



Graduate School
of **BUSINESS**
UNIVERSITY OF CAPE TOWN

MCom

Review of Social Impact Bonds in the South African Educational Sector

A Dissertation
presented to

The **Development Finance Centre (DEFIC)**,
Graduate School of Business
University of Cape Town

In partial fulfilment
of the requirements for the
MCOM in Development Finance Degree

by

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January 2017

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ACKNOWLEDGEMENTS

Thank you to my friends and colleagues at the GSB.

To the GSB Finance Department who kept the ship afloat during my periods on study / module break, thank you.

To Professor Walter Baets the former GSB Director, and my mentor, who maintained the pressure in a manageable way.

To my mad class mates on the MCOM Development Finance Programme – Dieter, Ambrose, Enrico, Basala, Faith, Babalwa, Mumbi, Curtis and Collen the Regulator and many more – thank you.

The biggest thanks goes to my family for putting up with me. Especially my wife Alexa for believing in me and giving me the space and freedom to finish this.

I love you!

DECLARATION

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ABSTRACT

Given the poor ongoing economic outlook, particularly for emerging market countries such as South Africa, new innovative, low-risk opportunities for improved service delivery and societal outcomes are particularly attractive. This is critically true for Early Childhood Development interventions given their ability to positively impact the school-readiness of learners and thus improve education outcomes.

This exploratory investigation examined relevant Social Impact Bonds from other markets and concluded that their implementation is likely to find traction within an emerging market context such as South Africa. The findings suggest that short to medium term (less than 5 years) SIB contractual periods are preferred with investor capital fully risk exposed.

Key words: Social Impact Bonds, Impact Investing, Pay for Success, Pay by Results, Development Impact Bond, Early Childhood Development, South Africa, education outcomes

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GLOSSARY OF TERMS

CAD – Canadian Dollar

CSI – Corporate Social Investment

DIB – Development Impact Bond

ECD Early Childhood Development

ESG – Environmental, Social and Governance

HIB – Health Impact Bond

IRR - Internal Rate of Return

MDG – Millennium Development Goals

NDP – National Development Plan

NGO – Non-Governmental Organisation

OECD – Organisation for Economic Co-operation and Development

PFS – Pay for Success

PbR – Payment by Results

PPP – Public Private Partnership

ROI – Return on investment

SBB - Social Benefit Bonds

SIB – Social Impact Bond

SRI – Socially Responsible Investment

SROI – Social Return on Investment

SSA – Sub-Saharan Africa

SYN - Social Yield Note

UK – United Kingdom

USA – United States of America

WHO – World Health Organisation

ZAR – South African Rand

CHAPTER 1

INTRODUCTION

As an introduction, this chapter will provide some background to this research endeavour and seek to provide a context in which the review will occur.

1.1 Overview

Social Impact Bonds (SIBs), being a relatively new financial instrument, suffer from high degrees of information asymmetry. Furthermore, each SIB is uniquely tailored for the specific role-players and required social outcomes being funded. Transaction costs are thus high, no secondary market exists for the asset and consequently there is only a small pool of primary investors willing to shoulder the risk.

Taking its cue from the South African Government's National Development Plan (NDP) 2030 (National Planning Commission, 2012), the Western Cape Government's Provincial Strategic Plan 2014-2019 has identified improved education outcomes as one of its strategic goals (Western Cape Government, 2014).

Using a review of the evolution of Impact Investing, government privatisation of social spending and the lessons from existing SIBs, this study seeks to inform the implementation of a SIB in an emerging market context, more specifically within the education environment of early childhood development (ECD) in the Western Cape Government.

1.2 Research Context and Justification

Governments, with ever-constrained resources, faced complex social problems for which they are ill equipped. The Western Cape Government for example highlights the need to improve the quality of education in poorer communities, but within budget limitations (Western Cape Government, 2014).

In addition to requiring new sources of capital, innovative specialised and effective service provision is also required to address a complex social issue such as improving education outcomes. These factors have created an environment calling for a new form of financing and risk sharing to solve certain social problems. SIBs represent a new paradigm of investing that seeks to marry private sector capital to societal needs on the bedrock of risk adjusted returns and reduced information asymmetry. The following graph is a representation of the cumulative growth of the SIBs and reflects SIB backed projects that have been launched since inception in 2010 through to February 2016.

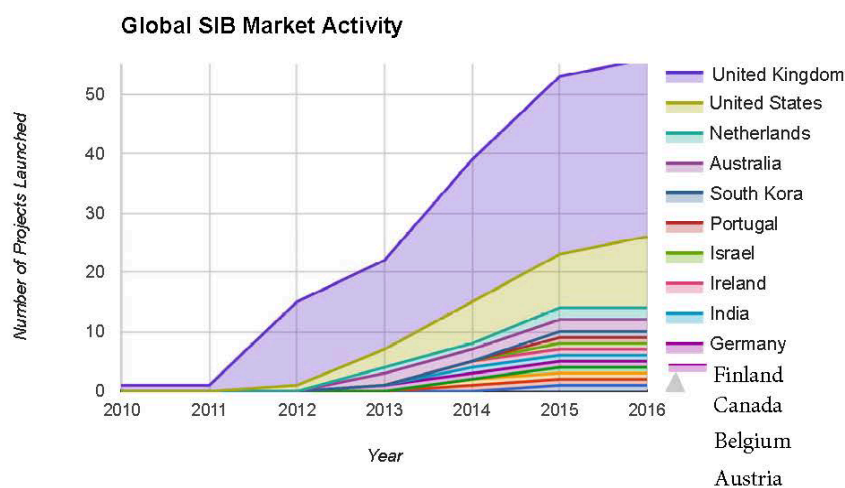


Figure 1: Graphical representation of the number of currently active global SIBs.

