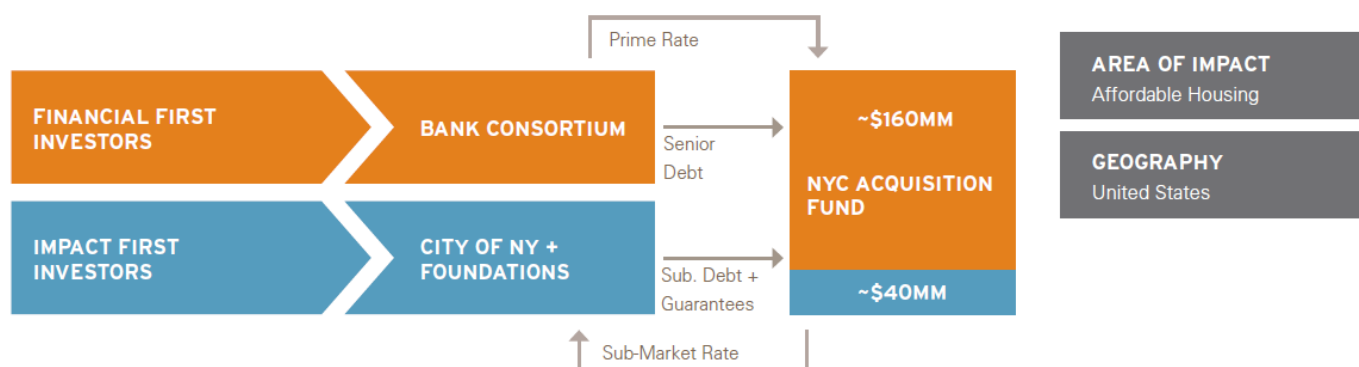


Figure 15: New York City Acquisition Fund (Bridges Ventures & The Parthenon Group, 2010)

A fourth way to enhance the credit quality of an IB and help crowd-in private investors is by offering insurance on project failure or non-payment (e.g. a defaulting Outcomes Funder). Hollard Insurance has developed an innovative insurance product for the developing world aimed at customers serving/living at the Base-of-the-Pyramid. Called HUGInsure, the instrument is the first-ever insurance underwriter for projects with/individuals making positive social impact. Unlike a guarantee which is often protracted and costly, the insurance product covers very specific risks, allowing service providers/policy-holders addressing a developmental need to secure the required bridging finance to continue with their projects (HUGInsure is backed by top breed insurance firms such as Hollard, Lloyds of London) (Bateman, 2014). One such example of this instrument’s application is in Mozambique with the malaria DIB intervention in which HUGInsure has been used to secure bridging finance to enable execution of the intervention such as spraying nets with insecticide and distributing them to beneficiaries.

HUGInsure manages to indemnify these risks by leveraging large but inactive aid monies (e.g. disaster-relief funds from the likes of Red Cross and Oxfam) to protect lending banks against project risks. HUGInsure can also be used to guard suppliers against defaults from buyers in advance purchase agreements – this has application in agricultural circles where smallholder farmers can have purchase orders underwritten against lack of payment from government or other customers, allowing policyholders to lock-in a guaranteed price for their produce (de-risking their activities), all for a small premium that is cheaper or equal to the cost of a guarantee.

Another attempt to address the potentially low return probabilities associated with IBs is to approach foreign funders with local offshore offices in the developing nation. These funders could be international banks with social finance divisions (e.g. JP Morgan, Goldman Sachs) or large, global foundations looking to engage in venture philanthropy. These multinational institutions often bring with them large balance sheets, relatively low costs of capital, strong networks/collaborative capabilities and sophisticated techniques for managing multiple risk-adjusted return expectations.



Partnering with strategic investors who are more concerned with social or environmental impact than monetary gain, is another way to deal with low financial return expectations or probabilities. Additionally, sophisticated social investors who are adept at conducting in-depth and accurate due diligence on service providers contracted to deliver a program in an IB may also be more inclined to settle for a lower RoI due to a greater understanding of the risks involved. These impact investors typically need to have a deep industry knowledge and keen ability to measure social returns as well as efficacy of interventions. For less sophisticated investors or those without an extensive advisory function, another solution to better quantifying the risks involved in an IB-backed intervention is to partner with service providers prior to project commencement. The point of this partnership is for investors to gain a level of comfort around the competency of service providers, to align objectives and to better understand the implementation plan and its associated challenges, thereby leading to a better gauge and potentially acceptance of financial risk. In the Berth Centre ECD SIB, this is precisely the configuration adopted under the tariff-based Innovation or Challenge Fund – service provider/investor partnerships bid into the Innovation Fund to deliver a specific set of outcomes at a specific rate (up to a predetermined maximum tariff or rate based on a rate-card published at the outset and prior to the bidding process). This matchmaking mechanism has the effect of getting investors to familiarize themselves with service providers as well as their capabilities/plans, whilst the bidding system ensures that a spirit of competition is created and that bidders hopefully offer interventions that are reasonably priced (i.e. offer value rather than charge the maximum tariff on offer).

Other potential solutions include applying IBs in areas where there is a large differential between the cost of the social ill, and what the government is willing to pay a service provider to prevent the malaise. If the gap is large enough to offer cashable savings to the commissioner (the state) whilst also providing decent returns (e.g. capital + inflation), there may be value in contemplating an IB to tackle the developmental problem. Given that many developing markets face serious, widespread, often intractable human and environmental challenges such as disease (HIV/AIDS, malaria, ebola, TB), drought, hunger/food security, rural electrification, clean water and adequate sanitation, unemployment/skills development, lack of/poor infrastructure and war, the potential for preventive program spearheaded by IBs is larger in these regions than in first world countries. This should mean that the business and social case for IBs is more compelling in frontier markets by offering the prospects of high social returns and financial viability, boding well for their application.

There are still many challenges that need to be overcome in order for IBs to take off in emerging markets. Some of these preconditions (besides those already mentioned) for IB success include whether or not there is an effective, evidence based technique to treat the social challenge, willing and able role-players (investors, outcomes funders, service providers, government), a rigorous method of monitoring and evaluating the performance of the intervention, an acceptable time lapse between intervention delivery and observable outcomes (Michael Belinsky, 2014).

#### *Policy changes can threaten the continuation/existence of an IB*

Sometimes a change of policy can mean that there is no longer a valid control group to compare results to, or counterfactual to establish what would have happened to a similar cohort in the absence of an intervention. One such example is the Peterborough SIB in the UK. The government recently decided to provide a national service for the rehabilitation of short term prisoners, rendering benchmarking invalid and disrupting the attribution framework (externalities of country wide support making it impossible to prove the Peterborough intervention specifically is the primary causal mechanism for improved convict



outcomes). In the Peterborough contract there was a Termination clause that specified the contract would have to cease should a material change occur in the laws surrounding inmate rehabilitation services that would potentially disrupt the integrity of the comparator group. In this instance, new country-wide regulation in terms of mandatory offender services trumped the district level program underway in Peterborough and via the SIB.

This case highlights the dangers that policy changes can represent for the successful operation of an IB (to maturity), especially when national policies/programs differ or override those in local spheres of government.

#### Potential solutions

One way to safeguard against a nullification of an IB due to policy changes is to be careful in choosing a benchmark. If Peterborough had possibly used time-based performance tracking relative to the national average (irrespective of any new national policies or instituted programs) or historical data, then the SIB may have been allowed to continue.

Another potential approach to avoid new country-wide policies sabotaging the roll-out of a SIB may be to keep policy makers involved at the instrument inception as well as throughout, and at the highest level, i.e. gaining national support, such as the UK Cabinet Office in the Peterborough case.

One associate at a developmental consultancy opined that the reason SIBs have taken off in America is that policies and regulations do not change drastically when leaders change. This may be due to the fact that, at a state level at least, federal laws are generally well preserved in the event of country wide proclamations.

Lastly, ensuring that the IB contracts are water tight in terms of termination options may better protect investors and beneficiaries. This is not to say that an IB should be kept intact for any reason other than its own existence –introducing a new program or policy that can offer beneficiaries better service and on a wider scale should be something that governments are encouraged to do, and lauded for in the event of success.

#### *SA viewed as a middle income country by international donors, reducing inward aid and charitable flows*

Some NPOs view SA's recent classification as an upper-middle income nation (Niels Keijzer, 2013) as a potential dampener on donor flows into the country. This new label has meant fewer donors consider SA as needing funds when compared to other, less developed frontier markets, and existing donors are shifting giving portfolios away from the country. This despite the fact that SA's economy is one of the most unequal on the continent, with a Gini coefficient of around 0.63 (United Nations Development Programme, 2015) and an unemployment rate of over 25% (and higher amongst the youth).

## Global IB trends and applicability to developing markets

There are a number of differences between African and Rest of World Impact Bonds (IBs), some of which are highlighted in Table 15 below. These range from varying social issue foci, to different IB durations and financial magnitudes, as well as geographical concentration.

African IBs	Rest of World IBs
Health slant (+ livelihoods)	Youth & family (+ homelessness)
Most very early stage	Large proportion implemented
More DIBs than SIBs	Mostly SIBs
Longer proposed duration	Shorter (actual) duration
Larger proposed quanta (\$)	Smaller (actual) quanta (\$)
Looking for patient capital	Attracting institution/HNWI \$
Varied geographies (SA?)	Hyper-concentration: UK/US
All developing countries	Mostly developed countries
IB/social challenge ratio low	IB/social challenge ratio high*

Table 15: Comparison between African and Rest of World Impact Bonds (IBs)

\* purely taking existing IBs into account, i.e. developed world bias

What follows is a brief analysis of some of the salient observations concerning IBs from Africa and the rest of the world.

Many of the African IBs being explored surround health/disease and employment/livelihood strategies (including SME support/development)

Many of the IBs in the developing world have a health focus – this is in contrast to the developed world where they are in the minority<sup>23</sup>. Only 8 (11.6%) of the 69 developed world IBs in operation/development are in the health sector. Instead 44% (33 of the total 75) of non-African IBs globally focus on disadvantaged youth and family (foster care avoidance, child and maternal welfare) together (~22% each). A further 17% (13) involve homelessness, and helping to reduce youth and the indigent from sleeping rough.

Conversely, of the 12 African IBs currently being contemplated/in operation, 33% (4) are in health, whilst a quarter (3) surround workforce and/or small business development.

Instiglio, a SIB intermediary with a focus on developing countries, has also recently released a World Health Organisation (WHO) journal article highlighting the applicability of SIBs to address healthcare

<sup>23</sup> There is a Health Impact Bond (HIB) being piloted in Fresno, California to tackle severe childhood asthma; the US has a countrywide paediatric asthma rate of 20%. A private health foundation, the California Endowment is pending \$1.1m to launch the pilot IB, which aims to provide 200 local children with preventive services to tackle the respiratory ailment (Clay, 2013)



challenges in South East Asia (SEA) (Michael Belinsky, 2014). The authors argue that SIBs can offer more efficient and widespread healthcare in this region<sup>24</sup>, combatting the extant low-levels of public healthcare spending and high out-of-pocket (OOP) expenditures<sup>25</sup>. SIBs are touted as not only being able to address these challenges, but represent an opportunity to migrate away from the ubiquity of traditional fee-for-service arrangements by health providers along with the concomitant perverse incentives (chasing volume business as opposed to incentivizing the maintenance of a healthy population). Instiglio is also exploring Results-Based Financing (RBF) to address the problem of diabetes in Mexico, where the disease is the leading killer in the country, responsible for 14% of all deaths and affecting more than 7 million inhabitants. Apart from the adverse social impact, direct and indirect financial costs to the Mexican government to tackle this malaise have been estimated at \$1.16bn<sup>26</sup>.

The focus on health related matters in the developing world is a promising development for Outcomes Based Financing (OBF) tools such as IBs as the medical field lends itself to evidence-based practices, offers clear and relatively easily measurable outcomes, represents a fertile place to tackle pressing and usually quantifiable social problems, and often attracts significant funding from government, donors and even impact investors<sup>27</sup>. One such example of an Impact Investment fund focusing on health on the continent is the African Medicines Impact Investment Fund (AMIIF) which is part of SARPAM, the Southern Africa Regional Program on Access to Medicines (sponsored by the UK DFID), and aims to assist SADC (Southern African Development Community) member states in accessing quality, affordable medicines. Partners on the program include SA asset manager Cadiz, as well as social impact advisory and reporting firm, Greater Capital (see Figure 16). Some of the beneficiaries of the fund include low-income communities in countries including SA, Namibia, Lesotho and Botswana.

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<sup>24</sup> Some SEA countries have health worker attendance rates of as low as 10% for new births (Michael Belinsky, 2014)

<sup>25</sup> 5% of population driven to poverty through high OOP payments (Michael Belinsky, 2014)

<sup>26</sup> See <http://www.instiglio.org/en/the-innovation/projects/>

<sup>27</sup> Examples include the \$60m African Medicines Impact Investment Fund (AMIIF) and the Global Fund



**Debt**      **\$60m**      **4-6%**      **50-75%**      **10 Yrs.**  
 Investment Instrument      Fund Size      Investor Return      Capital Credit Guarantee from AFD<sup>2</sup>      Fund Term<sup>1</sup>

<b>Social impact objective</b>	To increase access to affordable, good quality healthcare and medicines in Sub-Saharan Africa through the growth and development of sustainable private sector enterprises operating at critical points along the health and medicines value chains.
<b>Target company profile</b>	Private sector small and medium enterprises that have a 3 to 5 year track record and which require loan funding for expansion of their business.
<b>Loan size</b>	\$500k – \$8m
<b>Loan term</b>	3 to 5 years, with the stated intention to roll over facilities that are well-performing



1. Term can be extended by the board for two additional one year period. 2. based on a Pari passu basis  
 Cadiz Asset Management (Pty) Ltd (Reg. No. 1965/001254/07) is an authorised financial services provider (FSP 636)  
 The Africa Medicines Impact Investment Fund Company No. 107925; Financial Services Commission Global Business License (Category 1) No. C112010596 & Code FS-4.1.  
 AMSCO is a joint initiative of the UNDP, IFC and the ADB to provide management expertise and technical assistance to African private sector companies in becoming globally competitive



Figure 16: The African Medicines Impact Investment Fund (AMIIF) (SARPAM & Re-Action!, 2015)

As a last note, of the 3 other non-African emerging market SIBs being tracked by Instiglio, 2 are in the education space (for primary schools in both Pakistan and India). In short, it is evident that the main focus of IBs in emerging markets to date has been around reducing the burden of disease in these geographies, followed by a secondary interest in improving (early-stage, primary and before) education. This ties in with the current state of world affairs, in which first world countries have generally made provision for the health care and educational needs of their populations, whether it be through government subsidies/free provision (e.g. Scandinavia and West Europe) or low-cost care/welfare provision (e.g. social security and Obamacare in the US) in rich countries. Whilst LDCs are battling to stabilize and improve tattered health care and educational systems, the foundations of a functional economy, first world countries are concerned with ensuring troubled youths reform into productive citizens and labour forces become more efficient and skilled, i.e. raising income and living standards for more citizens (expanding the middle class).

*Donors increasingly interested in diversifying funding mechanisms used, and creating greater impact per developmental dollar spent*

Many donors (philanthropists, foundations, aid organisations) are looking at using impact investing instruments such as IBs as a vehicle to leverage their development capital. An investment in an IB helps to recycle donor capital through the repayment of principal plus a possible economic gain, thereby creating a multiplier effect for their social impact as returned monies can be reinvested to create further social/environmental value. Whilst this trend (of donors moving into the impact investing space) may be viewed as a threat by for-profit investment firms with a dual mandate (social and financial returns) who may feel that their donor counterparts are crowding them out from certain deals, this is not necessarily the case. Many donors making impact investments are doing so at a much earlier deal stage than most impact investors would be comfortable with. Thus, venture philanthropy can be viewed more as providing



early-stage, higher risk funding to act as a catalyst for follow-on funding from more traditional for-profit impact investors, once investee companies are more mature and investment ready. In addition, rather than replacing traditional grant-making with impact investing, and potentially threatening the lifeblood of the charitable sector (NPCs/NGOs/NPOs) as well, donors are getting involved in the latter as a supplementary activity to their traditional role.

#### *Regional funding for social/environmental problems affecting multiple countries*

Some international donor funds are offering funding for healthcare programs in Least Developed Countries (LDCs) based on needs common to a specific region. The Global Fund<sup>28</sup> is one such example which looks to bankroll medical interventions such as TB/HIV in countries in Southern Africa, recently pledging \$574m to tackle these diseases (including malaria) in Malawi alone. The potential beneficiary countries will thus apply for funding as a group, and under an IB bond scenario, would mean that multiple governments will be involved and the benefits of successful initiatives would spread beyond one country only. A case where an IB with a multi-country beneficiary arrangement would have proved useful is in West Africa recently to combat the ebola virus. A coalition of beneficiaries consisting of Guinea, Sierra Leone and Liberia would have gone a long way to providing a coordinated way of containing and eliminating the disease.

#### *Average size of IB needs to be large enough to justify transaction costs and create sufficient impact*

According to Finance for Good, the average size of SIBs in the developed world is about \$7m, although individual SIBs range in size from under \$1m to around \$18m max (Finance for Good, 2015). This compares with an average value of ~\$4.76m or ~R60m based on a more comprehensive global scan of IBs, including sources from the UK Cabinet Office and Instiglio. According to the more extensive list compiled as part of this study, IBs ranged in size from \$130k - \$39m, and had an average duration of 4.43 years.

By way of comparison, in Africa the average size of mooted IBs (most of which are DIBs) is larger, and stands at around \$25m, with a range of between \$2.1-52.5m, and a middling duration in the region of 7 years.

A possible reason for the seemingly greater average quanta for IBs on the (African) continent may be due to the fact that most of the prospective deals generally involve large donor organisations (i.e. they are DIBs rather than SIBs) with greater appetite for involvement in such socially focused projects (subject to the caveats mentioned above regarding actual implementation of IBs and donors willingness to act as Outcomes Funder in practice). Additionally, many of the developmental challenges in frontier markets are large-scale and hence require more ambitious projects and hence budgets (think of the extent to which diseases such as malaria affect certain African countries, etc). IBs need to be sufficiently capitalized to provide service providers with the working capital necessary to carry out the intervention effectively, and on a broad enough scale to cover the target market.

Also, if average deal sizes are too small, then the transaction costs of the IB cannot be justified and will not make the instrument financially viable, especially if investors need to be paid their capital back plus a return, commissioners often expect to make a cashable saving, service providers need to be paid upfront and intermediaries have to charge a fee. Already some authors have mentioned that upfront fees to create a SIB need to be reduced in order for the instrument to gain more traction around the globe, and

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<sup>28</sup> The Global Fund spends on average \$4bn annually to combat HIV/AIDS, malaria and TB related morbidity in 140 countries around the world – see <http://www.theglobalfund.org/en/>

to make them more financially viable (Michael Belinsky, 2014). Some critics even argue that SIBs need to be at least \$20m in size to justify the transaction and ongoing management fees (performance monitoring, administering payments etc) (Hanna Azemati, 2014). Large institutional investors are typically reticent to invest in deals in the \$1-10m range (within which many impact deals fall), as these are too small to make a noticeable difference in the returns and composition of their portfolios (Michael Drexler, 2014).