Source: (Finance for the Good, 2016)

The research investigates whether a SIB is an appropriate financing tool or method that can improve certain educational outcomes in the Western Cape context. In 2013 the Centre for Development and Enterprise, noting declining standards, called for innovation in the delivery of schooling through a shift towards publicly funded privately managed schools (John, 2013). A 2010 World Bank report on financing higher education in Africa highlights the constraints on maintaining or growing higher education provision in African countries with narrow tax bases. It goes on to suggest the need for alternate financing methods to ensure improvements in education provision (World Bank, 2010). South Africa's already over-burdened and narrow tax base represents a major constraint to expanding government spending (Visser, 2014). The Organisation for Economic Co-operation and Development (OECD), who cite South Africa's narrow tax base as being unable to meet the countries future spending requirements, supports this view (Vollgraaff, 2015). South Africa's own former Finance Minister, Nhlanla Nene, recently highlighted the need to broaden South Africa' tax base to enable the state to expand its investment into education and further nation-building endeavours (Nene, 2015)

There are currently 13 SIB's focussed on education. The bulk of these relate to vocational education with outcome metrics focussed on increased employment. (Bloomgarden, Eddy, & Levey, 2014). In the USA, Goldman Sachs and JB Pritzker (a venture capitalist) are funding two SIBs focussed on access to early childhood education, with the outcome metric here being a reduced take up of remedial education programmes (Bloomgarden et al., 2014; Gustafsson-Wright & Atinc, 2014).

Given SIB's have only been in operation for five years, little research has been conducted into the potential benefits these financial instruments can facilitate. The South African Government may have improved access to education, but the quality of education, particularly for those from poorer parts, remains problematic (The World Bank, 2011).

To this end, both The World Bank and John, call for the inclusion of the private sector in preserving and improving the quality of education (John, 2013; World Bank, 2010). Efficiency gains from private sector involvement are not a guaranteed silver bullet to overcome government inefficiency (Megginson & Netter, 2001). However in situations of state-led market failure, or where measurable output based deliverables are in place, private sector participation typically does lead to improved efficiencies (Christiansen, 2007; Joumard, Lonti, & Curristine, 2007). Correctly incentivised, monitored and measured, specialised private sector service providers may thus fare better at service delivery than government.

1.3 Research Objective

This study therefore seeks to explore the application of SIB in a developing country educational environment to provide both economic value and improved outcomes. In doing this, the various stakeholders within a SIB partnership may then have a clearer understanding of the economic returns and associated risks with a specific successful outcome being funded. It will also seek to understand who should fund such SIB. This in turn can shape the risk-return discussions between output funders and investors and other stakeholders.

1.4 Research Problem

SIBs potentially provide the investment platform to assist financing transformative solutions to complex social problems. However, primary investors, being required to shoulder much of the risk, have little robust data upon which to value the impact of their investment. This creates a barrier to investment. Assessing the economic / financial value of the social impact remains problematic, notably for sponsoring governments and investors seeking appropriate risk adjusted returns.

Thus, based on a review of existing relevant SIBs, what are the primary recommendations to consider for developing a SIB for the Western Cape Education sector?

1.5 Significance of the Research

A 2014 World Economic Forum report, notes a changing investor demographic with current and future investor values set to focus on environmental and societal improvements. The shift is most apparent in women and the so-called millennial generation who within the next 40 years are likely to own 70% of all US intergenerational wealth estimated as \$ 41 trillion (World Economic Forum, 2014).

Education has long been seen as fundamental to improving social impact through improving child well-being whilst reducing poverty and inequality (UNICEF, 2012). More pointedly, the strategy of increasing school readiness of learners is seen as being amongst the most effective interventions yielding positive social impact (Berry, Biersteker, Dawes, Lake, & Smith, 2013; UNICEF, 2012)

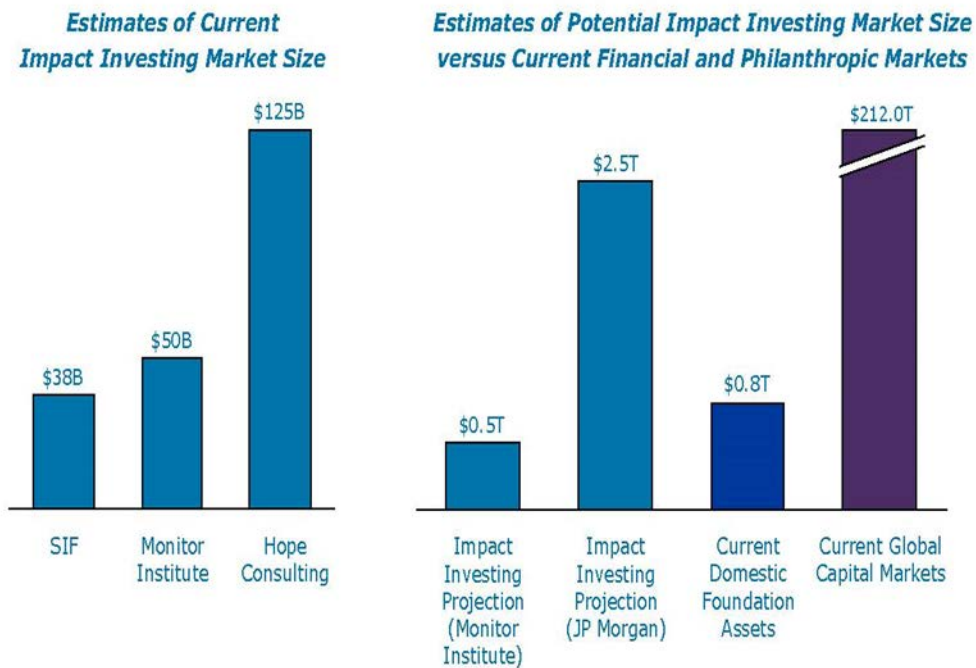


Figure 2: A graphical representation of the current size and estimated potential size of the broader Impact Investment market.

Source: (Seegull, 2013)

For the projections reflected above the Monitor Institute assumes that only 1% of Assets under Management, i.e. controlled by institutional investors / asset managers, would be earmarked for Impact Investments. The JP Morgan estimate is based on the assumption that 5% of Assets under Management is designated for Impact Investing. The potential capital available is thus significant even if one assumes the more conservative of estimates (Seegull, 2013).

The current state of play, however still sees the control of the majority of investment funds vested with institutional investors / asset managers, operating within the confines of their fiduciary duties, notably the duties of loyalty and care. We thus see ownership of investment funds divorced from control (Hawley & Williams, 2007). In order to access mainstream investment capital, investment products, that are understood and accepted by fiduciary

managers, need to be brought to market. For SIBs to gain mainstream acceptance, and by doing so unlock mainstream investment capital, the benefits (both social and economic) arising from the social outcome being funded needs to be understood.

This study may prove valuable to stakeholders, seeking improved educational outcomes, within the South African investment (notably Corporate Social Investment practitioners), education and government sectors.

1.6 Organisation of the dissertation

The thesis is divided into four main chapters. Chapter 2 is a detailed content review, and deals with the origins and purpose of SIBs whilst also examining the importance of improving education outcomes with specific reference to early childhood development in South Africa. This section explores impact investing as an investment approach after which the evolution of government financing arrangements are discussed to highlight how SIBs may be viewed as a further extension of such public-private partnership arrangements.

Chapter 3 deals with the analysis and discussion as garnered from the review of the existing SIBs. Chapter 4 will then provide recommendations for the highlights areas for future research that may advance the use of SIBs to improve ECD outcomes in an emerging markets context.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter reviews SIBs and the importance for improving education outcomes in early childhood development. The chapter also explores the evolution of public private partnerships and reflects on how SIBs may be viewed as the next evolutionary step in such arrangements. Finally, the chapter reviews and summarise existing ECD SIBs.

2.2 Overview of SIBs

The literature review explores the relatively new SIB phenomenon. It explores the background and seeks to highlight the evolution that has given rise to SIBs, notably the Impact Investing landscape, certain strategies already employed by government as well key challenges facing the instrument. The history and characteristics of the relevant SIBs already in operation will also be compared and contrasted, with the objective of providing a series of recommendations that may inform the implementation of a SIB within an emerging market context such as South Africa.

2.3 Theory of Social Impact Bonds

SIBs are a relatively new form of financing arrangement with the first SIB, the Peterborough Prison Social Impact Bond, having been launched in the UK in 2010 (Bryan & Rafferty,

2014; Wilson, 2014). The first such bond in the USA was launched by New York City, for prisoners on Riker's Island, in 2012 (OECD, 2013). The concept was however propagated with an idea for a social policy bond in the late 1980's by a New Zealand economist, Ronnie Horesch (Clifford & Jung, 2016).

SIBs may be viewed as a nexus for a number of inter-related areas. Firstly, one could trace its roots in Social Innovation, notably to the Connected Difference theory of Social Innovation as described by Mulgan in Oxford University's Said Business School report of 2007. The theory espouses three important components to social innovation:

- They are typically hybrids or new combinations of existing elements, as opposed to being completely new themselves
- Their implementation dissects organisational, sectoral or disciplinary boundaries
- In connecting together previously disparate role-players, they create powerful and lasting new social relationships

The report goes on to point out a potential link between social development and having a critical mass of quality innovative social connectors (Mulgan, Tucker, Ali, & Sanders, 2007).

Secondly, they can be viewed as a market driven development that seeks to link investors to returns. In many ways SIBs may be viewed as the next evolutionary step following Outsourcing, Public Private Partnerships (PPP) and Pay by Results (PbR) arrangements. Each of these may be viewed as a form of deliberate government action, either to stimulate private sector investment in a particular area or, to utilize private market expertise and efficiencies in service delivery. The common thread in each of these is the rewards for private sector participation or investment.