#### Potential workarounds to high IB transaction costs

In order to address the high percentage transaction costs inherent in low value IBs, Social Finance recommends foundations put up the capital to fund initial feasibility work around IBs, as well as help to finance pilots (Centre for Global Development and Social Finance, 2013).

## 6. Potential for IB market in SA to achieve pro-poor outcomes through SME development

Based on the criteria outlined in this report for developing IBs, initial assessments of various sectors in SA reveal potential attractiveness for IBs.

### Healthcare

#### *Description of the social issue*

South Africa faces a significant challenge, in that it has to manage a quadruple burden of disease. This includes communicable diseases such as HIV/AIDS with associated TB infections; high maternal and child mortality rates; intentional and non-intentional injuries; and non-communicable diseases, such as cancers, heart disease and diabetes (South African Declaration on the Prevention and Control Non-communicable Diseases, 2011).

This complex health challenge requires careful management of the significant costs associated with addressing these various health issues, as well as the cost of hiring and maintaining appropriate levels of essential human resources. There are often also a host of associated costs related to both short and long management of health conditions, and these may include: medication costs; numerous and/or regular hospital visits; surgical costs; specialist care requirements from doctors, nurses and other supporting medical personnel; and the cost of any potential associated infections, such as with HIV-associated TB infections.

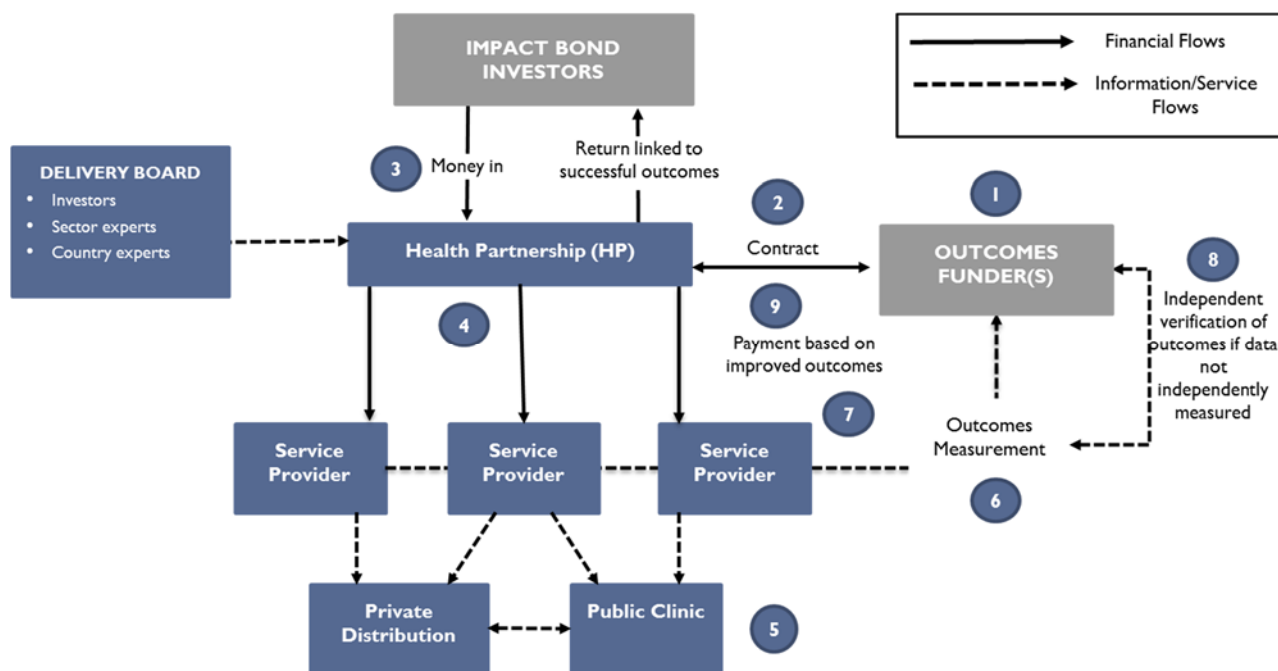
The question is therefore, where and how does the government focus and manage its funding when facing this kind of challenge? How does it manage this significant burden of care and responsibility to each and every patient? It is not possible for the government or any other organisation to address the issues faced, without finding innovative solutions to address them.

These innovative solutions require multiple stakeholder collaboration, and the development of partnerships and communication between the public and private sectors. One of these innovative solutions is the development of Impact Bonds. Impact bonds, initially piloted by Social Finance in the UK, make use of risk capital from private investors to pilot a social intervention, which otherwise may not, or could not, have been funded.

There is the potential for a SIB to be suitable for a number of different disease interventions, such as Diabetes, TB, HIV/AIDS, and Malaria, to name a few. There have already been a number of studies and case studies developed around some of these diseases, which indicate the potential and opportunity for this innovative funding model to be successful. Lastly, in the case of a health impact bond, there is the

potential for substantial social impact benefit as the focus is shifted away from funding issues/constraints, to the provision of early intervention and prevention health strategies.

## PROTOTYPE HEALTH BOND



- 1 A range of potential relationships are possible between donor agencies and partner governments – where donor agencies and partner governments co-fund the outcomes payments, they will both act as an Outcomes Funder
- 2 The Health Partnership (HP), a new corporate entity, contracts with Outcomes Funder(s)
- 3 Investors provide upfront financing to the HP
- 4 HP selects and funds relevant Service Providers
- 5 Services provided in identified Public Clinics and/or through Private Distribution
- 6 Measurement and reporting of contracted outcomes / outputs either by the HP or by an independent third party as appropriate
- 7 Performance manager reports additional management information and data to outcomes funders as appropriate
- 8 Independent verification of contracted outcomes / outputs
- 9 Outcome Funder(s) pay according to outcomes / outputs achieved

Figure 17

### Opportunity for an HIV SIB

Despite major progress in the treatment and management of HIV and AIDS, there is still a global epidemic which requires urgent addressing. Sub-Saharan Africa still has the highest rate of HIV, with approx. 70% of estimated 34 million people infected worldwide with HIV in 2010 in sub-Saharan Africa (WHO, 2012).

2005 government statistics also reveal that over 5.5 million of these infected people were in fact in South Africa (SA Government, 2015). This has continued to be the case, with SA still having one of the highest HIV infection rates of any other country.

Traditional funding for the management and treatment of the HIV/AIDS epidemic is being reduced, so new types of funding are required which can be more flexible and adaptable. However, governments continue to lack the necessary funding to not only manage the epidemic, but to fund any large scale implementation projects.

HIV is still one of the most serious epidemics to affect the world population and “is the fastest growing threat to development today” (WHO, 2015), Women and children are particularly vulnerable to HIV infection, with children most vulnerable when infected with the HIV. There is 50% mortality rates of children infected with HIV by the age of 2 years, and 80% by 5 years without ART (UNAIDS, 2015).

HIV is also extremely complex to manage and has far-reaching consequences and effects. It is becoming clearer that HIV also needs to be addressed as a chronic health issue and needs to be managed “within the context of other chronic health conditions (WHO, 2015) (UNAIDS, 2015)”, and that there is a strong link between HIV and other non-communicable diseases.

Primary and Preventative Healthcare is the foundation of any Health system (South African Declaration on the Prevention and Control Non-communicable Diseases, 2011) therefore a SIB presents a unique opportunity to assist in setting the necessary funding in place to address the HIV epidemic and its changing presentation. By doing so, it provides the opportunity to implement new programmes and facilitate the development of new treatment policies which can hopefully start to reduce the prevalence rate of HIV infections in SA.

## HIV MANAGEMENT: From Reactive to Preventative

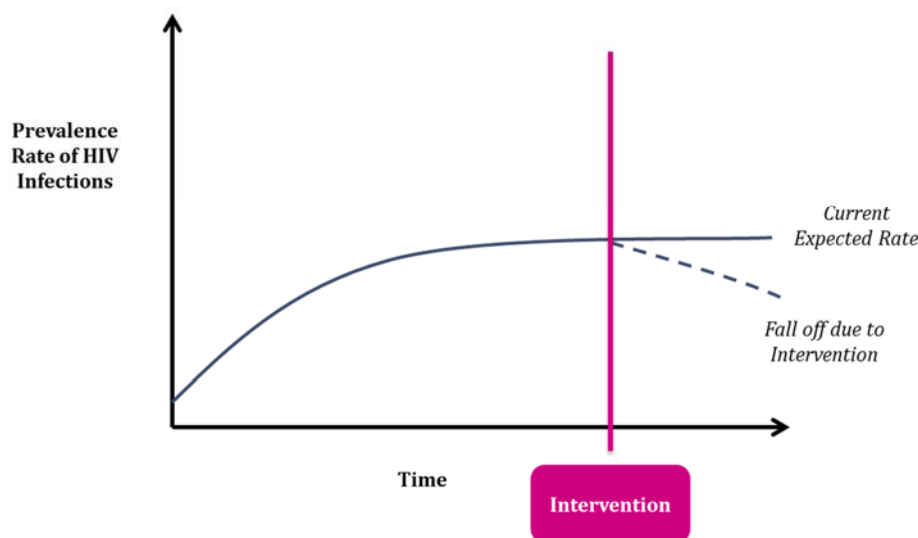


Figure 18



### *Status of ARV programmes in SA*

While there may have been an initially slow response to the treatment of HIV, according to the SA Government Information website, “SA [now] has the largest Antiretroviral Therapy Programme in the World” (WHO, 2015).

The government ARV programme, in conjunction with an upscaled ‘HIV and AIDS Treatment Plan’ which was launched in 2010, has resulted in an overall leveling off of HIV prevalence in SA. However, despite this leveling off in the rate of increase in HIV prevalence, HIV is still one of the main challenges faced by the SA government as the overall infection rates remain high (SANAC, 2007) (WHO, 2015).

This indicates a clear will by the government to tackle this issue head on, and the proof is there that current interventions are making an impact. However, while there have been significant results, significant funding issues have resulted in some provinces still not being able to effectively administer ARV’s. An example of this is the provision of dual-therapy ARV’s for the prevention of mother-to-child transmission (MTCT). Due to incomplete administration of the dual ARV’s, transmission rates remain relatively high in some hospitals or regions (IRIN, 2015).

The current (2013) ARV treatment programme in SA is predominantly based on CD 4 count (350 or less) or severe HIV disease (WHO level 3 or 4), with some exceptions of who may receive ART irrespective of CD 4 count being: children < 1 year of age; HIV-positive women during pregnancy & breastfeeding; and patients co-infected with drug sensitive or resistant TB (DOH, 2013). There is also a move by government to “test all HIV-exposed children under 5 years and treat all those found to be infected with HIV” which does seem to indicate a shift in policy towards early access to ARV’s.

But while SA government has reduced the rate of HIV prevalence, it has not been able to reverse the trend. There have been numerous studies across the world, and even in SA, which indicate that a new intervention policy may assist in reversing this trend. The current administration of ARV’s is under review by the WHO and other key stakeholders, and new research has indicated that a shift in ARV policy may be necessary.

### *What is TasP?*

TasP (Treatment as Prevention) is a relatively new concept of HIV management. WHO defines TasP as: “a term used to describe HIV prevention methods that use ART in HIV-positive persons to decrease the chance of HIV transmission independent of CD 4 cell count. (WHO, 2012)”

It is the use of early ARV Treatment as part of a prevention strategy, in order to reduce the viral load of HIV by making it harder for the HIV to replicate. By lowering the viral load, it dramatically reduces the incidence of HIV transmission. This is particularly clear in the incidence of MTCT, where the introduction of early ARV treatment reduces HIV transmission, directly linked to a lowering of the maternal viral load. HIV infection can therefore be transformed into a chronic, but manageable condition, and it significantly reduces the risk of transmission (British Columbia Centre for Excellence in HIV/AIDS, 2015).

According to a recent report by Social Finance and the Centre for Global Development, it is not yet clear if TasP can be implemented at scale. A SIB could assist in providing the up-front funding to not only test the intervention itself more widely, but test its potential to be scaled up for a broader base of intervention in SA (DIB Working Group, 2013).



### SA-based Research on TasP

A study has recently been undertaken by the Africa Centre for Health and Population Studies at the University of KwaZulu-Natal to assess the benefit of TasP as part of a strategy for HIV. This study is in the form of a cluster randomized trial, and includes the initiation of immediate ART on diagnosis of HIV, regardless of CD 4 count compared to the provision of ART according to standard SA and WHO guidelines (CD 4 less than 350 cells/ml, WHO stage 3 or 4 disease, or MDR/XDR TB) over a period of 24 months.

The objectives of the study are “to estimate the effect of ART initiated immediately after HIV diagnosis, irrespective of CD 4 count criteria, on the reduction in incidence of new HIV infections in the general population in the same setting over a period of 24 months (Africa Centre for Health & Population Studies, 2012).” It is a multiple intervention approach, and therefore also includes additional preventative interventions such as information, education, condom promotion and distribution, family planning, male circumcision, etc. While the study still seems to be ongoing, interim results have indicated “a decrease in individual risk associated with increased ART coverage (UNAIDS, 2015)”.

A similar trial, called the HPTN 052 trial, was started in April 2005, and was conducted by the HIV Prevention Trials Network (HPTN) in SA and other countries, and was funded by the US National Institutes of Health AIDS Division (Medical Chronicle, 2011). The trial involved the initiation of ARV treatment for patients with CD 4 counts between 350 and 550 (significantly higher than current CD 4 guidelines of less than 350). The trial started in April 2005, and was due to be completed 2015, but was stopped in May 2010 when clear data showed that “the use of ARV’s by individuals with relatively healthier immune systems substantially reduced transmission to their partners.” The study also indicated that by introducing ARV treatment earlier, that there is the potential to prevent HIV infections by up to 400 000 infections a year in SA alone.

### Multiple Intervention Approach

ARV treatment alone is not sufficient, and part of the principle of TasP is that it should be implemented in conjunction with a range of other interventions. These interventions should include such things as: safe sex education of partners and women, medical male circumcision, education to reduce stigma and improve compliance with ARV medication, regular doctor’s appointments, access to healthcare facilities (especially when pregnant and when giving birth) in order to truly make an impact on HIV and reduce the rates of maternal HIV/AIDS infection in the first place.

### *Potential Issues with TasP intervention:*

- Significant upfront funding required to assess the suitability of bringing TasP implementation to scale in SA
- Cost of implementation of a range of other key and necessary interventions in conjunction with TasP (or any ARV treatment programme)
- Surge in demand for ARV Treatment will put government resources and funding under significant pressure

## HIV – MULTIPLE INTERVENTION APPROACH

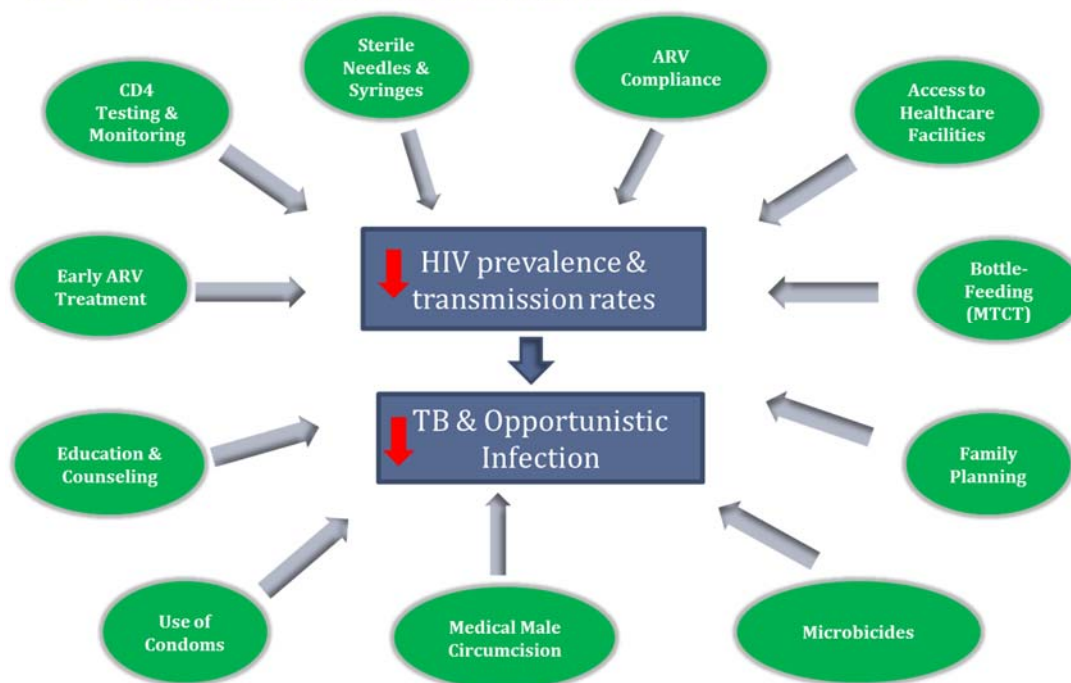


Figure 19

### Potential Outcomes for an HIV SIB

These should be clearly-defined, measurable & objectively verifiable (Ben Jupp, 2011). Some potential outcomes are:

- Primary : Reduced rates of HIV infection; Increased life span with HIV infection
- Secondary: Reduced rates of sexual HIV transmission; Reduced rates of MTCT; Improved maternal health; Reduced number of AIDS related deaths

The longer the term of intervention, however the more results should become available, e.g. reduced AIDS related deaths.

### Potential Opportunities for a HIV SIB in SA

- Pilot bigger ARV prevention trials in SA to test larger scale implementation (based on results of Africa Centre and HPTN 052 trials)
- And/or set up another trial(s) in different geographic regions in SA to test ability to reproduce results
- And/or extend length of trial to ensure results are maintained over long term
- Set up full scale TasP implementation project in predetermined and agreed upon region/site

### Example of a Healthcare Pilot Project for a Social Impact Bond

Collective Health, in partnership with Social Finance and the California Endowment, has launched an Asthma demonstration project in Fresno County in California, in order to tackle the high incidence of



Asthma-related emergency department visits and hospitalisations. They are currently in the first phase of this project. The project aims to lay the foundation for the implementation of a health impact bond to scale the Asthma project and ensure its long term sustainability (Brusch, 2013).

#### How it works in practice

- California Endowment has awarded grant funding to Collective Health and Social Finance to mobilise investment capital to drive the social intervention change
- Collective Health and Social Finance are working with local partners to implement a one year comprehensive home-based intervention to reduce asthma emergencies and the costs of intervention for 200 high risk children
- The intervention and design is led by the Central California Asthma Collaborative, with technical assistance from the Regional Asthma Management and Prevention group, in moderate to low income areas, mainly the underserved populations of San Joaquin Valley and Clinica Sierra Vista
- Programme participants are identified based on multi-year claims, geographic clusters and clinical assessment

#### Determining outcomes and bond structure

- Asthma related emergency and hospital visits costs are averaged at US \$16,371 per person per year
- By reducing services in the emergency by 30% and hospitals by 50%, this has been calculated to bring the average annual cost per person down by US \$7,773, resulting in an overall saving of US \$1,6 million for the 200 identified children for the first year of intervention alone
- Collective Health is providing actuarial-based savings methodology using insurance claims data to measure reductions in emergency and hospital visits, and to calculate the cost savings to payers covering the individuals
- A third party actuary will validate savings
- The savings from the first year of intervention will be leveraged to expand the programme further.
- Public and private payers, legislators and other stakeholders will be forming part of an advisory group in order to structure a health impact bond to scale up the programme as part of the next phase of the project
- It is estimated that a 5 year programme with 3,500 participants could yield US\$27 million in reduced costs

#### Example of a Healthcare Bond

The Mozambique Malaria Performance Bond (MMPB) is an initiative that has been set up by the Mozambique Ministry of Health, in partnership with Anglo American, Nando's and Dalberg Global Development Advisors (Task Force on Innovative Financing for Malaria, 2011).