Thirdly, given the social context, SIBs may be seen as a particular focus point within the broader Sustainable Responsible Investment (SRI) arena. A 2015 Global Economy and Development report from Brookings describe SIBs as a subset of impact investing (Gustafsson-Wright, Gardiner, & Putcha, 2015). Here a SIB can be viewed as the financial instrument distilled from Impact Investing, within the broader SRI arena.

It is important to realise that SIBs are not bonds in the traditional sense. In common financial parlance, a bond is understood to be a financial instrument of indebtedness, whereby the issuer is contractually obliged to repay, at a specified later date, the principal, and typically to also pay regular interest or coupon payments. SIB's, whilst sharing some commonality with respect to having a finite date, are more akin to an equity investment. The reason for this is that the 'bond-holders' (more typically called investors) principal is not guaranteed and no regular interest or coupon is paid. Instead, the 'bond-holders' principal is at risk and only repaid, with interest (or profit), upon the specific social outcomes being achieved.

The 2011 Young Foundation paper employs the term 'funding mechanism' to describe SIB's. They are further seen to offer new sources of financing, in a resource-constrained environment, to social outcomes. Three key characteristics that are highlighted are the financial investment, a series of actions leading to social improvements and payers commitment to reward investors on the basis of the improved social outcome (Mulgan, Reeder, Aylott, & Bo'sher, 2011).

SIBs are also described as a channel through which private capital is entering the publicly funded social impact arena. This private capital, whilst requiring a risk adjusted return, is supplanting both government funding and risk, whilst driving innovation with respect to social interventions (Sulemankhil & Novak, 2012).

Social Finance Limited also defines a SIB as both a ‘financial mechanism’ and a ‘contract’ and notes key role-players as the government (or more broadly the public sector) and socially motivated investors. They further highlight improved social outcomes as being the measurable metric that results in the investor being repaid their investment plus a return (Social Finance Limited, 2013).

McHugh, Sinclair, Roy, Huckfield and Donaldson (2013) recently described SIBs as differing from traditional pay-by-results (PbR) arrangements and not sharing any characteristics with traditional bonds. Instead, returns accrue only upon certain social outcomes being met. Again, this points to being closer to an equity instrument than a bond. They further characterise SIBs with terms such as ‘multi-stakeholder arrangement’ whilst noting key role-players to again include investors and government. Service providers and intermediary organisation, acting as brokers are also noted.

According to Pauly and Swanson in 2013, SIBS are characterised by the upfront provision of capital by private investors that not only reduces service provider risk, but also bridges the gap created by shrinking government budgets. They note further features to include innovative performance features and stringent monitoring and evaluation against set targets (Pauly & Swanson, 2013).

Ragin and Palandjian, providing an American view, support the view that SIBs are the next evolutionary step for impact investing. SIBs are further seen as providing the nexus around which impact investors can achieve financial returns and positive social outcomes (Ragin & Palandjian, 2013). The OECD describes SIBs as being a payment by results financing model that rewards private investors (OECD, 2013).

(Nicholls & Tomkinson, 2013) in a Said Business School case study of the Peterborough Pilot SIB, describes it as an innovative series of contracts for financing welfare and other

social services. Key role-players noted include government, service providers and external investors, with the arrangement linking back well to public-private partnerships already employed in the UK.

Warner too rejects the link to traditional bonds and asserts they are more akin to Pay for Success Bonds. She furthermore introduces philanthropists and venture capitalists into the range of stakeholders whilst noting SIBs ability to crowd in both political and financial capital that enable risk taking. In comparing SIBs to PPPs she notes that SIBs payments follow only successful outcomes, unlike PPP payments typically based on inputs or delivered services. A further distinguishing feature introduced is that of a far shorter time horizon, less than 10 years, compared to many traditional PPPs whose lifespans typically runs to 20-50 years (Warner, 2013).

In a recent South African report, SIBs are noted to be instruments designed to assist governments in the endeavours to improve social programmes. Role-players noted in the report include specialised service providers, investors, performance managers and government, that is typically the outcomes funder (Genesis Analytics, 2014). SIBs are described as more structured product requiring qualified role-players and are hence not akin to traditional bonds. They also enable upfront funding for projects which allows them to demonstrate their value and hence attract further funding (Coble, 2014). Another concurring South African view refers to SIBs as being both innovative outcomes based contracts and innovative methods of financing social programmes for governments (University of Cape Town, Genesis Analytics (Pty) Ltd, & Social Finance Limited, 2014).

The mechanics detailing the various role-players and transactional flows of a typical SIB may be viewed in figure 6 below.



Figure 3: The mechanics of a typical SIB.

Source: (Gustafsson-Wright et al., 2015)

The common threads running through the literature leads one to define SIBs as an innovative funding mechanism, contract or instrument employed to improve social outcomes.

2.3.1 SIBs Origins and Purpose

SIBs are seen as having arisen as a result of financial crises, which led to government spending cuts and ultimately the need for a more efficient use of scarce public resources.

Governments are currently left struggling to provide funding to social problems where the benefits only accrue over a long term horizon (Deprez, 2014). Instead, we see investment in short term projects with more immediate impacts that serve to keep the electorate enamoured with the current government. This view is somewhat supported by Jung and Clifford who conclude that SIB's unique contribution is that it enables social interventions by overcoming governmental constraints through crowding together various stakeholders and financial resources (Clifford & Jung, 2016).

Outsourcing the delivery of social interventions to a combination third party organisations and private institutions is seen as a way to ensure greater innovation, efficiency and effectiveness of the interventions (McHugh, Sinclair, Roy, Huckfield, & Donaldson, 2013). It also provides a mechanism to attract private investment capital to fund improved social outcomes (Warner, 2013).

They are relatively new financial instruments within the social services sphere and their underlying composition is akin to standard financing arrangement. Their use is however particularly being advocated for financing programmes in the health-care sphere (Pauly & Swanson, 2013) and behavioural change programmes (McKinsey & Company, 2012). The anticipated benefits accrue when private capital brings with it considerable financial nous and accountability to bear in the social sector. This in turn drives result orientated evaluation of interventions, aligned to the predefined outcomes (Sulemankhil & Novak, 2012).

Figure 7 below reflects how savings might be captured through the implementation of a SIB to improve a social outcome. With an increase in preventative spending on programmes or interventions aimed at improving social outcomes, we see a greater decline in reactive spending to remedy social ills. Combined the 'new' under a SIB regime, is less than before

(the status quo), thus providing savings which can fund investor returns as well as be retained by the outcome funder (Boggild & Bronson, 2015).

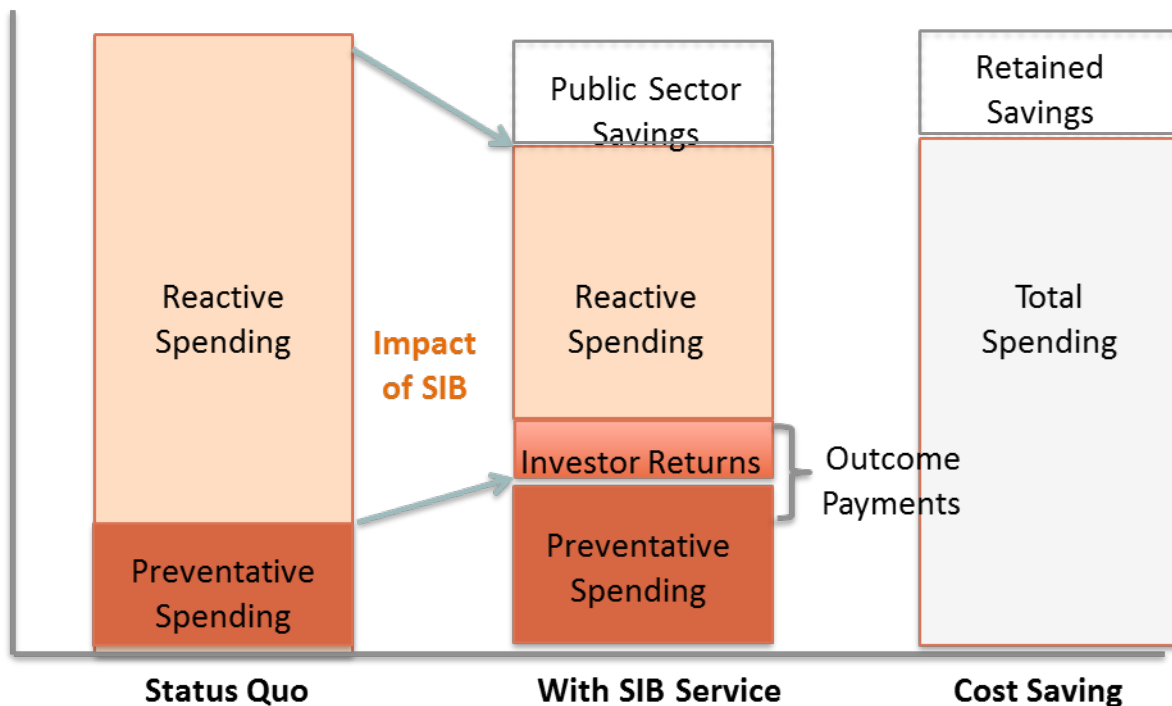


Figure 4: The economic case for utilizing a social impact bond.

Source: (Boggild & Bronson, 2015)

A further purpose for SIBs that is introduced is that of being the creation of a marketplace for impact investing, which will in turn provide more opportunities to access new capital. This can be achieved through investor / asset manager driven due diligence, performance management and reporting. The improvements in service provision then ultimately drives the returns that can be achieved (Ragin & Palandjian, 2013). This view is supported by Pauly and Swanson (2013) who highlight that true value in SIBs would be achieved when an investor can positively impact the outcomes through their skillset and/ or effort.

2.3.2 SIBs Characteristics

SIBs provides new sources of funding for social programmes, whilst allowing for genuine risk transfer and promoting improved outcomes.

2.3.2.1 New Sources of Funding

Through contractually mandated rigor and measurement of outcome metrics, SIBs provide attractive bespoke investment opportunities which appeals to a new generation of socially minded impact investors. In an environment where public finances are constrained, funding for social programmes is often limited, SIBs thus provides the means for these activities to proceed (Mulgan et al., 2011). Social Finance list SIBs objectives as including the crowding in of private capital from diverse source, to fund social outcomes (Social Finance Limited, 2013).