#### How it works in practice

- The MMPB has raised US \$500 million to US \$700 million in capital from a various corporates, donors, government and investors.
- The MMPB will use this funding to provide malaria interventions for up to 8 million people in Mozambique, over a period of 12 years



- The intervention is based on a highly successful malaria intervention programme which has been piloted in Ghana
- Investors provide capital upfront throughout the 12 years of the programme

#### Determining Pay-for-Success payments

- Outcome based repayments are made to the investors from corporates, donors and government, based on the programme performing according to its outcome goals
- If the programme does not meet its goals, it can be terminated with investors only receiving a portion of their principal investment back

#### Benefits to Government

- It has the potential to tap into the private investor market and mobilise the investor funds by 2015
- By using private investor funds, it frees up donor funding for other required and identified interventions
- It provides an opportunity to improve efficiencies and the cost of the provision of malaria interventions because it is based on payment by performance
- It provides the opportunity to strengthen the development and economic growth of the country, as it not only reduces healthcare costs for the country, but it improves overall worker productivity

#### Early Childhood Development (ECD)

- From both international and South African research, significant evidence around the effectiveness and long term outcomes of specific Early Childhood Development related interventions
- Early Childhood Development is a high priority issue for national and provincial governments and has substantial interest from international and local donors
- Early Childhood Development centres and non-centre based interventions are routinely underfunded and South Africa currently lacks a comprehensive Early Childhood Development design at both the provincial and national levels

#### *Rationale for considering IBs in the ECD space*

Early childhood development is key to ensuring that children gain a solid foundation for learning later on in their lives, better preparing them for school and improving educational outcomes.

The WHO list 5 pertinent facts regarding early childhood development:

- 1) Early childhood is the most important phase for overall development throughout the lifespan.
- 2) Brain and biological development during the first years of life is highly influenced by an infant's environment.
- 3) Early experiences determine health, education and economic participation for the rest of life.
- 4) Every year, more than 200 million children under five years old fail to reach their full cognitive and social potential.
- 5) There are simple and effective ways for families and caregivers to ensure optimal child development (WHO, 2009).

Early stage investments into the development of infants, toddlers and pre-schoolers is crucial in the hopes to achieve above average proficiency in core subjects (especially maths and literacy), increased rates of high school graduation and acceptance into tertiary institutes.

Research shows that providing more children (especially from disadvantaged backgrounds) with higher-quality early childhood programs leads to superior long-term education, health, social and economic outcomes. According to researchers, spending on early childhood development offers the highest rate of return to education (Carneiro P, 2003). Conversely, insufficient investments in early childhood education leads to a higher government spend on special education, English language training and grade retention.

One report estimates that the annual per pupil cost of special education could be as high as \$8,162 (Kauffman Foundation, 2012).

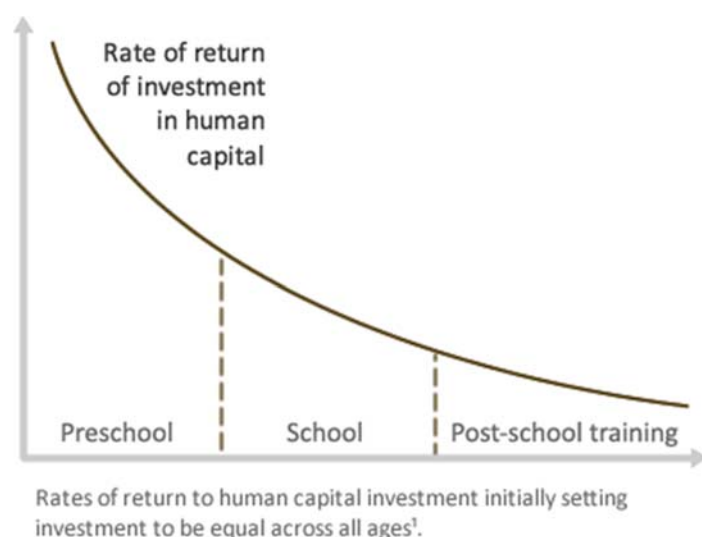


Figure 20 (Carneiro P, 2003)

Since the need for early childhood interventions is high, it is not possible for the State and philanthropic organisations to solve this challenge, especially given the immense budgetary pressures the SA government is under (large fiscal deficits). New and innovative models of financing will be needed to address the problems of early childhood development, to ensure that at-risk children achieve the educational and caring support they require in a timeous and effective manner, whilst at the same time alleviating the burden of constrained state budgets.

#### Potential solution

Outcomes based contracts facilitated by Impact Bonds represent a unique opportunity to change the dynamic of how public and private capital is used to solve society's challenges. Impact bonds, initially piloted by Social Finance in the UK, make use of risk capital from private investors to pilot a social intervention, which otherwise may not have been funded. Outcome funders, like the government, commit to repaying the capital plus returns to the private investor only if the intervention successfully meets pre-determined outcome and output metrics – in other words only if success is achieved. This model brings together the four benefits of a) lower risk for the state, b) reduced public spending, c) the use of private skills and d) discipline to achieve higher rates of success.



Thus, a Social Impact Bond has the potential to address the early childhood development needs of governments, especially the funding quandary, by utilising private capital (as provided by social impact investors) upfront to fund Early Childhood Development Interventions, with the added benefits listed above. State Departments of Education as outcomes funders would thus only have to pay for Early Childhood Interventions that meet or exceed pre-determined outcome metrics.

Research has shown that by offering a structured early childhood education curriculum tailored to the local context, children can be better prepared to enter kindergarten, closing the achievement gap and ensuring a greater likelihood of completing high school. Such societal gains translate into savings for the state in terms of reduced special education and remedial services costs (Reuters, 2013) in elementary school. In a study conducted in Utah, it was discovered that over a 3 year period between 2006-2009, 33% of low-income students would require special education services. After early childhood interventions such as the Granite School District preschool program, 95% of these children no longer required special education, resulting in savings for the government of \$2,607 a year per child for 12 years.

In other states, the savings from providing a high quality curriculum with rigorous standards to disadvantaged pre-schoolers, has resulted in savings of 7:1 – i.e. for every \$1 spent on Early Childhood Development initiatives such as these, \$7 is saved from the local state budget in terms of reduced need for special education, public assistance and preventing crime, as well as higher taxes due to better wages and heightened consumer spending (United Way, 2013).

By using a SIB, service providers (of Early Childhood Interventions) are incentivised to provide high quality curricula and kindergarten readiness programs in order to continue receiving funding, whilst investors are driven to select the best delivery agents for the job in order to maximize the chances of success (and hence payment). By agreeing on outcomes metrics upfront and adopting rigorous data capturing, as well as monitoring and evaluation of interventions, attribution can be proven, ensuring real impact is made in the community and actual cost savings can flow through to the government fiscus.

#### *Example of an ECD SIB*

J.B. Pritzker and Goldman Sachs will provide private capital to finance an expansion of the Utah High Quality Preschool Program to provide early education services to up to five cohorts totaling over 3,500 children. In this approach, there is no upfront cost to the taxpayer or other funders, instead:

- Goldman Sachs loans up to \$4.6 million to United Way of Salt Lake
- J.B. Pritzker provides a subordinate loan up to \$2.4m to United Way of Salt Lake, reducing risk to the senior lender if the preschool program proves to be ineffective
- United Way of Salt Lake oversees the daily implementation of the Utah High Quality Preschool Program in Granite School District and Park City School District. United Way of Salt Lake is also responsible for managing repayments to the private investors
- Private capital and other public funding sources provide Pay-for-Success payments to repay the loans, based on the cost-savings associated with the reduced use of special education and ancillary services
- If the preschool program does not result in increased school readiness and decreased use of special education services, then there is no obligation on the part of United Way or other public funding sources to repay the social impact loan



- After initial funding, subsequent investments will be made based on the availability of repayment funds from public entities that are realizing cost savings as a result of the program

#### Determining Pay-for-Success Payments

- Children participating in the high impact preschool program will take a Peabody Picture Vocabulary Test which is a predictive evaluation that will serve as an indicator of their likely usage of special education and remedial services. Students that test below average and are therefore likely to use special education services will be tracked as they progress through 6th grade
- Every year that they do not use special education or remedial services will generate a Pay-for-Success payment
- School districts receive a fixed per annum payment of approximately \$2,600 per student to provide special education and remedial services for students in general education classrooms from the State of Utah. The amount of the Pay-for-Success payment is based on the actual avoided costs realized by the State of Utah
- Pay-for-Success payments will be made equal to 95% of the avoided costs or \$2,470 per child for every year, Kindergarten through Sixth Grade, to repay the senior and subordinate debt plus a base interest rate of 5%
- Thereafter, Success Payments will equal 40% of the savings, or \$1,040 per child per year of special education services avoided, to be paid as Success Fees to Goldman Sachs and Pritzker.

The Utah High Quality Preschool Program has the potential to generate long-term savings for taxpayers and the Social Impact Bond structure can become a replicable model for financing early childhood services nationally.

- The potential savings associated with the reduction in special education and remedial service usage are significant, and in each scenario exceed the potential payments to the lenders
- Pay-for-Success payments are only made through 6th grade for each student; but all savings that are generated after that point will be captured by the school district, state and other government entities (Goldman Sachs, 2013)

## PROTOTYPE EARLY CHILDHOOD DEVELOPMENT IMPACT BOND

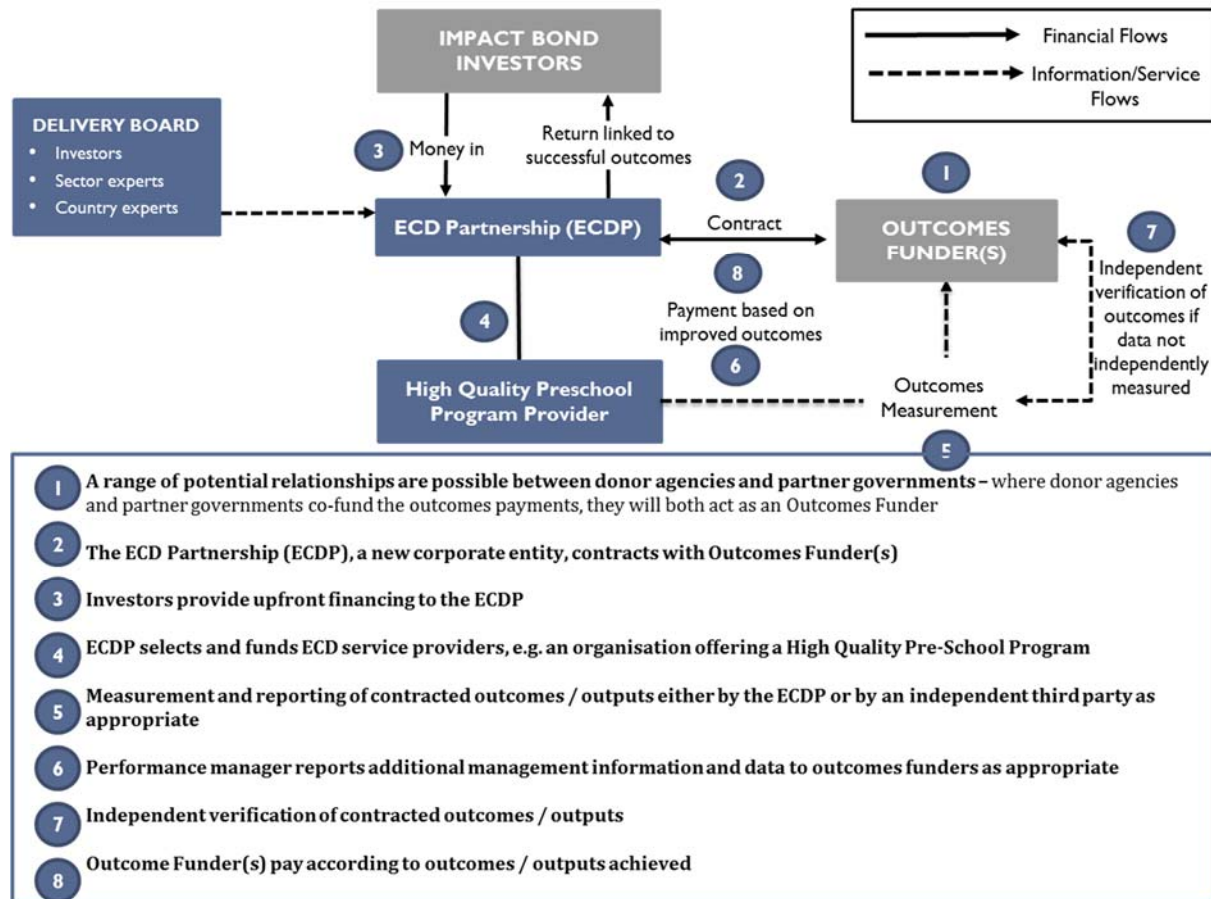


Figure 21: Generic example of how an ECD SIB would work/be structured

### Education

#### Developmental Issue

The education system in South Africa is widely acknowledged as needing desperate attention. Studies by UNESCO (United Nations Educational, Scientific and Cultural Organization) and Stellenbosch University indicate that only 71% of children who should be in grade 6 in SA are literate, whilst only 58.6% are numerate, behind poorer (by GDP, overall and per capita) African counterparts Kenya, Swaziland, Tanzania and Zimbabwe on both counts. The Department of Basic Education's annual national assessments showed that on average the country's grade 9 pupils scored a dismal 13% for mathematics in 2012 (Wilkinson, Is SA's education system the worst in Africa? Not according to the data, 2013).

Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) conducted 3 education policy research projects between 1995 and 2010 amongst education ministries in 15 African countries including Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe. The findings showed that SA was 10<sup>th</sup>

out of the 15 in terms of average student reading scores, and 8th in terms of average students' mathematics scores<sup>29</sup>.

What is of great concern is that despite SA being the 3<sup>rd</sup> highest spender on primary school education per pupil in Africa (at \$1,225<sup>30</sup> per capita in 2007), the country is still doing worse than some nations who spend less, e.g. Kenya spends only \$258 per capita on primary school education and yet ranks ahead of Africa's most advanced economy in terms of mathematics and literacy (the same is true of Swaziland – lower educational spend than SA but better educational outcomes).

### *SME involvement/composition*

Many of those who would like to work in the education, research and/or training sector in SA, e.g. as ECD Practitioners (overlap with **Early Childhood Development (ECD)** section of this report), youth workers, researchers, environmental educators etc, do not possess adequate skills to enter or succeed in the field. Partly to address these needs, the government has launched the Education, Training and Development Practices Sector Education and Training Authority (ETDP SETA) whose task it is to implement learnerships, apprenticeships, skills and other programs (e.g. work experience) aimed at developing the capacities of those seeking employment or to launch an enterprise in the education, training and/or research fields. An education-focused IB could thus look at improving the capabilities of entrepreneurially minded candidates with a passion for training/teaching/research, thus paving the way for the creation of SMEs (ECD centres, private schools, tutor centres, research consultancies etc) in the education, training and research sector, creating jobs and providing much needed knowledge and skills transfer in SA.

The Department of Higher Education and Training (DHET) notes that there are 118 Private Higher Education Institutes (PHEIs) in operation in SA (87 registered, 31 provisional), most of which are Small, Medium and Micro Enterprises (SMMEs) (ETDP SETA, 2013). The definition of a Private HET (Higher Education and Training) provider is any accredited institution which offers qualifications in the NQF level band 5-10 (i.e. post-matric to doctoral level).

According to a Research and Development (R&D) survey carried out by the Education, Training and Development Practices Sector Education and Training Authority (ETDP SETA), the Business Enterprise (i.e. the for-profit private sector rather than science councils, government or NPOs) sector also comprises many small and medium sized businesses that employ researchers to gather market intelligence, conduct industry analysis etc for profit-making firms.

Additionally, the education sector exhibits many crossovers with the issue of

**Youth** unemployment in SA, as mentioned later in this document (under the heading in **bold**). Strengthening the education system, especially so as to make matriculants better prepared for the working world, will directly feed into the success of SMEs, who will then be able to access a talented and work-ready young, graduate workforce that is both affordable and motivated to prove their worth. Not

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<sup>29</sup> The SACMEQ study did not take into account enrollment rates amongst children of school going age; adjustments for enrollment have been done by researcher Nicholas Spuall and Stephen Taylor from the University of Stellenbosch, with the results still indicating room for improvement for SA learners when compared to top African countries (Wilkinson, Is SA's education system the worst in Africa? Not according to the data, 2013)

<sup>30</sup> (EFA, 2010)



only will SMEs have to spend less on training young, school leaving interns, the first-time work hires will be able to perform at a higher level and benefit from on-the-job experience.

Thus, an intervention at the senior secondary school level (e.g. Further Education and Training, or Grade 10-12) could help to make future school leavers better prepared for the workplace.

#### *Applicability of IBs/OBF*

- Evidence from around the world shows that the returns from education are significant, with properly educated and trained individuals earning as much as 58% more than those with poor schooling (e.g. as is the case with Ghana's Technical and Vocational Education and Training program)
- Education is a key area for the South African government to improve, with unsatisfactory maths and science standards in particular (a recent ranking places South Africa second last in the world, after Yemen, in this regard (Evans, 2013))
- Outcomes such as improved literacy and numerical skills, exemptions as well as job readiness can be measured through standardized testing and benchmarked, whilst outputs such as time spent in class (attendance) can be useful proxies to monitor intermediate progress and efficacy of interventions
- There is substantial financing available for education, with SA setting aside R10bn alone for student loans in the tertiary sector, available via the National Student Financial Aid Scheme, boding well for potential outcomes funding from government (especially if the state only has to pay for successful results).
- SA is willing to innovate in the education space as evidenced by the efforts towards a paperless classroom, with initiatives such as the Gauteng education department's "Big Switch On" project, aimed at linking students to the internet for materials and encouraging the use of tablets in classrooms (to make pupils tech savvy and increase engagement, access to information and hence learning outcomes (SA Information, 2015).

#### *Green Economy*

##### *Developmental Issue*

The idea of a green or low-carbon economy, whilst traditionally the purview of developed countries, is gaining traction in developing countries, as concerns over pollution and environmental sustainability start to gain increasing importance. In South Africa, there is a tension between the socio-economic developmental objectives of the country (reducing poverty and inequality) and the need to be proactive about safeguarding ecosystems and reducing emissions. Whilst SA realises the increasing need to reduce carbon footprints, much of the country's industry and economic growth (including job creation: petrochemicals industry led by the likes of Sasol, Chevron<sup>31</sup>; electricity generation via Eskom, Koeberg etc) is tied to the use of fossil fuels (e.g. coal, oil etc) and other environmentally hazardous energy and commercial practices (e.g. use of landfills; nuclear, plastic and other waste generation) (M.Kaggwa, 2013). In 2007, more than 87% of SA's energy supply came from coal (~66%) and oil (~22%), see Figure 22.