In times of economic hardship, governments tend to cut back on preventative activities, especially where the benefits tend to accrue only over the longer term, or are difficult to measure (Liebman & Sellman, 2013). Similarly, development aid and donor flows into developing countries are also negatively impacted when financial markets perform poorly (Centre for Global Development & Social Finance, 2013). Both SIBs and DIBs are seen as powerful instruments designed for governments to explore and expand more effective social programmes. Furthermore they provide an investment platform to catalyse transformative solutions to social problems (Centre for Global Development & Social Finance, 2013; Genesis Analytics, 2014).

From a fiscal liquidity view, scarce resources can thus either be retained or redeployed. This may be particularly attractive to developing countries needing to fund fiscal deficits.

2.3.2.2 Risk Transfer

Through a SIB financing arrangement, whilst government is not required to fund the social intervention, they are liable to pay the investor both the principal and typically a return. Government is however only contractually liable to pay upon specific, measured outcomes being met. These outcomes are independently verified. The PBR component of SIBs thus appeal to risk-averse governments (Pauly & Swanson, 2013), where bureaucrats operate within shrinking budgets and fear of perceived political failure for non-delivery (Wong, Ortmann, Motta, & Zhang, 2013).

Beyond being risk-averse, government funded social programmes typically lack incentives to innovate and focus more on input measures as opposed to tracking outputs with a view to constantly evolving and improving (Centre for Global Development & Social Finance, 2013). The benefits that flow from improved social outcomes are often only seen after the current political administration is in office (Deprez, 2014). This results in government officials taking a more short-termism outlook with respect investing government resources.

Government thus bears no operational risk, which the Basel Committee defines “The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events” (Bank for International Settlements, 2011,p. 11). This risk transfer has both financial and political advantages to the outcome funding government. The operational risk of performance failure is borne by the third party service provider, with the financial risk of failure borne by the private investor (Genesis Analytics, 2014; Mulgan et al., 2011; Wilson, 2014; Wong et al., 2013). Government thus does not pay for activity undertaken, but through

SIBs they can shift risk-free from reactive remedial interventions to more proactive preventative solutions (McKinsey & Company, 2012).

Failure, whilst not generating the social outcome desired, does not reflect poorly on the Government, nor will they pay for the attempted intervention. Governments thus only pay for measured successful outcomes.

2.3.2.3 Promoting Improved Outcomes

SIBs are in essence a form of outcomes based, or PBR contract type (De Wit, 2013; Wilson, 2014). The mainstream investment industry has developed various financial metrics to assess and measure performance and so in turn allow intermediaries and investors alike to make informed decisions. SIBs may provide an instrument or asset type that mainstream investors can access for making both financial returns and societal impact. Fundamental to SIBs success are that they require the development of credible, reliable and verifiable improvements of social outcomes (Scherer & Schenk, 2012). The development of these in turn promotes improved social outcomes.

With payment to investors reliant on measured successful outcomes, much of the focus in constructing a SIB is placed on designing and agreeing robust measurable metrics. Success in turn is directly linked to these metrics. In so doing, evidence based interventions or activities are encouraged from the outset (Mulgan et al., 2011; University of Cape Town et al., 2014). In this way SIBs are an extension of managing to outcomes and results based management (McKinsey & Company, 2012) with a distinct PPP impact investment focus.

Private capital attracted to SIB funded projects encourage greater rigor to performance management, increasing the likelihood of achieving desired outcomes (Social Finance Limited, 2013). A Genesis Analytics paper entitled “An introduction to Social Impact Bonds” supports the views of Social Finance Limited and Sulemankhil & Novak (Sulemankhil & Novak, 2012), in that they see external investment encouraging greater rigour, performance management and a results orientated focus (Genesis Analytics, 2014).

SIBs are believed to be most effective when investors are in a position to positively impact the outcome, through bringing financial expertise and diligence to bear of the project (Pauly & Swanson, 2013). One of the channels through which this may be achieved is through the development of metrics that measure the desired social outcome and which in turn triggers payment back to investors. This links in well given that critical to the future success of SIBs, is the demonstration of successful outcomes. Furthermore, to achieve this, and gain a level of credibility with taxpayers, the results need to be independently verified, much like public companies are required to be independently audited against a set of audit standards. It is also critical that the outcome measures correlate strongly with the programmes positive social outcomes (Liebman & Sellman, 2013). The outcomes must therefore be open to independent scrutiny, ideally against the backdrop of industry accepted metrics and standards.

The following graph is an illustration of the total global value of launched SIBs, in Canadian Dollars (CAD), for the various social issue areas. As of February 2016 the value was CAD 254million which at a current exchange rate (CAD 1.0000 : ZAR 11.3068), amounts to some ZAR 2.872billion.