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<sup>31</sup> Chevron is planning on spending over R400m on maintenance of its Caltex refineries in Milnerton, Cape Town, and plans to employ an additional 3,000 workers (made up of artisans, semi and unskilled labourers) for the task. Chevron's operations in the Cape are estimated at contributing around 3.4% to the province's GDP as well as 2.4% of its employment (Booyesen, 2015)

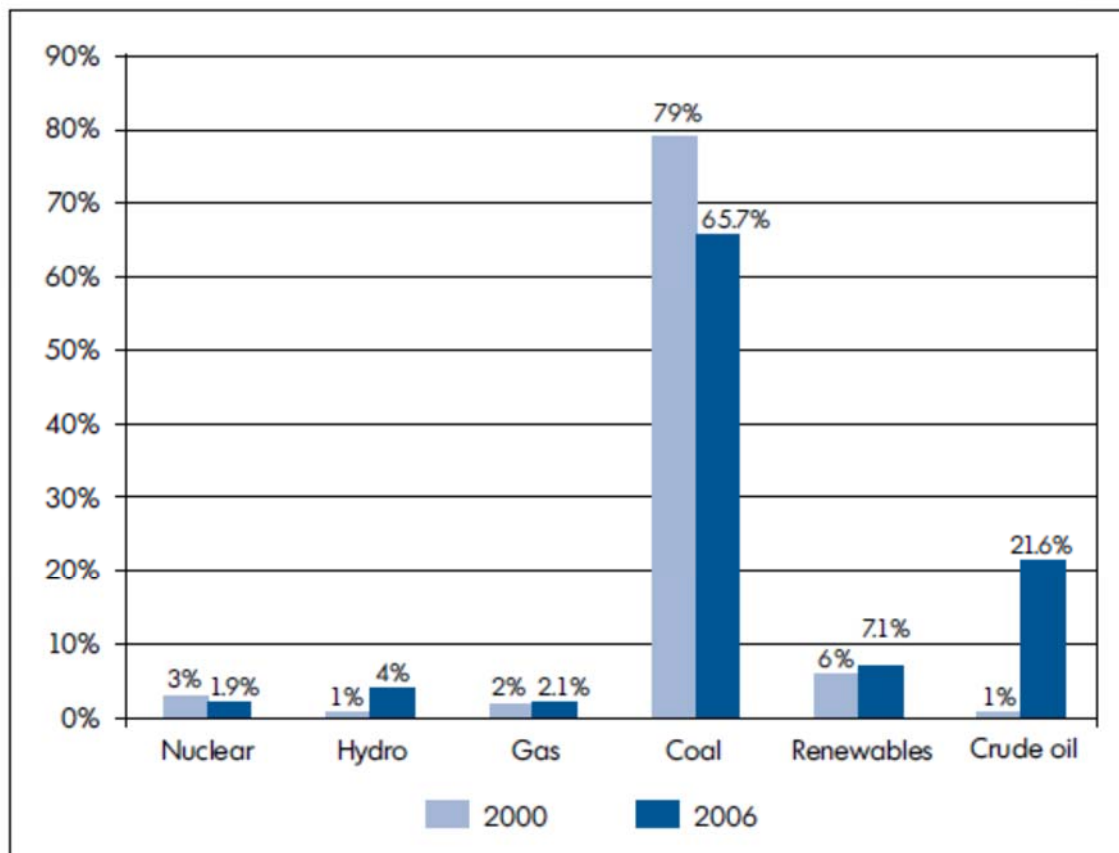


Figure 22: Primary energy supply for the years 2000 and 2006 (DME, 2010)

A transition towards a green economy should encourage inclusive economic growth and social development whilst addressing energy insecurity (over-reliance on non-renewable, carbon rich fuels) and environmental stability. This means that the current systems of production, distribution and consumption should be relooked at to ensure greenhouse gas emissions are reduced, and that ecological scarcities and devastations are not exacerbated. In this way, economic progress and human upliftment is achieved whilst at the same time not impoverishing the wellbeing (health, welfare) of future generations. Whilst many emerging markets have been criticised by developed world counterparts for pursuing economic growth with little consideration for adverse impacts on the environment (especially those forming part of the BRICS bloc of nations, namely Brazil, Russia, India, China and SA), the reality is that hyper-industrialisation and intensive infrastructure expansion is seen by many developing countries as a necessary imperative for socio-economic transformation and prosperity, a path ironically followed by many first world countries in the past.

In order to facilitate the trajectory towards a low-carbon economy, SA's National Department of Minerals and Energy drew up a National Energy Efficiency Strategy which aimed at a 12% improvement in energy efficiency nationwide by 2014. To this effect, over the past few years, Eskom has rolled out various programs including free replacement of household incandescent light bulbs for more energy efficient halogen ones, as well as providing subsidies on solar powered geysers<sup>32</sup>. Despite this attempt at reducing

<sup>32</sup> Eskom's target is one-million solar water heaters by 2014/15, of which around 400,000 have been installed so far (Adams, 2014)



energy usage, due to electricity constraints that are seen as a growth and investment impediment for the country<sup>33</sup>, the national energy utility has set about building two more large-scale coal-fired power stations (in addition to the extant Kendal, Majuba and Matimba stations), Medupi and Kusile, each with a generating capacity of 4,800 MW (Blaine, 2014). Whilst 93% of Eskom's power comes from coal-fired stations, the utility has argued that the latest two installations are cleaner and far more energy efficient than their predecessors, with technologies including fabric filters, low NOx burners and desulphurisation plants aimed at reducing ash, NOx and sulphur dioxide emissions (the latter two by 40% and 90% respectively) (Eskom, 2011).

Notwithstanding the country's continued dependence on and preference for fossil-based energy sources, the government is steadily putting the necessary frameworks in place to migrate SA towards a greener economy. As part of the New Growth Path (now the National Development Plan or NDP<sup>34</sup>), the Presidency has highlighted the potential that a lower-carbon economy may have regarding the generation of jobs as well as spurring industrial development. As part of this green strategy, the government is aiming at reducing greenhouse gas emission by 34% by 2020, and by 42% five years later. The Government also entered into the Green Economic Accord in 2011, which aims to create 300,000 work opportunities over 10 years through investments into the green economy, whilst Treasury allocated R800m over 2 years to the Green Fund in order to finance high-quality projects with high-impact and strong job generation capabilities.

By the middle of 2012, the government had approved around 19 clean energy proposal to the value of R73m across wind, solar and hydropower (SA Information, 2013). To date, around 21 renewable energy projects have been awarded, with a combined electricity generation capacity of 1,076 MW. The National Energy Act of 2008 setup a regulatory framework to encourage the movement towards the use of a diverse mix of energy sources at affordable prices and sustainable, material supply levels. Already the benefits (financial, social and environmental) of a move towards the use of renewable energy is being experienced at this early stage of implementation, with a recent study by the Council for Scientific and Industrial Research (CSIR) indicating that the net financial benefits of SA's first wind and solar Photo-voltaic (PV) projects stands at R800m (the difference between the financial return and costs of implementation). The benefits that accrued to the SA economy as a result of the incorporation of clean energy generation by Independent Power Producers (IPPs) came from 120 hours of "unserved energy"<sup>35</sup> savings to the value of R1.6bn, as well as a reduction in diesel and coal fuel consumption worth R3.7bn<sup>36</sup>. Conversely, whilst the total financial benefits attributed to the use of renewable energy stood at R5.3bn, the tariffs paid to IPPs to generate this energy amounted to only R4.5bn, leading to the aforementioned cost saving (CSIR, 2015). This net positive economic outcome bodes well for the further adoption of renewables over fossil-derived energy sources, as the evidence suggests that clean energy is becoming

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<sup>33</sup> The National Development Plan (NDP) of South Africa emphasizes the need for the economy to expand at 5% per annum in order to reduce unemployment and inequality, a GDP growth rate that relies on large-scale investment and sufficient, stable power generation (SA Government, 2013)

<sup>34</sup> The NDP devotes an entire chapter (5) on how the country can and should strive to become more environmentally friendly

<sup>35</sup> During tight supply periods, in the absence of renewables, some customer's electricity supplies would have to have been curtailed (unserved) (SA Government News Agency, 2015)

<sup>36</sup> Due to the use 2.2TWh (terawatt-hours) of wind and solar energy instead of the more expensive option of running diesel-fired open-cycle gas turbine and coal-fired power stations) (SA Government News Agency, 2015)



increasingly financially viable with further downward pressure on per unit pricing expected as the cost of coal fired power rises<sup>37</sup>, and green energy technology becomes more advanced.

Lastly, as a deterrent to big business's continued reliance on fossil fuels for its energy needs, the government is planning on implementing a carbon tax (as part of the NDP) on CO<sub>2</sub> emissions of approximately R120 per ton, which will come into effect in 2016. This tax will have a significant adverse financial impact on large emitters of greenhouse gas such as miners and petrochemical companies including Arcelor Mittal, Sasol, Eskom, BHP Billiton, Anglo American etc.

#### *SME involvement/composition*

There are a number of renewable energy projects currently underway in SA that are providing jobs to locals as well as supplier contracts to empowered SMEs. Examples include two Concentrating Solar Power (CSP) plants of 100MW capacity each in the Northern Cape, namely the Kathu Solar Park and Redstone Solar Thermal Power projects (preferred bidders in the third round of the Department of Energy's Renewable Energy Independent Power Producer Procurement Programme or REIPPPP).

The consortium behind the Kathu Solar Park comprises GDF Suez (the lead), Investec Bank, Sishen Iron Ore Company Community Development Trust, the Public Investment Corporation (PIC), Lerako Metier, and the project will incorporate a molten-salt storage system (allowing for up to 4.5 hours of thermal energy storage<sup>38</sup>), as well as the traditional parabolic trough technology.

The Redstone project, led by SolarReserve (and partnered by International Company for Water and Power Projects (ACWA Power), a power and water developer, owner and operator from Saudi Arabia) will create over 800 direct jobs during the building phase as well as additional jobs surrounding equipment supply, engineering, manufacturing, transportation, amongst others (SA Information, 2015). Additionally, around 40% of the project's total value would be provided by suppliers from SA, many of which would constitute black empowered enterprises. Lastly, a study by Borel-Saladin et al (2013) on the green economy and its job creation potential in SA has shown that the sector has the ability to create over 462,000 direct, long-term employment opportunities, 46,000 of which would be in manufacturing (see Table 16 below).

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<sup>37</sup> The National Energy Regulator of South Africa (NERSA) has granted Eskom a 12.69% increase in electricity tariffs for 2015, in an effort to cover the R225bn revenue shortfall the utility needs to finance its energy generation expansion program; estimates are that similar (13%) increases will be needed over the next 5 years to cover the State-Owned Entity's (SOEs) capital requirements (Tamar Kahn, 2014)

<sup>38</sup> Useful for night-time operation

Broad green economy category	Segment	Technology/product	Long-term net direct employment	Long-term net direct manufacturing employment	
Energy generation	Renewable (non-fuel) electricity	Wind power	Onshore wind power	5156	2105
			Offshore wind power		
		Solar power	Concentrated solar power	3014	608
			Photovoltaic power	13 541	8463
		Hydropower	Marine power	197	0
			Large hydropower	272	111
	Micro/small hydropower		100	0	
	Fuel-based renewable electricity	Waste-to-energy	Landfills	1178	180
			Biomass combustion	37 270	154
			Anaerobic digestion	1429	591
			Pyrolysis/gasification	4348	2663
Co-generation			10 789	1050	
Liquid fuel	Biofuels	Bioethanol	52 729	6641	
		Biodiesel			
Energy generation subtotal			130 023	22 566	
Energy and resource efficiency	Green buildings	Insulation, lighting, windows	7 340	838	
		Solar water heaters	17 621	1225	
		Rain water harvesting	1275	181	
	Transportation	Bus rapid transport	41 641	350	
	Industrial	Energy-efficient motors	-566	4	
		Mechanical insulation	666	89	
	Energy and resource efficiency subtotal			67 977	2686
Emissions and pollution mitigation	Pollution control	Air pollution control	900	166	
		Electrical vehicles	11 428	10 642	
		Clean stoves	2783	973	
		Acid mine water treatment	361	0	
	Carbon capture and storage		251	0	
	Recycling		15 918	9016	
Emissions and pollution mitigation subtotal			31 641	20 797	
Natural resource management	Biodiversity conservation and ecosystem restoration		121 553	0	
	Soil and land management		111 373	0	
Natural resource management subtotal			232 926	0	
Total			462 567	46 049	

Source: Adapted from Table 0.1 in Maia et al.<sup>18</sup>

Table 16: Employment estimates by green economy categories and segments (Jacqueline M. Borel-Saladin, 2013)

### Applicability of IBs/OBF

- There is significant funding for Green Investments which could be channelled into an IB.
  - Besides the aforementioned Department of Environmental Affairs' (DEAs) established Green Fund (R800m), the Industrial Development Corporation (IDC) established the Green Industries Special Business Unit in 2011 with the aim of investing R22bn in green industries over the following 5 years (equal to roughly 25% of the funder's total portfolio) (Jacqueline M. Borel-Saladin, 2013).
- There exist many opportunities for interventions in the green economy, ranging from biofuel projects, clean energy generation, environmentally friendly production, energy efficiency, reducing waste (e.g. through recycling/upcycling) and mitigating pollution.
- Clear outcomes metrics can be devised for a green or environmental impact bond, such as tons of landfill waste averted, percent reduction in CO<sub>2</sub> emissions, tons of waste recycled etc.
- There is a strong political will to transition SA towards a lower-carbon economy, as evinced by recent financial (Green Fund) and policy support (Chapter 5 of the NDP)
- Positive environmental outcomes have second order benefits for population wellbeing such as better health due to cleaner air, water and safer food, notwithstanding the financial benefits linked to lower health problems (respiratory illnesses, water borne diseases, food poisoning) etc.

- Interventions related to the green economy have clear job generation prospects as well as inherent financial viability/lucrative ness (cash offered for recycled waste and for upcycled, re-purposed and/or repaired materials/discarded units)

## Youth unemployment

### Developmental Issue

In SA, youth unemployment is a large concern, with recent Stats SA estimates showing a joblessness rate of 36.1% in 2014 amongst 15-34 year olds (Stats SA, 2014), an increase over 2008's figure of 32.7%. The picture is even bleaker in the 15-24 year old category, where the unemployment rate stands at over 50%, placing SA 3<sup>rd</sup> last in the world. Whilst young adult males make up 52-64% of the working age population (15-64 year olds), only 42-49% are employed.

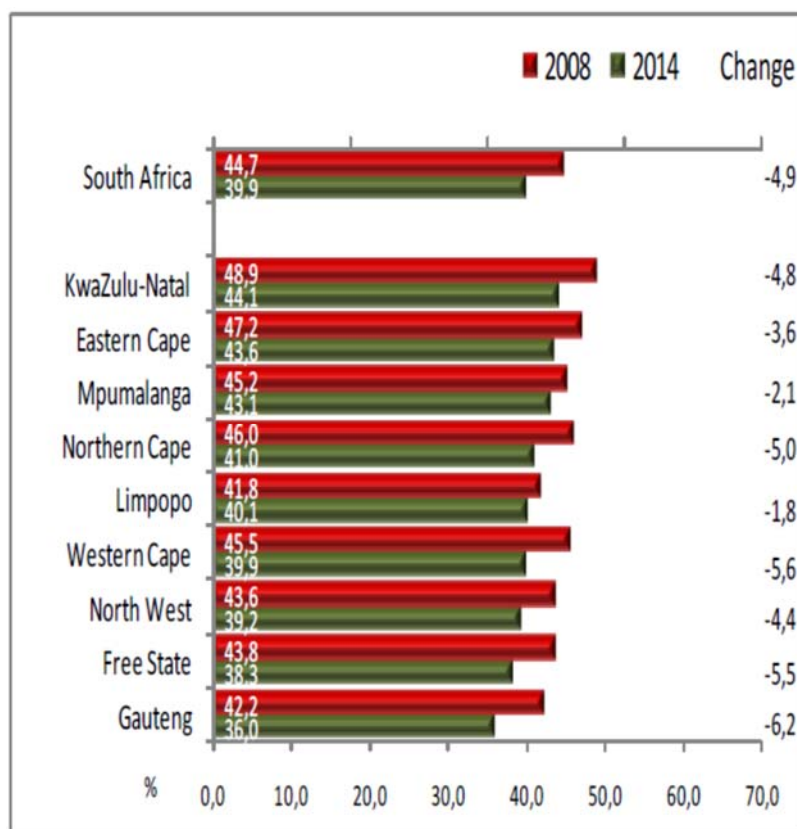


Figure 23: Share of youth 15-34 years in employment (Stats SA, 2014)

In Figure 17, one can see how youth employment in SA has changed over the past 6 years, both nationally and by province. The youth employment rate in the country has drop by almost 5%, whilst the 2 provinces with the largest drops are Gauteng, followed by the Western Cape. This last statistic is particularly worrisome, as not only is Gauteng SA's most populous province (23.7% of total inhabitants), but it is the largest contributor to the nation's GDP, at 34.5%. Whilst only possessing 11.3% of the SA population, the Western Cape contributes 14.5% to the country's GDP and so a decrease in the percent of young people working is also a large cause for concern.



As a response to this concern, the country's Jobs Fund has recently funded 16 projects under their Work Seekers Application Window aimed at helping young South Africans apply for, enter and remain in gainful employment. Greater Capital, the impact investment advisory and monitoring/reporting firm, was asked to conduct a comparative analysis of the Job Fund projects, which produced a clearer picture of some of the challenges facing SA's youth.

Many matriculants are struggling to pass basic aptitude tests for entry level jobs in e.g. retailing, and found menial tasks such as barcode matching (pairing a retail item's barcode with the corresponding numbers on a printed list) challenging. This state of affairs points to pressing need for an improved education system to cover basic yet fundamental skills such as numeracy and literacy. The findings of the analysis also indicate the need for work readiness programs to be instituted to prepare school leavers for the working world, upskilling them in how to be punctual, dress appropriately (i.e. business attire), interact with colleagues (email and verbal etiquette) and generally act in a professional manner.

#### *SME involvement/composition*

Many SA SMEs are hesitant to hire new permanent staff - reasons include inflexible labour laws in SA, expensive recruitment costs, and relative unpreparedness of graduates for new jobs (lack of necessary experience, skills) (Finweek, 2014). This reticence by SMEs to hire young job seekers/graduates is an impediment not only for youths seeking first time employment, but also potentially to the businesses themselves whose growth may be constrained due to an insufficient or cheaper supply of labour, especially as older employees leave the workforce, taking with them valuable industry and tacit business knowledge. Instead of shying away from employing fresh entrants into the labour pool, SMEs can instead focus on innovative ways to hire young workers without stretching wage bills. Offering short-term internships (unpaid or with a stipend) provide a way for businesses to assess potential permanent hires, whilst providing a taste of the business world and what a job entails to first time work seekers. Businesses also stand to gain from hiring new graduates as interns, as many possess fresh ideas, challenging old ways of doing things and providing insights into new markets (specific communities or the rest of Africa) due to their cultural diversity and local background knowledge (Finweek, 2014).

Youth employment accelerator Harambee has found that making young job seekers work ready and placing them into entry level jobs not only provides employment and a source of income to youths, but can also serve as a launch pad for greater things, such as moving up the ranks in the company hierarchy or even launching their own enterprises. Harambee assists young employment seekers by identifying the talent/HR needs of companies, matching high potential candidates with specific roles, and bridging any skills gaps to ensure work readiness and culture fit. The accelerator measures its performance by looking at how many first-time work seekers enter and remain in gainful employment for a period of at least 1 year. Research has shown that employees who remain within a company for at least 1 year have a far greater chance of remaining in stable, long term employment (with enhanced earning potential) than those who chop and change within 12 months. Additionally, youth employment acceleration and support initiatives can have a positive impact on entrepreneurship as the skills often taught on these programs can be useful for starting a business.

## Applicability of IBs/OBF

Reasons why IBs could be suitable to address youth unemployment:

- Pressing social challenge that, if left unaddressed, has ramifications for other basic needs such as housing, health, food and education
- Encourage service providers to concentrate on outcomes (e.g. permanent jobs created) rather than outputs (e.g. number of job seekers assisted)
- Potential willing outcomes funders in SA in the form of the National Youth Development Agency (NYDA), DoL, DTI and the SEFA/IDC sponsored R2.7bn Youth Fund (launched in 2014 as part of the Youth Employment Accord<sup>39</sup>, a social pact between government, organized labour, the private sector as well as youth and community formations)
- Clear, social benefits that are relatively easy to translate into financial terms:
  - reduction in reliance on youth wage subsidies<sup>40</sup>;
  - increased taxes from higher proportion of working individuals;
  - lower Unemployment Insurance Fund (UIF) payments;
  - lower costs associated with crime, substance abuse and poor health (possible adverse effects of sustained unemployment amongst youth)
  - multiplier effect on the economy (higher spending power)
  - high income positive spill-over effects on “useful” spend such as education, health, food and family needs
- Strong political will behind youth employment strategies in SA (Youth Enterprise Development Strategy 2013-2023 – a DTI program aimed at providing employment opportunities to young men and women in SA)

## Housing

### Developmental Issue

Lack of affordable housing is a major concern in South Africa, where homelessness and informal settlements are rife. There are also those in the “missing middle” who earn too much to qualify for RDP (Reconstruction and Development)/low-cost housing but too little to qualify for a bank loan in order to buy a house. SA has over 14.45 million households, yet only 15% of them can afford a mortgage, 60% earn less than R3,500/month and hence qualify for state housing whilst the remaining quarter of

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<sup>39</sup> Youth Employment Accord involves government and private sector’s commitment to a national Youth Employment Strategy (2013), encompassing 6 factors: 1) Education and training - improving the gap between school leaving and first time employment; increasing FET intakes; expanding targets for National Skills Accord); 2) Work exposure – job placement schemes (5% of total employment time per department for each State-Owned Entity (SOE); work-readiness programs); 3) Public sector measures – increasing number of youth employed by public institutions by scaling up National Youth Service Program (Expanded Public Works and Community Works program to absorb up to 80% of new young job pool entrants); 4) Youth target set-asides – encouraging certain industries to hire mainly young workers, e.g. green economy (60-70% of labour should be drawn from young workers; solar water heater installation program to be mainly youth focused), infrastructure program (at least 60% youth target) and Business Process Services sector (80% youth set-aside); 5) Youth entrepreneurship and cooperatives (SEFA, SEDA and Jobs Fund to strengthen and develop programs to encourage youth cooperatives and enterprises (better regulation; technical support; funding; demand-side: government procurement – e.g. school nutrition programs); 6) Private Sector Measures – incentivize business to improve youth-absorption with sustainable jobs (EDD, 2013).

<sup>40</sup> The SA government signed the Employment Tax Incentives Act (commonly referred to as the youth Wage Subsidy) into law at the beginning of 2014; the act seeks to provide a tax break (for up to 2 years) to companies who train and employ youths, especially targeting Special Economic Zones (SEZs) (Ensor, 2014).



households (comprising mainly nurses, teachers, soldiers and police officers) have little or no access to affordable housing. This last group also has limited access to free services and often has to pay for all rates, property taxes etc. The Presidency and the Ministry of Human Settlements is targeting upgrading around 400,000 informal dwellings in addition to the provision of free housing (although long waiting lists abound). Some supportive policies to encourage bank lending to the low income home purchasers is the availability of government subsidies on deposits for first-time properties costing less than R350,000 (reducing loan sizes and default rates). These subsidies are provided by the National Housing Finance Corporation (a unit of the Human Settlements Department), and house-holds earning between R3,500-R15,000 can qualify for between R10,050 – R87,000 cash deposits on housing down-payments.

Since the ANC came to power in 1994, 3.3 million (Robert Brand, 2013) low-cost houses have been built in post-Apartheid South Africa, yet there are still many townships around the country (including Langa, Khayelitsha, Nyanga, Gugulethu, Alexandra and Soweto), whilst the housing backlog stood at over 2.1 million in 2013 (1.5 million in 1994). The government is aiming at eliminating the backlog by 2030, earmarking around R16bn for housing each year (SA Information, 2013). Even though the Housing Act defines government's responsibilities in terms of promoting and facilitating access to adequate housing for all South Africans, including support services (through municipalities) such as water, sanitation, roads, electricity, storm water drainage and transport, SA has only managed to deliver around 140,000 houses/annum on average since 1994 (Wilkinson, Factsheet: The housing situation in South Africa, 2014). The Constitutional Court has also maintained that the provision of housing is seen as a basic human right that constitutes more than just providing bricks and mortar (SA Information, 2013).

The lack of basic shelter and services has led to many protests, with 2013 registering 173 demonstrations alone by frustrated communities in need. As of 2011, roughly 12 million South Africans were recognized as being without adequate housing (Masilela, 2012). Whilst SA's total mortgage market stands at over R838m, affordable housing makes up only 5% of this, due to large-scale unemployment (25% or more) as well as over-reliance on single salaries or grants, often for entire families. Additionally, many banks are cautious of over-extending themselves in the loan department, with provisions for bad debt rising 36%, far higher than advances at less than 6%, in 2012.

To add to the complexity of this sector, some commentators have noted that the quality of some of the affordable housing schemes has been inferior (often falling into disrepair through poor workmanship), or that constraints such as lack of capital for regular maintenance or overcrowding have led to their deterioration. Some critics have also argued how some recipients of RDP houses have rented out their homes to multiple tenants whilst choosing to remain in informal settlements (e.g. shacks in townships) in order to generate higher income from rents. Lastly, some beneficiaries of government funded low-cost houses have bemoaned the fact that the houses they have been provided with are in undesirable locations, have been provided after too long a wait, are inadequately linked to services such as water, waste removal, electricity and sanitation or are costly to run (affordability of aforementioned services/rates and taxes).

#### *SME involvement/composition*

There are many SMEs involved in the construction and residential property sector, making an IB focused on developing small business in this sector highly attractive. According to the 2012 ABSA SME Index, over 31% of medium businesses employing between 20-49 workers are in the construction industry, making it the largest employer of businesses this size across all sectors in SA (see Figure 26). Construction is also

the second largest employer across sectors (after wholesale and retail trade) in the small business category (between 2 and 19 employees, see Figure 27).

The sector which showed the highest growth in SA over the 3 years to 2012 has been construction, both in terms of economic value (12.7% increase) and employment (almost 20%), see Figure 24 and Figure 25. Lastly, the construction industry has the second highest number of SMEs (after retail and wholesale trade) across sectors in SA, at 14% of all small and medium businesses (see Figure 28).

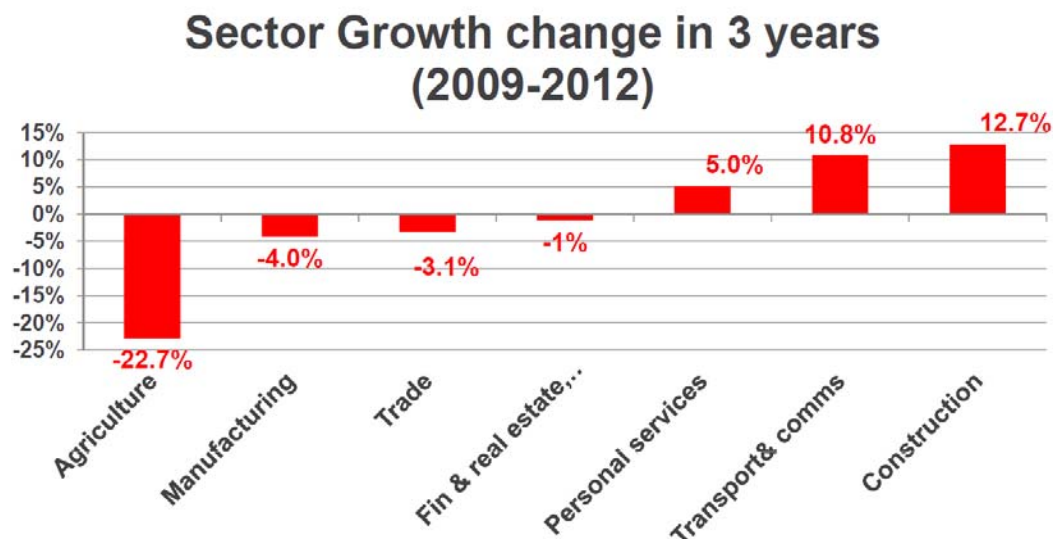


Figure 24 (Schüssler, *The ABSA SME Index: And a small look at sector growth and size of businesses*, 2013)

### Formal employment growth 2009 to 2012

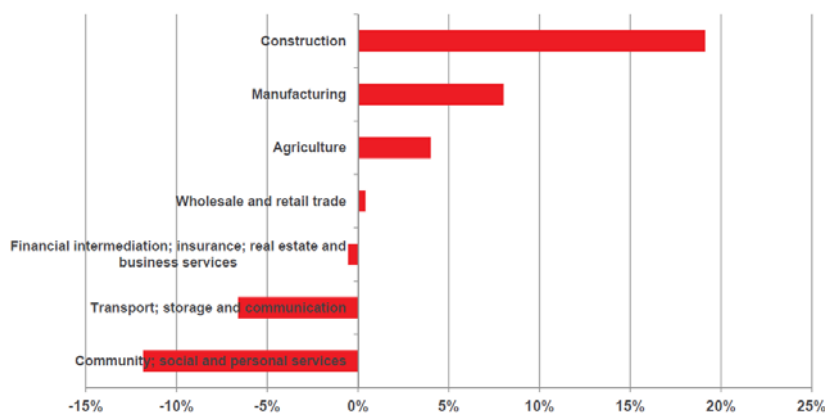


Figure 25 (Schüssler, *The ABSA SME Index: And a small look at sector growth and size of businesses*, 2013)

### Percentage of Business owners by main Industry. (medium)

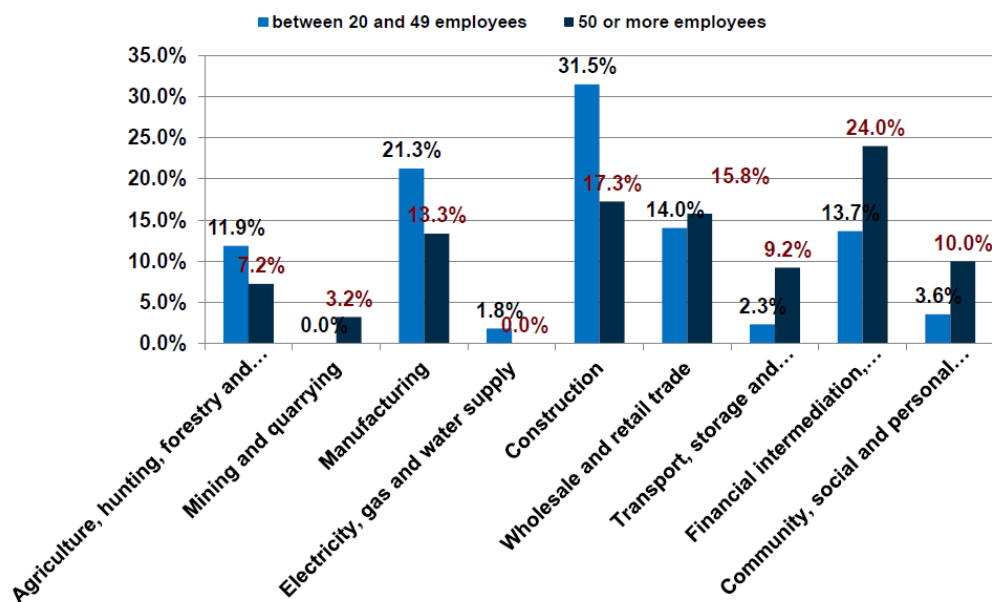


Figure 26 – data for 2<sup>nd</sup> quarter 2012 (Schüssler, *The ABSA SME Index: And a small look at sector growth and size of businesses, 2013*)

### Percentage of Business owners by main Industry. (small)

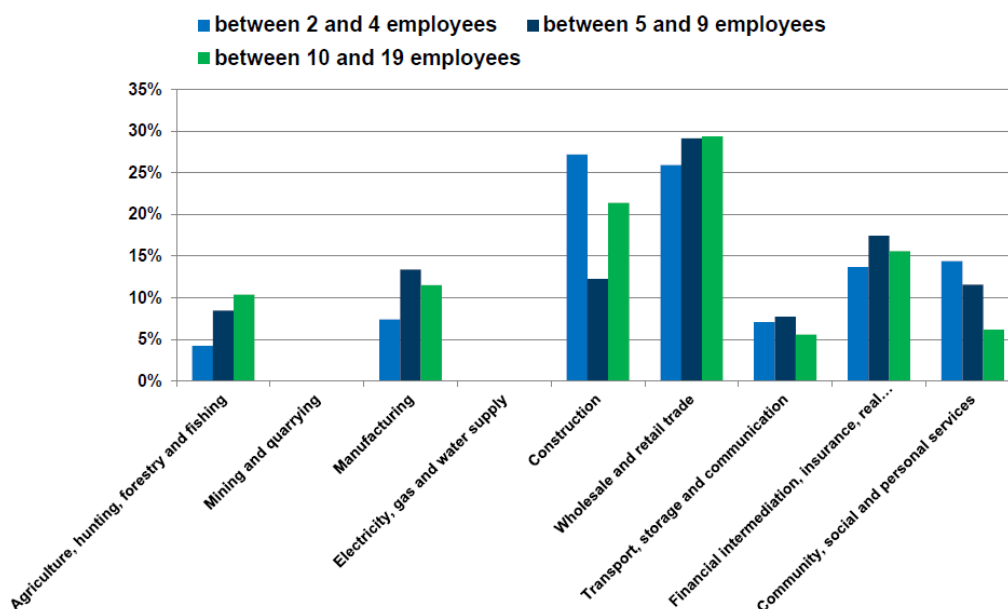


Figure 27 - data for 2<sup>nd</sup> quarter 2012 (Schüssler, *The ABSA SME Index: And a small look at sector growth and size of businesses, 2013*)

## Where the business owners are. Number of businesses by sector – not sector size

Excludes mining, utilities and household businesses.

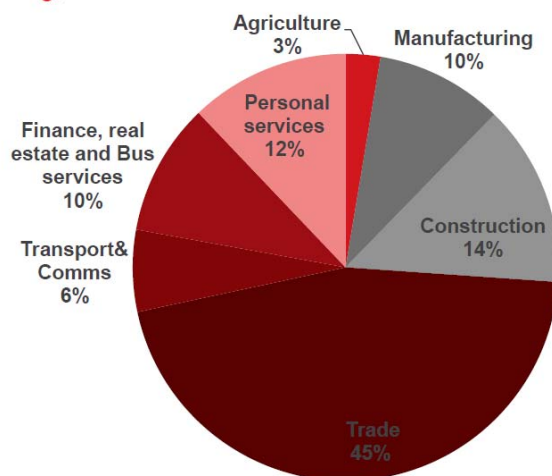


Figure 28 - data for 2012 (Schüssler, *Business Owners in SA: Who, where, how big, what they do and a few other facts, 2012*)

A case in point of the potential for success in supporting a construction related SME is that of Musa Capital's investment (through the Musa Kubu Fund) in Matlapeng Group (including Matlapeng Housing), a leading provider of large-scale turnkey residential construction developments to blue-chip mining firms and low to middle income markets. Through a R47.7m investment made by Musa Capital in 2009, the housing company was able to grow from 150 to c. 1,200 employees by 2014, and having developed c.2,750 houses for the low-to-mid income market with a further pipeline of between 6,000 and 10,000 planned over the next 5 years (in the North West, Limpopo and Western Cape provinces). By accessing this growth capital, Matlapeng has been able to expand to the stage where it is able to help other SMMEs in its supply chain, and, together with the DTI has launched an Incubator Support Program (ISP). The ISP involves a 3 year training program that aims at developing SMMEs that the company procures goods and services from, and includes practical on-the-job and classroom training to employees of small-scale suppliers (Musa Capital, 2015).

### Applicability of IBs/OBF

- Provision of adequate housing leads to additional positive societal benefits such as increasing perceptions of self-worth, achievement and belonging<sup>14</sup> whilst also improving social, leisure and family life as well as access to public transport
- Many service providers and institutions available to support housing initiatives in an IB structure, such as International Housing Solutions, National Housing Finance Corporation, the Rural Housing Loan Fund, Trust for Urban Housing Finance, the Social Housing Regulatory authority, low-cost housing providers (private sector, residential developer e.g. Calgro M3) and finance institutions (micro-lenders, traditional banks and mortgage providers).
- Availability of financing for affordable housing including the Public Investment Corporations (PICs) R2.6bn commitment, covering development financing (mortgages), bridging finance, and investments (direct: into low cost housing; indirect: affordable housing intermediaries; private equity: into housing developments) and SME property development related investment funds e.g.

Utho SME Infrastructure Fund (second round of financing seeking to raise R120-300m, see <http://www.utho.co.za/smefund<sup>41</sup>>).

- Introducing performance based payments in the area of housing will mitigate the problem of poor workmanship by holding construction firms accountable
- The multi-party arrangement under an IB is well suited to facilitate the roll-out of mass housing through creative public-private partnerships integrating state subsidies with private building firms (for profit and not for profit) and investors (impact capital).

## 7. Conclusion

This landscape study has provided a global scan of Impact Bonds, with a particular focus on those found/being contemplated in South Africa, as well as on the rest of the continent.