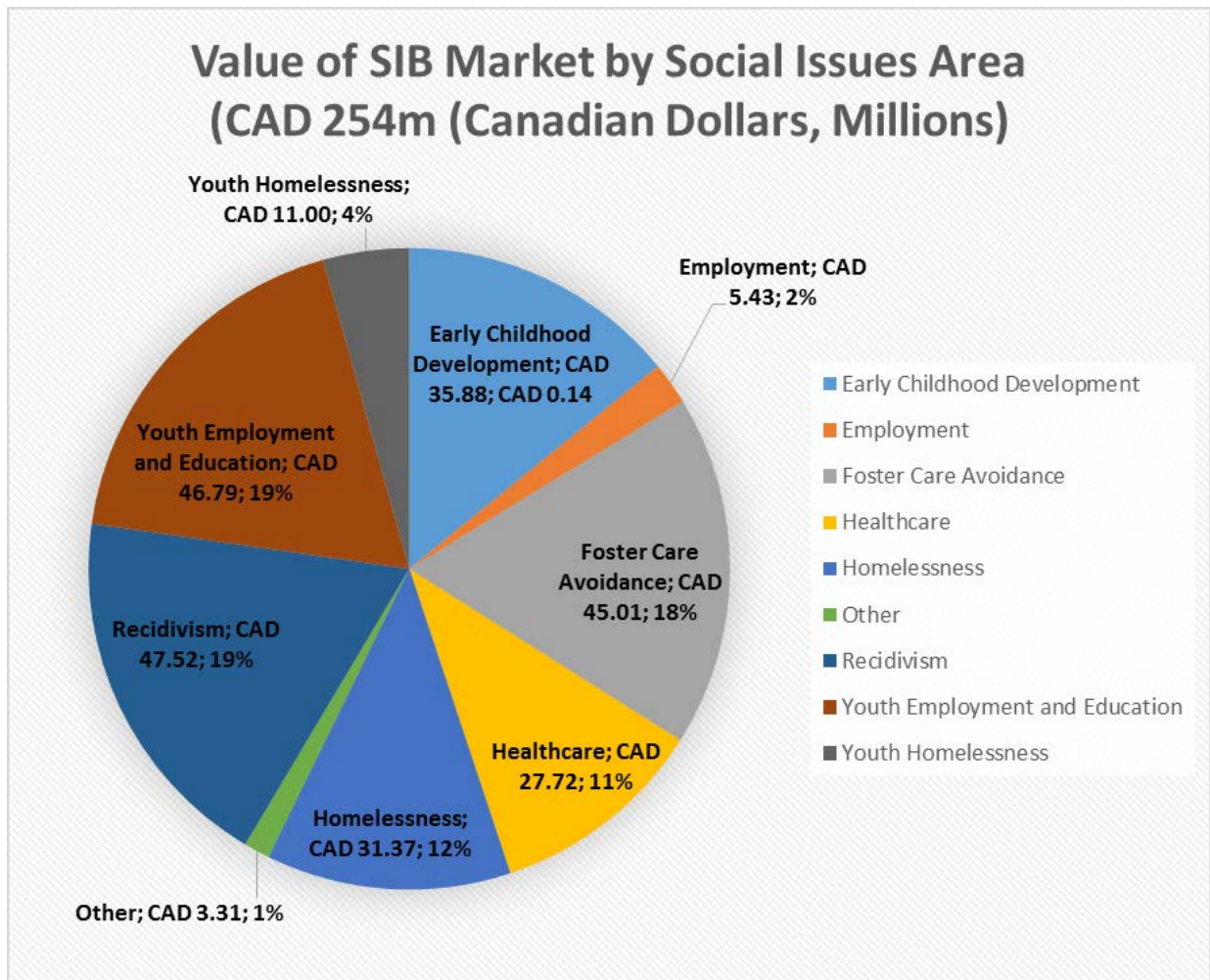


Figure 5: Graph of SIB value by Sector (Social Issue Area).

Source: Finance for Good (2016)

The existing literature reveals a disparate nomenclature with a number of terms utilized to describe similar financing arrangements. The terms Social Benefit Bonds (SBBs) and pay-for-success bonds (PFS) are noted by Bryan and Rafferty (Bryan & Rafferty, 2014). The term Development Impact Bond (DIB) is used in cases where a donor or foundation supplants, either fully or partially, the government as the outcome funder (Bellinger & Fletcher, 2014; Bloomgarden et al., 2014; Centre for Global Development & Social Finance, 2013; Gustafsson-Wright et al., 2015). In instances where the funding finances health care interventions aimed at reducing medical costs, the SIB is often referred to as a Health Impact Bond (HIB) (Coble, 2014).

Impact bonds are generally referred to as a form of pay by results (PbR) arrangement, with both SIBs and DIBs featuring in high income and low middle income countries. A notable further difference, besides that of government versus external / donor funder, is that SIBs may have greater potential for sustained improvements given government participation (Gustafsson-Wright & Gardiner, 2016). This is especially true if government is not the outcome funder as there is no real public private collaboration (Gustafsson-Wright et al., 2015). DIBs do however provide a platform to improve the efficiency of aid, the transparency of how the funds are spent as well as potentially crowding-in private sector financing where more traditional donors are too risk averse (Bellinger & Fletcher, 2014).

Building on from SIBs and DIBs, Social Yield Notes (SYNs) develop the concept further moving further towards a tradeable, liquid equity framework whilst introducing competition, through use of multiple service providers (Bellinger & Fletcher, 2014).

2.4 Empirical Literature regarding the effects of SIBs on education

Why are improved education outcomes important in a developing country context such as South Africa? More particularly, where might SIBs provide opportunities for government, socially responsible investors and private sector service providers to positively impact education outcomes?