In performing this review, a number of observations are notable:

- **The developed world has many more IBs than the developing world, yet the latter has the greater social burden (in multitude and magnitude)**
  - SIBs dominate the global IB space, and since governments are paying/commissioners, the social focus is localized (specific to a province or country)
  - Many IBs in frontier countries (e.g. in Africa) are focused on combatting (often preventable) disease (HIV/AIDs, TB, malaria, sleeping sickness)
  - The developed world is more concerned about social issues affecting family & youth (foster care avoidance & education/unemployment, i.e. socio-economic reforms)
- **Proposed African Impact Bonds are generally larger in size and duration than those in the rest of world**
  - There are more audacious, intractable social challenges on the African continent and as well as in South Africa specifically
  - Funders/Investors in African (excluding South Africa) Impact Bonds are generally donors/venture philanthropists (DIBs) whilst the government is usually the commissioner in SA Impact Bonds (SIBs)
  - Developed world IB are usually less than 5 years in duration, i.e. within one typical political term (correlates with SIB dominance) , whilst African Impact Bonds contracts are ~7 years long
- **Donors/investors/governments seem reticent to participate in Impact Bonds in Africa/emerging markets**
  - *Possible reasons include:*
    - Insufficient understanding/awareness of IBs
    - Lack of sophistication around innovative finance instruments
    - Shallow capital markets/small (impact) investor universe

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<sup>41</sup> Utho SME Infrastructure Fund is a niche fund with the aim of investing in high-growth SMEs in infrastructure that possess a developmental focus

- Less transparency/accountability/will in some governments
  - Inadequate (in-country) service providers
  - Poor reward/risk ratio relative to developed market IBs
  - Content with pay-for-service/direct contracting or simpler results-based contracts
  - Easier to maintain status-quo: over-delivery leads to heightened expectations
  - History/culture/reality of aid: too much “easy” capital?
  - Concerns around budget cuts if cash not spent
  - Easier to measure outputs rather than outcomes
  - Political uncertainty/instability
  - Poor data systems/integrity: availability, measurability, reliability
  - Suspicions around private sector providing social services (undermining the state/outourcing)
  - Untested in developing markets: everyone waiting for proof of concept
- **There exist many opportunities for Impact Bonds to be applied in South Africa to support SMMEs/SEs (Small, Medium and Micro-Enterprises/Social Enterprises) across a variety of sectors/areas**
    - Sectors that exhibit potential for an SMME-focused, IB-led intervention include:
      - Healthcare
      - Early Childhood Development (ECD)
      - Education
      - Green Economy
      - Youth unemployment
      - Housing
    - The inclusion of B-BBEE principles in the design and implementation of an IB in SA will further increase the social impact and economic transformation needed to help alleviate poverty and reduce inequality

The research process for this paper has demonstrated that IBs could be applicable and useful in SMME development in South Africa. As a country characterised by many social problems, as well as the need for cost-saving private or NGO interventions, stronger accountability between spending and results, and a mechanism to combine private and public efforts, the research coalition believes that South Africa could also benefit from the application of IBs in social issue areas beyond SMME development.

The project team firmly believes that IBs represent an exciting opportunity to shape the flow of private and public capital in South Africa. During the course of this research project, momentum around IBs has grown both substantially on a local and global level. Within South Africa, the project team has been impressed by engagement and enthusiasm of multiple provincial and local governments to explore SIBs as well as dozens of private funders. We expect this momentum to only increase with the publication of this report. Globally, SIBs were at the top of the agenda for the G8’s Social Impact Investment Forum in 2013 and the value of funds set aside to catalyse the growth of SIBs in both the developed and developing world continues to rise.

Whether in supporting SMMEs/SEs or other key social issues, this research team believes the timing is ripe for South Africa to commence designing, commissioning and implementing IBs in our country.

## 8. Appendices

### Appendix I: List of Acronyms and Abbreviations

B-BBEE - Broad-Based Black Economic Empowerment

BoE – Bank of England

CDG – Centre for Global Development

C3 - Community Contribution Company

CIC – Community Interest Company

CSI – Corporate Social Investment

DDS – Donor Deductible Status

DFID – Department for International Development (UK)

DIB – Development Impact Bond

DSBD – Department of Small Business Development

DTI – Department of Trade and Industry

DWP – Department for Work and Pensions (UK)

ECD – Early Childhood Development

EDD – Economic Development Department

EU – European Union

FFS – Fee for service

GHG – Greenhouse Gas

IB – Impact Bond

ILO – International Labour Organisation

IRR – Internal Rate of Return

JICA - Japanese International Cooperation Agency

L3C – Low-profit Limited Liability Company

LDC – Least Developed Countries

MMPB - Mozambique Malaria Performance Bond

NCR – National Credit Regulator

NPC – Non-profit Company

NPO – Non-profit organization

ODA - Official Development Assistance  
OF – Outcomes Funder  
PBO – Public Benefit Organisation  
PIK - Payments in Kind  
PMB – Profit Making Business  
PRI – Program Related Investments  
REBP - Retrospective Episode-Based Payments  
SA – South Africa  
SARS – South African Receiver of Revenue  
SBD – Small Business Development  
SE – Social Enterprise  
SED – Socio-economic development  
SIB – Social Impact Bond  
SME – Small, Medium Enterprise  
SMME – Small, Medium and Micro Enterprises  
TA – Technical Assistance  
TasP – Treatment as Prevention  
VA – Voluntary Association

## Appendix II: Social Enterprises (SEs) in SA: definitions and forms

### *Defining a Social Enterprise*

At the International Labour Organisation's (ILOs) regional conference in 2009 entitled "*The Social Economy – Africa's Response to the Global Crisis*", participants accepted the following working definition of a social enterprise in SA: "*A social enterprise's primary objective is to address social problems through a financially sustainable business model where surpluses (if any) are mainly reinvested for that purpose*". (International Labour Organisation, 2009) Additionally, Social Enterprise UK defines a social enterprise as any organization that meets the following 6 criteria (Coetzee, 2014):

- 1) Has a definite social and/or environmental mission as laid out in their governing documents
- 2) Produces most of its income through trade
- 3) Reinvests the majority of their earnings
- 4) Is autonomous of state
- 5) Is largely (>50%) controlled for the benefit of the social/environmental mission
- 6) Is accountable and transparent

A social enterprise can often be seen as an organization with a dual mandate: a primary aim of creating meaningful (long-term, positive, system-wide) social/environmental value, and a secondary goal of financial self-sufficiency and/or generating an (often modest) economic return (e.g. aiming for at least full-cost recovery).

It is this duality that has led to the term “blended or shared value<sup>42</sup>”, when referring to the main objective of a social business. Whilst traditional Profit-Making Businesses (PMBs) usually focus on maximizing shareholder value (by striving to generate as much profit or financial bottom line as possible), a social enterprise can often be thought of as striving to achieve a triple-bottom line, with social and/or environmental gains held in higher regard than financial success.

As can be seen from Figure 29 below, a focus on a triple bottom line would prioritise positive social and/or environmental results above financial reward, without ignoring the latter.

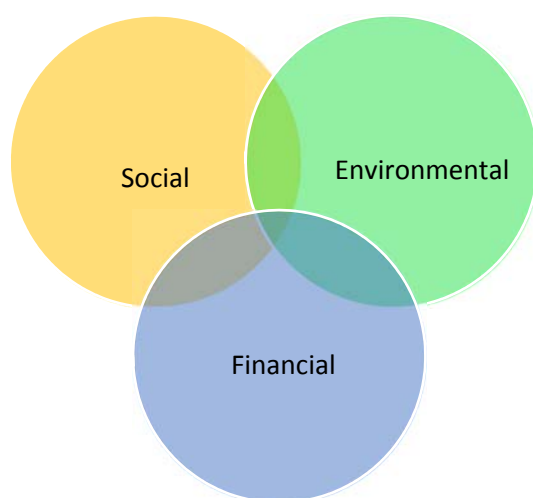


Figure 29: Venn diagram showing a possible triple bottom line focus of an SE

What is important to note is that a social enterprise is exactly what the term states: it is a business entity that aims to bring entrepreneurial skills and market forces to bear on tackling usually intractable social problems (like hunger/malnutrition, disease, poor water/sanitation, recidivism, unemployment etc). This means that a Non-Profit Company/Organisation (NPC/NGO) that has a social mandate to reduce environmental pollution and damage, but which relies mostly on donations for financial survival, is not generally viewed as a social enterprise. Neither can an NGO (Non-Governmental Organisation) whose primary aim is to lobby governments in Least Developed Countries (LDCs) to reduce corruption be seen as a social enterprise if its primary activities (e.g. advocacy in this case) do not possess a commercial or entrepreneurial aspect (i.e. little or no revenue generation is involved). In this last example, the efforts of the NGO fall more clearly under the title of social activism rather than social entrepreneurship (Osberg, 2007).

As an article in the Stanford Social Innovation Review puts it, “*Ventures created by social entrepreneurs can certainly generate income, and they can be organized as either not-for-profits or for-profits. What distinguishes social entrepreneurship is the primacy of social benefit...*” (Osberg, 2007) The article goes on

<sup>42</sup> A term originally coined by Antony Bugg-Levine, CEO of Nonprofit Finance Fund and co-author (along with Jed Emerson) of the book “Impact Investing: Transforming How We Make Money While Making a Difference”, a seminal publication on the industry



further to state that the goal of social entrepreneurship (as carried out by a social enterprise, for example), is to break down old, extant and unjust equilibria through disruptive innovation, bringing about a new and better order in which the poor and marginalized receive previously denied benefits (often through creative destruction, i.e. the replacement of the status quo with a new and more just system, for example, low cost eye care taking over from more expensive private ophthalmology services in India<sup>43</sup>).

### *Applicability of SEs to IBs*

Since most service providers in an IB are generally mandated to serve a disadvantaged target population, a social enterprise may be well suited to operate under such an arrangement. Since SEs generally aim to achieve systemic, social and/or environmental change for the good, participating in an IB would not only help the enterprise achieve its developmental mandate, but would also facilitate the initial, upfront working capital to do so, whilst providing impact investors (potentially) worthy partners with which to collaborate and achieve blended value.

Two examples of Social Enterprises supported by Bridges Ventures (a specialist fund manager focusing on sustainable, impact-driven investments) through their Social Entrepreneurs Fund is the HCT Group and CASA (Care and Share Associates). The HCT Group is a UK transport social enterprise<sup>44</sup> that operates London yellow school bus routes, red bus routes, and Park & Ride services, using surpluses to help those who cannot use conventional transport services due to mobility complications (e.g. being disabled etc). CASA is a social franchise organization in the UK that oversees an employee-owned domiciliary care business that provides high quality care to vulnerable, older and/or disabled people. An IB focusing on either transport or care services to older, disabled and/or vulnerable people could procure services from HCT Group or CASA respectively in an IB-based contract agreement.

### *SA context for SEs*

As it stands in SA, there is no separate legal entity for a social enterprise. Instead, an entrepreneur seeking to create positive social/environmental change by adopting a business approach would have to run their venture either as a single for-profit entity, a single non-profit entity, or setup two separate legal structures e.g. create a regular Profit-Making Business (PMB) with a non-profit arm like a Foundation, or vice versa (start an Non-Profit Company and develop a separate for-profit business as an offshoot). This last option, of creating two separate legal entities in order to achieve one's social mission whilst conducting commercial operations, is sometimes referred to as running a "hybrid or dual model" (Greater Capital, 2011).

### *For-profit and not-for-profit legal entities in SA*

As a South African social entrepreneur (actual or prospective), deciding whether or not to run your business under a for-profit or non-profit structure (or both, by adopting two separate legal entities) depends on various factors ranging from tax considerations, potential funding sources (accessing donations, philanthropic capital, government grants, enterprise or supplier development funds, bank loans, venture capital or private equity etc) and (for existing organisations) the current legal form of the enterprise, among others.

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<sup>43</sup> The Aravind Eye Care Clinics are one such example of a pioneering social enterprise

<sup>44</sup> The HCT Group is a single social enterprise comprising multiple (17) legal entities, including both for-profit and non-profit varieties (Coetzee, 2014)

## The for-profit legal form

The current for-profit legal forms available in SA include the following (Legal Resources Centre, 2011), (Deloitte & Touche SA, 2007)<sup>45</sup>:

- 1) Public limited (liability) company:
  - a. usually a large company, listed on a stock exchange, with the general public as (part) shareholders
  - b. shares can be (relatively) easily traded on an exchange
- 2) Private company or Proprietary (Pty) Limited (liability):
  - a. ownership is more tightly held by no more than 50 private individuals, and shares cannot be sold to the general public
  - b. a shareholder wishing to exit their investment has to sell their stake to one of the other part-owners
- 3) Small Business Corporation (previously known as a Close Corporation or CC) (MD Accountants and Auditors, 2014):
  - a. Entire share-holding must be by natural persons and turnover must be less than R20m p.a.
  - b. Not more than 20% of gross income and/or capital gains can be derived from investments or the rendering of personal services
- 4) Co-operative
  - a. Is a business organization run and owned by a group of individuals for their mutual financial, social and cultural benefit
  - b. Governed by a committee or board of directors, but is equally owned and controlled by all members (each possesses 1 vote)
- 5) Partnership
  - a. Can have between 2 and 20 partners in the business who usually have to contribute either capital, skill or labour to the partnership
  - b. Constituted through a “partnership agreement” (founding document); each partner is jointly and severally (i.e. or individually) liable for the debts of the partnership
- 6) Sole-proprietor
  - a. Individual who runs a business by themselves and trades under their own name
  - b. Simplest business structure but personally liable for the debts of the business

These companies generally derive a net income from selling services or products and constitute most of the business types in SA. The owners of for-profit businesses generally have the discretion to decide on what to do with profits, e.g. paying it out to themselves (partially or entirely), re-investing it in the business or spending it elsewhere (e.g. on an acquisition) (Legal Resources Centre, 2011).

### *Typical benefits of adopting a for-profit structure for social enterprises*

- Can access deep pools of capital via traditional markets such as debt and equity
- Do not have to rely on potentially uncertain donor funding to meet financing needs
- Can rely on internal funding from profit-making activities to finance business operation and expansion

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<sup>45</sup> State-Owned Entities have been excluded from the list above as this legal form is not available to ordinary citizens to setup



- Can (usually) attract the right people talent due to being able to pay market-related salaries (in the case of a profitable business)
- Can access Enterprise and Supplier Development (ESD) funding via B-BBEE (Broad-Based Black Economic Empowerment) Status (Legal Resources Centre, 2011)
- Public image as operating efficiently and being well run (Legal Resources Centre, 2011)

#### *Some disadvantages of adopting a for-profit structure for social enterprises*

- Have to pay tax
- Can't access donations/grants or state subsidies (generally)
- May be viewed with suspicion by beneficiaries if trying to pursue a dual mission of social good and financial reward
- Can have lots of competition, especially if high profit margins and low barriers to entry exist in industry
- Shareholders may feel pursuing a social mission is an unwelcome distraction from the profit maximization imperative

#### The non-profit legal form

The current non-profit legal forms available in SA include the following:

- 1) Non-profit companies (NPCs, formerly Section 21 companies)
  - a. A company incorporated for public benefit or for another objective involving social, cultural, communal or group interests
  - b. Income is not distributable to its incorporators or members (officers, directors etc) but must be used to further the social mission of the organisation
- 2) Non-profit trusts
  - a. A trust is an agreement (formed by a trust deed) in which an owner/founder assigns assets (property, capital etc) to a group of individuals (trustees) to manage on behalf of beneficiaries or in order to achieve a specific objective
  - b. For a non-profit trust, either the beneficiaries would come from disadvantaged backgrounds or the stated objective of the trust would be a social or environmental one
- 3) Voluntary associations (VAs)
  - a. Formed when 3 or more people enter an agreement to pursue a non-profit aim such as improving access to low-cost education
  - b. The agreement can be verbal (but it is advisable to write it down to avoid potential future disagreements) and is governed by common law.

In addition to these legal forms, non-profit entities can apply for recognition as Public Benefit Organisations. To achieve PBO status, the organization will have to be accredited by SARS (South African Receiver of Revenue) under Section 30 of the Income Tax Act. This will enable the non-profit organization to qualify for numerous tax exemptions including transfer duty, estate duty, capital gains tax, donations tax, dividends tax and skills development levy (generally). In order to qualify, non-profit entities need to



be engaged in core activities<sup>46</sup> that form part of an approved list as specified in Part 1 of the 9<sup>th</sup> schedule of the Income Tax Act (Coetzee, 2014).

As an accredited PBO, a non-profit entity can thus also seek to obtain Donor Deductible Status (DDS). This enables the non-profit to provide its donors with a Section 18A receipt for any charitable donations made, allowing them to achieve a tax deduction from their giving.

#### *Typical benefits of adopting a non-profit structure for social enterprises*

- Can access donor funding (e.g. grants, philanthropic capital, SED/CSI<sup>47</sup> spend) and government subsidies
- Easier alignment with donor objectives
- May be easier to engender trust with beneficiaries
- Can receive tax exemptions if accredited as PBO with DDS status
- Image as a non-profit social enterprise might gain loyalty of certain socially and/or environmentally conscious customers (Legal Resources Centre, 2011)

#### *Some disadvantages of adopting a non-profit structure for social enterprises*

- May struggle with funding if donors pull out
- Traditional providers (banks, investors) of capital (debt, equity) may be more reticent to invest in a non-commercial entity
- Public image may carry less status due to stereotypes of inefficiency and lack of sophistication (operationally, financially)
- May struggle to attract well-qualified/skilled/experienced hires with high salary expectations

#### *Choosing a Hybrid Structure*

There are two ways in which a social entrepreneurs could adopt a hybrid model for a social enterprise in SA. The first is to start a non-profit arm of a for-profit business. An example of this arrangement is Shonaquip, a South African private company involved in the manufacture of therapeutic support and seating equipment (e.g. wheelchairs) for disabled people that started a foundation called Uhambo to service the mobility needs of those both poor and living with disabilities (see Figure 30 below) (Coetzee, 2014) (Legal Resources Centre, 2011).

The second option is for an NPO to start a separate profit making venture, setting up a business to earn income for the non-profit. An example of this setup in SA is NICRO, a Non-profit Organization (NGO) which provides prisoner rehabilitation and integration services to inmates at prisons across the country. NICRO started a for-profit business in 2007 called NICRO Enterprise which focuses on revenue generating activities by employing former convicts (Coetzee, 2014).

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<sup>46</sup> Some of which include the following: welfare and humanitarian; health care; land and housing; education and development; religion, belief or philosophy; cultural; conservation, environment, and animal welfare; research and consumer rights; sport; providing of funds, assets or other resources (South African Revenue Service, 2014)

<sup>47</sup> Socio-economic Development (SED) and Corporate Social Investment (CSI)

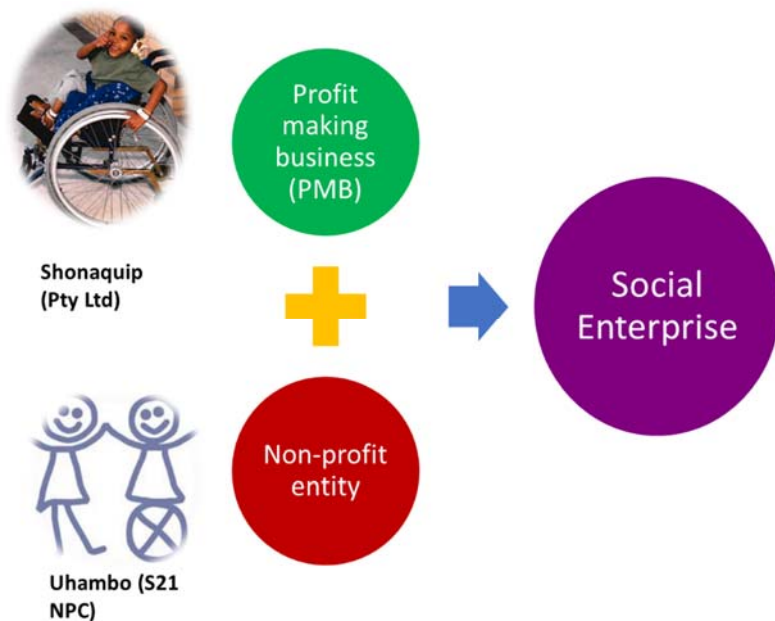


Figure 30 - Hybrid SE structure: For-profit firm starts a non-profit operation

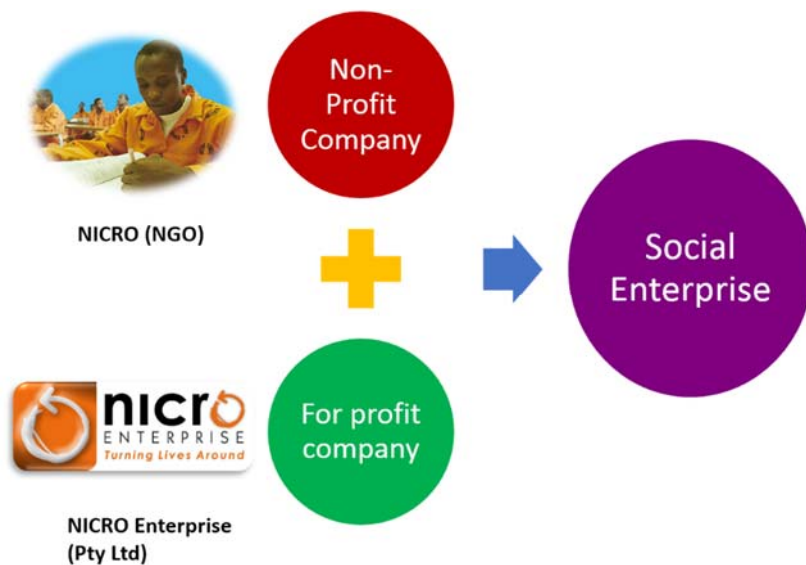


Figure 31 - Hybrid SE structure: Non-profit firm starts a for-profit operation

Whilst both are options, the ILO notes that the most common hybrid structure is the former, e.g. a private profit-making company may set up a foundation through which to carry out its philanthropic activities.

#### Potential advantages of adopting a hybrid structure for an SE

- Can attract funding from donors as well as traditional, profit-focused financiers
- Separate governance structures means potential for less tension between profit and social/environmental motive
- Brand reinforcement/image enhancement: The non-profit structure can endear customers to the for-profit firm potentially resulting in higher earnings through customer loyalty. Conversely,

the for-profit structure can improve the reputation of the non-profit as being more effectively run, entrepreneurial and/or innovative.

- A portion of the earnings from the for-profit entity can be channeled to the non-profit structure as a donation, helping the former earn a tax deduction through the donation whilst helping the latter with its funding requirements
- Can access both SED and ESD spend from a B-BBEE perspective

#### Potential disadvantages of a hybrid form for an SE

- Potentially more costly to set up two separate legal entities
- Extra governance, institution and administration burden associated with running 2 organisations
- Shareholders and beneficiaries/donors may feel that the respective organisations (for-profit and not-for-profit) may be diverting their focus from their respective missions (maximizing earnings versus creating social/environmental value) – this is more of a threat where the governance of both structures is combined

In short, if a social enterprise’s business model has clear profit generating ability, is not reliant on donor funding and can achieve positive social outcomes and acceptance amongst beneficiaries, than a for-profit legal entity may be the best option to for a social entrepreneur to choose. Conversely, if a social venture cannot generate enough revenues to at least cover all its costs, than adopting a non-profit legal structure may be preferable. Lastly, if the social entrepreneur has an extant organisation (for profit or not-for-profit), and is struggling to manage a dual mandate of pursuing profit and social/environmental aims, than it may be better to adopt a hybrid structure and have two separate legal entities with independent governance structures in order to prevent mission drift/conflict.

#### Appendix III: Broad-Based Black Economic Empowerment (B-BBEE) and IBs in SA

##### *Corporate involvement in IBs and the revised B-BBEE codes*

There are 3 main ways in which corporates could become involved in financing (Social) Impact Bonds in South Africa (SA):

- 1) As an outcomes funder
- 2) Investor, and/or
- 3) Guarantor.

Depending on the choice above, corporates could either potentially channel CSI funds or the various elements of B-BBEE spend into a SIB, provided South Africa’s National Treasury sanctions the use of Impact Bonds for conduits of this type of capital at some point in the future (the Bertha Centre is investigating the steps needed to make SIBs eligible from a B-BBEE perspective).

##### *The revised B-BBEE codes in short*

There are now 5 elements to the code (7 previously) as set out in the table below:

ELEMENT	WEIGHTING
<b>Ownership</b>	25 points
<b>Management Control</b>	15 points (actual scorecard out of 19 points, i.e. 4 bonus points to be gained)

<b>Skills Development (6% of payroll, including up to 2.5% of that spend on unemployed, black individuals)</b>	20 points (actual scorecard out of 25 points, i.e. 5 bonus points to be gained)
<b>Enterprise and Supplier Development: ESD (1% and 2% of Net Profit After Tax spend annually, respectively)</b>	40 points (actual scorecard out of 44 points, i.e. 4 bonus points to be gained)
<b>Socio-Economic Development: SED (1% NPAT spend annually)</b>	5 points

Table 17: Revised B-BBEE scorecard (Source: Adapted from ENS Africa, 2013)

The B-BBEE scorecard is out of 105 points, although enterprises can earn up to 13 bonus points. In order to have 100% B-BBEE recognition, an enterprise would have to score at least 80 points, translating into a Level 4 status. Enterprises scoring 90 points or more will qualify as Level 3 or better in terms of B-BBEE status, and will have a B-BBEE recognition level of over 100%.

Lastly, any measured enterprise which fails to achieve at least 40% in the priority elements of the codes (shaded in orange in table above – Ownership, Skills Development and ESD) will drop a status level.

<b>Role</b>	<b>Allocation</b>
<b>Outcomes Funder</b>	Socio-economic Development/CSI/Skills Development
<b>Investor: Pari-passu or subordinated</b>	Enterprise or Supplier Development
<b>Guarantor for investor</b>	Socio-economic Development/CSI

Table 18: Corporates and IBs - options of capital allocation

#### *The Corporate as Outcomes Funder*

Since Outcomes payments in a SIB are unidirectional (no return is expected), this could make the use of CSI funds applicable (as soon as there is a return of capital, CSI spend will not be eligible for B-BBEE points). For CSI spend to qualify for points under the codes, at least 75% of beneficiaries must be black (then 100% of spend recognised). B-BBEE points can be earned via the Residual Contributions Scorecard provided a company spends at least 1.5% of Net Profit After Tax (NPAT) on qualifying beneficiaries (historically disadvantaged/black individuals) an annual basis – doing so will earn the company 5 points. A company can also spend 1.5% of NPAT on industry specific contributions to qualifying beneficiaries (as per above), also earning an additional 5 points.

It was however mentioned that since outcomes payments are not guaranteed to be made every year (e.g. if the SIB fails or is more likely to reach outcomes after a period greater than a year, i.e. triggering outcomes payments more back-ended in time), there may be less drive from CSI heads to act as an Outcomes Funder, especially if the corporate urgently needs the B-BBEE points or does not have a longer term or flagship CSI program in place.

To mitigate some of these concerns, suggestions were made to possibly establish proxy outcomes such as shorter term outputs with which to increase the likelihood of triggering interim (less than 1 year) outcomes payments. This will have the dual effect of allowing corporates to spend their CSI budgets and earn B-BBEE points, whilst also ensuring investors get part of their money back sooner. Another idea put



forward was to focus on corporates who are developmentally focused as they would be more intent on achieving meaningful social impact, and to ensure that there is alignment between the company and government's social aims (to facilitate government buy-in for B-BBEE eligibility). Additionally, corporates would expect CSI spend on a SIB to result in a tax deduction and so outcomes payments would have to be recognized as donations and qualify for an 18 A tax certificate.

#### *CSI in terms of the B-BBEE scorecard*

CSI spend would generally fall under the Socio-Economic Development element of the B-BBEE scorecard, and businesses would have to spend at least 1% Net Profit After Tax (NPAT) per annum on community development initiatives and/or supporting non-profit organisations to qualify for these points. Socio-economic Development (SED) spend could thus be channeled into an IB as Outcomes Funding, as per the general CSI case. Again, there is a potential challenge since the timing and quantum of outcomes payments cannot be accurately predicted potentially resulting in the corporate not spending the required 1% of NPAT and thus not qualifying for the 5 SED points under the codes. Furthermore, since the SED element (like CSI) of the codes only carries a 5 point rating, this may not act as a strong enough drive for many (especially black owned) companies to fulfil, let alone via a complex and less certain instrument such as a SIB.

#### *Skills Development and IBs*

The last way in which corporates can potentially act as outcomes funder is via Skills Development, but only by spending on the training of black, unemployed individuals, equal to at least 2.5% of the company's wage bill. For Skills Development spend via a SIB to be eligible for BEE points, the intervention carried out by the service providers must primarily revolve around training and education (e.g. learnership, internship, ABET – Adult-Based Education & Training).

#### *The Corporate as Investor*

The Enterprise and Supplier Development (ESD) element is another priority element of the B-BBEE codes and awards points to corporates who spend at least 2% of NPAT on Supplier Development (SD) and 1% on ED (on an annual basis). Since these funds are meant to be spent on profit making enterprises, and can include investments into qualifying (black owned) enterprises, an appropriately structured SIB (wherein the target beneficiaries are empowered SMEs that are part of the corporate's supply chain for the SD component) could be a vehicle by which a corporate acts as an investor in the instrument whilst earning B-BBEE points via this ESD spend.

What is attractive about this proposition is that the corporate will get BEE points for every year it is invested in the SIB (if and when the instrument is sanctioned by National Treasury and receives BEE approval), and at least 2% of NPAT (the SD element) is spent on SMEs linked to the corporate's industry, i.e. can be seen as a strategic investment.

#### *The Corporate offering credit enhancement*

The final way in which a corporate could act as a funder of a SIB is in the form of a guarantor, or subordinated investor that is willing to take the first loss should the Impact Bond underperform. As guarantor the company doesn't stand to make a return and so the allocation would need to come from SED. If they were to play the role of subordinated investor the investment scenario would apply.

There is much work still to be done on working out the legalities of the role that companies can play in the Impact Bond model. There is great potential for companies to align with and leverage government

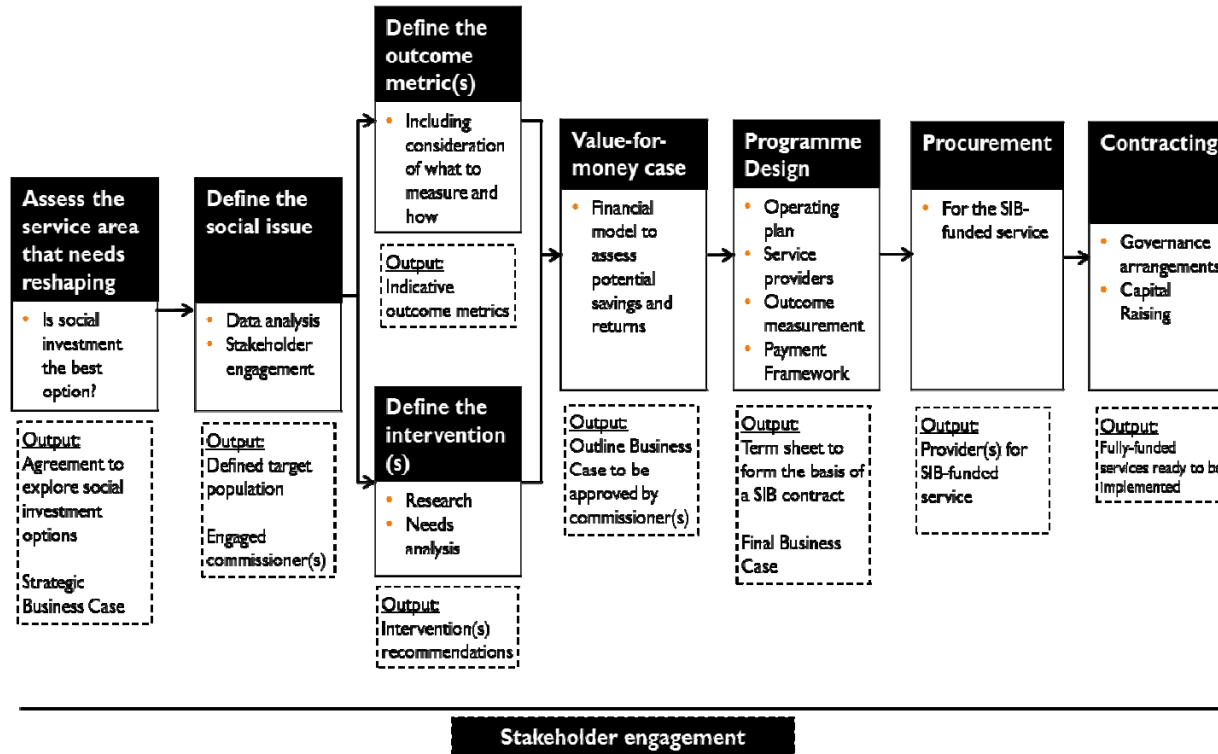
funding to achieve positive social outcomes at scale by partnering in this model. Lastly, for many non-black owned companies, it will be imperative for them to adhere to all 4 of the non-ownership elements of the codes in full in order to be recognised as 100% B-BBEE (i.e. Level 4 status). Thus, any initiative or instrument (like a SIB) that can facilitate this achievement will be in high demand.

#### Appendix IV: List of Stakeholders Engaged

#	Name	Surname	Organisation	Position
1	Alina	Greinert	Jönköping International Business School, Sweden	Strategic Entrepreneurship
2	Andy	Du Plessis	Foodbank SA	Managing director
3	Annelise	de Jager	Charity Support Services	Fundraising consultant
4	Carron	Howard	Cadiz	Portfolio Manager
5	Claire	Price	DA (SBD)	Analyst
6	Devang	Vussonji	Dalberg	Associate partner
7	Dylan	Cunard	Werksmans Attorneys	Director
8	Enrico	Girolo	Western Cape Tourism and Investment Promotion	Principal Professional Officer
9	Gabrielle	Habberton	Impact Trust	Impact Director
10	Gerhard	Papenfus	National Employer's Association of South Africa (NEASA)	CEO
11	Germa	Hattingh	Imisebeyelanga Services	Executive Director
12	Greg	Macfarlane	Edge Growth	Investment officer
13	Guy	Harris	South Africa Institute for Entrepreneurship (SAIE)	CEO
14	Halima	Mahomed	Trust Africa	Philanthropy Program Co-ordinator
15	Henro	Kruger	DA (SBD)	MP
16	J.Louw	Nel	DA (SBD)	Parliamentary Researcher
17	Keet	van Zyl	Knife Capital	Executive Director
18	Keri-Leigh	MacDonald	Muthobi	New Business Development
19	Krissen	Pillay	Werksmans Attorneys	Associate
20	Lauren	O'Donnell	Greenpop	Managing director
21	Leonardo	Snyman	University of Johannesburg	Community Engagement Manager
22	Mark	Frankel	Shanduka Black Umbrellas	CEO

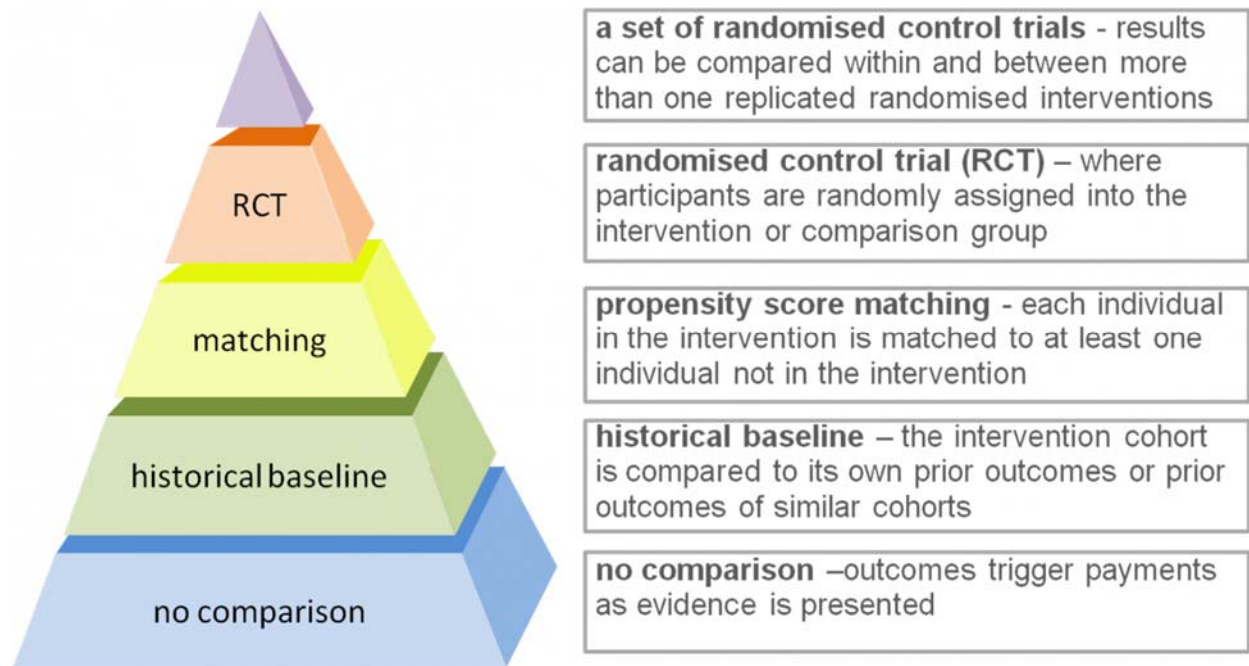
23	Michael	Belinsky	Instiglio	Co-founder and partner
24	Michelle	Matthews	Dialogue	Content manager
25	Mike	Herrington	GEM Global	Executive Director
26	Nicholas	Jaff	Bright Kid Foundation	Founder and CEO
27	Nikita	Mfenyana	Business Partners	Regional Manager of Consulting Services, West Coast
28	Nomzamo	Xaba	Empowerdex	General manager
29	Nqe	Dlamini	Save Act	Strategic program support
30	Patrick	Atkinson	DA (Economic Development)	Shadow Deputy Minister for Economic Development at Parliament of RSA
31	Queen	Mutheiwana	Land Bank	Community development practitioner
32	Rita	Perakis	Center for Global Development	Programme Associate
33	Salma	Seedat	Greater Capital	Managing director
34	Samantha	Braithwaite	Aspen Network for Development Entrepreneurs (ANDE)	Social Investment Specialist (independent)
35	Tamzin	Ractliffe	Impact Trust	Founder and CEO
36	Tatenda	Nyamuda	Dalberg	Investment analyst
37	Toby	Chance	DA (SBD)	Shadow Minister for Small Business Development
38	William	Mapham	Vula Eye App	Founder and CEO

## The social impact bond development process



Source: Social Finance

Appendix VI: Hierarchy of evidence used to judge IB performance



(UK Cabinet Office, 2013)



## 9. References

- Abor, J. a. (2010). Issues in SME development in Ghana and South Africa. *International Research Journal of Finance and Economics*, 218-228.
- Adams, F. (2014, February 25). *Rollout of National Solar Water Heater Programme: briefing by Department of Energy*. Retrieved from Parliamentary Monitoring Group: <https://pmg.org.za/committee-meeting/17005/>
- Africa Centre for Health & Population Studies. (2012). *ANRS 12249 TasP Protocol: version 1.2*. Durban: University of KwaZulu-Natal.
- Bailit Health Purchasing. (2013). *Payment matters: the ROI for population-based payment*. Robert Wood Johnson Foundation.
- Bank, D. (2012, June 12). *New details of \$25 million JP Morgan-Gates-Rockefeller African farm fund*. Retrieved from Impact IQ: <https://impactiq.wordpress.com/2012/06/12/new-details-of-25-million-jp-morgan-gates-rockefeller-african-farm-fund/>
- Bateman, C. (2014). Lowering private investor risk to build a healthier country. *South African Medical Journal*, 104(5), 327-328.
- Ben Jupp, E. S. (2011). *Using Social Impact Bonds to improve health outcomes*. Social Finance.
- Bertha Centre, Social Finance, Genesis Analytics. (2014). *Final Policy Paper: Exploration of Social Impact Bonds for SME Development*. Cape Town: April.
- Biljon, S. H. (2009). *The Equity Premium and Risk-Free Rate Puzzles in a Turbulent Economy: Evidence from 105 Years of Data from South Africa*. Cape Town: School of Economics, University of Cape Town.
- Blaine, S. (2014, March 10). *SA needs 'another power station the size of Medupi and Kusile'*. Retrieved from Business Day Live: <http://www.bdlive.co.za/business/energy/2014/03/10/sa-needs-another-power-station-the-size-of-medupi-and-kusile>
- Booyesen, J. (2015, February 2). *Big inspection for Cape refinery*. Retrieved from Independent Online: Business Report: <http://www.iol.co.za/business/big-inspection-for-cape-refinery-1.1812251>
- Bouri, A. B. (2011). *Report on Support to SMEs in Developing Countries through Financial Intermediaries*. Dalberg.
- Branson Centre of Entrepreneurship. (2011). *The Young Upstarts Report*.
- Bridges Ventures & The Parthenon Group. (2010). *Investing for Impact: Case studies across asset classes*. GIIN.
- British Columbia Centre for Excellence in HIV/AIDS. (2015, January 22). *Treatment as Prevention*. Retrieved from British Columbia Centre for Excellence in HIV/AIDS: <http://www.cfenet.ubc.ca/tasp>
- Brusch, R. (2013). Can Pay for Success Reduce Asthma Emergencies and Reset a Broken Healthcare System? *Community Development Investment Review*, 9, 115-126.



- Carneiro P, H. J. (2003). *Inequality in America: What Role for Human Capital Policy?* MIT Press: *Human Capital Policy*, 77–240.
- Centre for Global Development and Social Finance. (2012). *Development Impact Bonds Working Group Meeting: Background*. DIB Working Group.
- Centre for Global Development and Social Finance. (2013). *Investing in Social Outcomes: The Report of the Development Impact Bond Working Group*. DIB Working Group.
- Clay, R. F. (2013, January). *Health Impact Bonds: Will Investors Pay for Intervention?* Retrieved from Environmental Health Perspectives: <http://ehp.niehs.nih.gov/121-a45/>
- Coetzee, M. (2014). *Setting up a hybrid social enterprise*. Cape Town.
- CSIR. (2015, January 21). *2014 sees financial benefits from renewable energy exceed costs in South Africa*. Retrieved from Council for Scientific and Industrial Research (CSIR) : [http://ntww1.csir.co.za/plsql/ptl0002/PTL0002\\_PGE157\\_MEDIA\\_REL?MEDIA\\_RELEASE\\_NO=7526622](http://ntww1.csir.co.za/plsql/ptl0002/PTL0002_PGE157_MEDIA_REL?MEDIA_RELEASE_NO=7526622)
- David Wilson, E. M. (2014). *Options for Sustainable and Innovative HIV Financing*. The World Bank.
- Deloitte & Touche SA. (2007). *JumpStart your Own Business: Handbook on Running a Business*. JumpStart.
- Dharmendra Kanani, P. M. (2014, July 7). *HMP Peterborough Social Impact Bond*. Retrieved from Social Entrepreneurship Network: <http://socialeconomy.pl/node/144>
- DIB Working Group. (2013). *Development Impact Bond Consultation Draft*. Center for Global Development and Social Finance.
- DME. (2010). *Department of Minerals and Energy: Annual Report 2009/10*.
- DOH. (2013). *The South African Antiretroviral Treatment Guidelines 2013*. SA Department of Health.
- EDD. (2013). *Youth Employment Accord*. SA Department for Economic Development.
- Eddy, M. (2012). *Scaling Tuberculosis Treatment through a Social Impact Bond*. Instiglio.
- EFA. (2010). *Education for All Global Monitoring Report: Reaching the marginalized*. Education for All.
- Ensor, L. (2014, January 1). *Youth wage subsidy comes into effect*. Retrieved from Business Day Live: <http://www.bdlive.co.za/economy/2014/01/01/youth-wage-subsidy-comes-into-effect>
- Eric C. Schneider, P. S. (2011). *Payment Reform: Analysis of Models and Performance Measurement Implications*. Santa Monica: RAND Corporation.
- Eskom. (2011). *COP 17 factsheet: Kusile and Medupi*. Retrieved from Eskom: About Electricity: [http://www.eskom.co.za/AboutElectricity/FactsFigures/Documents/Kusile\\_and\\_Medupi.pdf](http://www.eskom.co.za/AboutElectricity/FactsFigures/Documents/Kusile_and_Medupi.pdf)
- ETDP SETA . (2013). *Sector Skills Plan 2011-2016*. Education, Training and Development Practices Sector Education and Training Authority.



- Evans, S. (2013, April 17). *SA ranks its maths and science second last in the world*. Retrieved from Mail & Guardian: <http://mg.co.za/article/2013-04-17-sas-maths-science-education-ranked-second-last-in-world>
- Finance for Good. (2015, February 12). *Social Impact Bond Tracker*. Retrieved from Finance for Good: <http://financeforgood.ca/social-impact-bond-resources/social-impact-bond-tracker/>
- Finweek. (2014, July 11). *Insight: Why SMEs are not hiring, and why they should*. Retrieved from Finweek: <http://finweek.com/2014/07/11/insight-smes-hiring/>
- Georgetown University & Beeck Centre. (2014). *Funding for results: A review of government outcomes-based agreements*.
- Goldman Sachs. (2013, June 13). Fact Sheet: The Utah High Quality Pre-school Program. Utah, USA.
- Greater Capital. (2011). *A Guide to Finance for Social Enterprises in South Africa*. Cape Town: International Labour Organisation.
- Grundling, I. a. (2011). *South Africa Small Business Survey 2010*. FinScope.
- Haas School of Business, University of California, Berkeley. (2012). *Economic Development Impact Bond (EDIB) Funding Facility*. Morgan Stanley: Sustainable Investing Challenge.
- Han, L. (2014, March 31). *Malaria in Mozambique: trialling payment by results*. Retrieved from The Guardian: <http://www.theguardian.com/global-development-professionals-network/2014/mar/31/malaria-control-payment-by-results>
- Hanna Azemati, M. B. (2014). *Social Impact Bonds: Lessons Learned So Far*. Federal Reserve Bank of San Francisco.
- HUGinsure. (2015, February 20). *Social Impact Insurance*. Retrieved from HUGinsure: <http://www.huginsure.com/home/?&re=1>
- Independent Online. (2008, April 26). *SA prison population among world's highest*. Retrieved from IOL: <http://www.iol.co.za/news/south-africa/sa-prison-population-among-world-s-highest-1.398070>
- International Labour Organisation. (2009). *The Social Economy – Africa’s Response to the Global Crisis*, (pp. 1-4). Johannesburg.
- IRIN. (2015, January 15). *South Africa: Who's tracking the world's biggest ARV programme?* Retrieved from Integrated Regional Information Networks: <http://www.irinnews.org/report/89624/south-africa-who-s-tracking-the-world-s-biggest-arv-programme>
- Jacqueline M. Borel-Saladin, I. N. (2013). The impact of the green economy on jobs in South Africa. *South African Journal of Science*, 1-4.
- James, W. (2014, January). *Creating youth jobs should be key driving force at WEF*. Retrieved from Democratic Alliance: <http://www.da.org.za/2014/01/creating-youth-jobs-should-be-key-driving-force-at-wef/>
- Jules-Macquet, R. (2014). *The State of South African Prisons*. NICRO Public Education Series.



- Kauffman Foundation. (2012). *Early Childhood “Pay-For-Success” Social Impact Finance: A PKSE Bond Example to Increase School Readiness and Reduce Special Education Costs*. Kauffman Foundation.
- KPMG. (2013). *Social Impact Bonds: Planting for future growth*.
- Latkovic, T. (2013). *The Trillion Dollar Prize: Using outcomes-based payment to address the US healthcare financing crisis*. McKinsey & Company: Healthcare Systems and Services.
- Leading Group. (2014). *Draft review of existing innovative sources and mechanisms of funding*.
- Legal Resources Centre. (2011). *A guide to legal forms for Social Enterprises in South Africa*. Geneva: International Labour Office.
- M.Kaggwa. (2013). *South Africa’s Green Economy Transition: Implications for Reorienting the Economy Towards a Low-Carbon Growth Trajectory*. South African Institute of International Affairs (SAIIA).
- Masilela, E. (2012, October 11). *Affordable housing in SA*. Retrieved from Property24: <http://www.property24.com/articles/affordable-housing-in-south-africa/16400>
- MD Accountants and Auditors. (2014). *2014/15 Tax Guide*.
- MDRC. (2015, May 2015). *Social Impact Bond Project at Rikers Island*. Retrieved from Manpower Demonstration Research Corporation (MDRC): <http://www.mdrc.org/project/social-impact-bond-project-rikers-island#overview>
- Medical Chronicle. (2011, June 6). *Earlier ARV Treatment Key to Turning SA’s AIDS Epidemic Around*. Retrieved from Medical Chronicle: <http://www.medicalchronicle.co.za/earlier-arv-treatment-key-to-turning-sa%E2%80%99s-aids-epidemic-around/>
- Michael Belinsky, M. E. (2014). The application of social impact bonds to universal health-care initiatives in South-East Asia. *WHO South-East Asia Journal of Public Health*, 219-225.
- Michael Drexler, A. N. (2014, May 7). *Charting the Course: How Mainstream Investors can Design Visionary and Pragmatic Impact Investing Strategies*. World Economic Forum (WEF). Retrieved from World Economic Forum (WEF).
- Michael Klein, T. H. (2005, March). Grants or Loans? Development Finance and Incentive Effects. *The World Bank Group: Public Policy for the Private Sector*, p. Note 287.
- Musa Capital. (2015, February 12). *A Case Study – Matlapeng Housing Group*. Retrieved from Musa Capital: <http://www.musacapital.com/case-studies/matlapeng-housing/>
- News24. (2013, March 4). Retrieved from SA has most inmates in Africa: <http://www.news24.com/SouthAfrica/News/SA-has-most-inmates-in-Africa-20130304>
- Nicola, D. J. (2013). *CASE i3: The CASE Initiative on Impact Investing - Environmental Impact Bonds*. Duke University, The Fuqua School of Business.
- Niels Keijzer, F. K. (2013). *Meeting in the Middle? Challenges and opportunities for EU cooperation with Middle-Income Countries*. European Centre for Development Policy Management (ECDPM).



- Ning Fu, S. T. (2013). *Innovations in Workforce Training Programs in Ghana: Using Pay for Performance Contracts*. John F. Kennedy School of Government, Harvard University.
- Ning Fu, S. T. (2013). *Innovations in Workforce Training Programs in Ghana: Using Pay for Performance Contracts*. John F. Kennedy School of Government, Harvard University.
- Olson, J., & Phillips, A. (2013). *Rikers Island: The First Social Impact Bond*. San Francisco: Goldman Sachs Urban Investment Group (UIG).
- Osberg, R. L. (2007). Social Entrepreneurship: The Case for Definition. *Stanford Social Innovation Review*, 12.
- Philanthropy Impact. (2013, Winter). The Challenges of Philanthropy. *Philanthropy Impact Magazine*, pp. 33-34.
- Piper, K. (2013, March 19). *Payment Reform Models: Employers Explore Population-Based and Bundled Payment*. Retrieved from Piper Report: <http://www.piperreport.com/blog/2013/03/19/payment-reform-models-employers-explore-population-based-bundled-payment/>
- Piper, K. (2014, September 10). *Value-Based Payment: Accountability for Health Spending and Outcome*. Retrieved from Piper Report: <http://piperreport.com/blog/2014/09/10/value-based-payment-accountability-for-health-spending-and-outcomes/>
- Ractliffe, T. (2015, January 20). *Social Impact Bond for Alternative Dispute Resolution*. Retrieved from Impact Trust: <http://impacttrust.org.za/current-research/impact-bonds/>
- Rene Vollgraaff, A. M. (2014, February 11). *Unemployment rate drops as government hires workers*. Retrieved from Mail & Guardian: <http://mg.co.za/article/2014-02-11-unemployment-rate-drops-as-government-hires-workers>
- Reuters. (2013, June 13). *Pritzker, Goldman Sachs announce \$20m first phase of early childhood innovation accelerator initiative*. Retrieved from Reuters: <http://www.reuters.com/article/2013/06/13/clinton-cgi-education-idUSnBw135888a+100+BSW20130613>
- Robert Brand, M. C. (2013, August 2). *Where the heart is: South Africa's post-apartheid housing failure*. Retrieved from Mail & Guardian: <http://mg.co.za/article/2013-08-02-where-the-heart-is-south-africas-post-apartheid-housing-failure>
- SA Government. (2013). *Medium Term Strategic Framework (MTSF) 2014-2019*. South African Government.
- SA Government. (2015, January 27). *About SA: Health*. Retrieved from Government of the Republic of South Africa: <http://www.gov.za/node/81>
- SA Government News Agency. (2015, January 21). *Renewable energy benefits SA*. Retrieved from South African Government News Agency: <http://www.sanews.gov.za/south-africa/renewable-energy-benefits-sa>



- SA Information. (2013, February 28). *South Africa: economy overview*. Retrieved from SouthAfrica.info: <http://www.southafrica.info/business/economy/econoverview.htm>
- SA Information. (2015, January 9). *New solar plants in sunny Northern Cape*. Retrieved from SouthAfrica.info: <http://www.southafrica.info/about/sustainable/solar-redstone-9115.htm>
- SA Information. (2015, January 15). *South Africa turns on digital classrooms*. Retrieved from SouthAfrica.info.
- SANAC. (2007). *HIV & AIDS and STI Strategic Plan for South Africa: 2007-2011*. South African National AIDS Council.
- Sapna Shah, M. P. (2012). *Perspectives, shared objective: Collaborating to Form the African Agricultural Capital Fund*. Global Impact Investing Network (GIIN).
- SARPAM & Re-Action! (2015, February 4). *The African Medicines Impact Investment Fund*. Retrieved from Southern African Regional Programme on Access to Medicines & Diagnostics: <http://amiif.sarpam.net/>
- Schüssler, M. (2012). *Business Owners in SA: Who, where, how big, what they do and a few other facts*. ABSA SME Index.
- Schüssler, M. (2013). *The ABSA SME Index: And a small look at sector growth and size of businesses*. ABSA.
- Small Business Project. (2009). *Small business development in South Africa: Time to Re-assess*.
- Social Finance & the Center for Global Development. (2012). *Family Planning Development Impact Bond: Initial Scoping Report to DFID*. Social Finance.
- Social Finance. (2013). *Development Impact Bond (DIB) Consultation draft*. Center for Global Development (CGD).
- (2011). *South African Declaration on the Prevention and Control Non-communicable Diseases*. South African Summit on the Prevention and Control of Non-Communicable diseases.
- South African Revenue Service. (2014). *Tax Exemption Guide for Public Benefit Organisations in South Africa*. Legal and Policy Division.
- Stats SA. (2014). *National and provincial labour market: Youth, Q1: 2008–Q1: 2014*. Statistics South Africa.
- Stern School New York. (2015, February 10). *Country Default Spreads and Risk Premiums*. Retrieved from <http://www.stern.nyu.edu/>
- Tamar Kahn, P. V. (2014, October 6). *Tariff hike for Eskom 'will be just the start'*. Retrieved from Business Day Live: <http://www.bdlive.co.za/business/energy/2014/10/06/tariff-hike-for-eskom-will-be-just-the-start>
- Task Force on Innovative Financing for Malaria. (2011). *Development of a Business Plan Malaria Bond*. Roll Back Malaria.



- The Palladium Group. (2015, July 28). *GRM Futures Group - DIBs*. Retrieved from GRM International: [http://www.grminternational.com/files/documents/DIBs-Flyer\\_-\\_Final\\_\(2\).pdf](http://www.grminternational.com/files/documents/DIBs-Flyer_-_Final_(2).pdf)
- The World Bank. (2003, April 29). *Financial Innovation Will Buy Polio Vaccine To Help Eradicate Polio Worldwide*. Retrieved from World Bank News and Broadcast: <http://go.worldbank.org/BZDWNYS0N0>
- Third Sector Capital Partners. (2013). *Case study: preparing for a pay for success opportunity*. Social Innovation Financing.
- UK Cabinet Office. (2013, June 23). *The Knowledge Box: A Measureable Outcome*. Retrieved from Centre for Social Impact Bonds: [http://data.gov.uk/sib\\_knowledge\\_box/measurable-outcome](http://data.gov.uk/sib_knowledge_box/measurable-outcome)
- UNAIDS. (2015, January 30). *The HIV experience and other chronic diseases*. Retrieved from UNAIDS: <http://www.unaids.org/en/resources/presscentre/featurestories/2012/july/20120722chronicdiseases/>
- United Nations Development Programme. (2015, February 7). *Human Development Reports: Income Gini Coefficient*. Retrieved from United Nations Development Programme: <http://hdr.undp.org/en/content/income-gini-coefficient>
- United Way. (2013, June 13). United Way of Salt Lake Announces Results-based Financing for Low-income Pre-school Students. Utah, USA.
- Van Roekel S, G. J. (2015, January 21). *Pay for success: an innovative approach to improve results and save money*. Retrieved from Office of Management and Budget - The White House: <http://www.whitehouse.gov/blog/2013/07/10/paying-success-innovative-approach-improve-results-and-save-money>
- WHO. (2009, August). *Early child development, Fact Sheet # 332*. Retrieved from World Health Organisation: <http://www.who.int/mediacentre/factsheets/fs332/en/>
- WHO. (2012). *Programmatic Update: Antiretroviral Treatment as Prevention (TasP) of HIV & TB*. World Health Organisation.
- WHO. (2015, January 13). *Oral health and communicable diseases*. Retrieved from World Health Organisation: [http://www.who.int/oral\\_health/action/communicable/en/](http://www.who.int/oral_health/action/communicable/en/)
- Wilkinson, K. (2013, September 4). *Is SA's education system the worst in Africa? Not according to the data*. Retrieved from Africa Check: <http://africacheck.org/reports/is-sas-education-system-the-worst-in-africa-not-according-to-the-data/>
- Wilkinson, K. (2014, May 2). *Factsheet: The housing situation in South Africa*. Retrieved from Africa Check: <http://africacheck.org/factsheets/factsheet-the-housing-situation-in-south-africa/>
- Zulu, L. (2014). Budget Vote 36 . *Department of Small Business Development* (p. 6). South Africa: Department of Trade and Industry.