South Africa has made significant strides in the reallocation of education spend (from historically advantaged to historically disadvantaged) to address apartheid legacy issues. By 2007, government investment in schooling for African learners had increase by some 76% (Hindle, 2007). South African society however continues to reflect huge poverty and

inequality despite more than two decades of democracy. Quality education is seen as one of a few key drivers that can assist in overcoming these challenges (National Planning Commission, 2012). Recognition of a need to actively continue to address these apartheid legacy issues within education, is given by the Western Cape Provincial Government in its 2014-2019 strategic plan, which identifies improving education outcomes and opportunities for youth development as one of its five strategic goals (Western Cape Government, 2014).

Despite these lofty goals, the South African context reflects stunted child development levels of some 25%. Add to this abject poverty, high unemployment, HIV transmission from mother-to-child and foetal alcohol syndrome prevalence of some 16% in certain regions, and the scope and complexity of the governments challenge becomes more apparent (Patton & De Wit, 2015; South African Department of Basic Education, 2015; The World Bank, 2008).

A 2008 World Bank development report found Sub-Saharan Africa (SSA) to have both the highest incidence of child poverty and education deprivation worldwide. The report goes on to confirm numerous earlier research that found that investment in pre-primary / young children hugely improves their success in education and consequently economic development in the long term. Despite the existence of available research, all indicators pointed to the likelihood that SSA would not achieve the Millennium Development Goals (MDG) with respect to access to education. A key limitation facing governments of the region is limited budgets and an inability to re-prioritise education given other priorities such as food security, disease and poverty (The World Bank, 2008). Given the global recession and austerity measures across even well-endowed territories such as the European Union, funding available for education remains constrained. Even existing education spending levels face significant threat given the ongoing global financial crises. Consequently governments and policymakers facing societal challenges are seeking new and innovative approaches to overcome these challenges amid shrinking financial resources (Little & Axford, 2015; The Economist, 2010).

Despite the World Bank's 2008 report, a more recent report commissioned by the Centre for Development & Enterprise, found the South Africa's education system to be the worst performing of all middle-income countries, with the majority of learners were functionally illiterate and innumerate in 2013 (Spaull, 2013). Evidence from global research indicates that there are both immediate and longer-term benefits to economies. More importantly, as a sub-section of education, early childhood development interventions is immensely effective at levelling the playing-field and allowing previously disadvantaged and impoverished children to excel in the long term (Berry et al., 2013).

School-ready children that enter the education system are critical to successful education outcomes (Karooy, L.A., Kilburn, R., Cannon, 2005). The South African government sees a clear linkage between quality education and economic opportunities, specifically to address apartheid's legacy of structural socio-economic inequalities. With the vast majority of learners having been born into a disadvantaged socio-economic setting, primarily along racial divides, the country's Department of Basic Education has signalled clear objectives for improving the school-readiness of learners through ECD interventions. The Department's objectives is supported by the National Planning Commission's proposals of additional pre-primary education resources (Berry et al., 2013). The strategy of utilizing ECD interventions has found further implementation support from the Department of Social Development together with whom they are collaborating. There also appears to be a growing trend towards working innovatively with NGO's and funders to seek out sustainable business models which deliver long-term value and a reduction of inequality (van der Merwe, 2015). In the Western Cape, the Provincial government contractually outsources 100% of its ECD services to NGO's. In turn, these NGO's are also co-funded by private sector investors, yet there is no contractual relationship between the provincial government and these private investors (De Wit, 2013).

Learners thus need to enter the system equipped with the capacity to learn (South African Department of Basic Education, 2015). The benefits accrue not only to the individual, through improved productivity and thus earning potential, but also to the wider society and the funders of education, through reduced wastage (UNICEF, 2012). A recent Brookings report notes that the greatest challenge to comprehensive ECD interventions is a lack of consistent funding. This despite overwhelming evidence that an investment in ECD as a preventative intervention, will accrue benefits to individuals and society over time. The problem is even greater in developing countries where both quality of existing education and the capacity to invest additional resources is limited (Gustafsson-wright & Gardiner, 2016).

The South African context is interesting in that country's Constitution, Section 29(1)(a), bestows the right to basic education and indeed further education to all its people. Conversely to those rights is a government, with limited and under pressure financial resources, which must provide that education, or at least make it progressively accessible (*Constitution of the Republic of South Africa, 1996*).

Improving access to quality education for its citizens is not an objective unique to South Africa. Latin America and the Caribbean suffer similarly, and much like South Africa, despite having invested heavily in education, outcomes fall short of requirements thus leaving large portions of the population below the poverty line with little opportunity to improve themselves (Bloomgarden et al., 2014).

Similarly, the in the US ECD interventions has recently received significant support. In terms of direct government funding, some US\$ 20 million has recently funded ECD programmes in Arizona. Indirectly, US government (or states) have backed more innovative PbR (SIB) funding arrangements in Utah and Chicago where ECD programmes are proving impactful results to improve education outcomes (Gustafsson-Wright et al., 2015; Stump & Johnson,

2016; Temple & Reynolds, 2015; UK Cabinet Office, 2013; van der Merwe, 2015). Australian studies have indicated that ECD interventions might yield significant ROI (10%) whilst at the same time addressing inequality issues and improvement productivity (van der Merwe, 2015).

Thus, given the financial constraints facing the South African government along with the need to redress societal inequalities, the importance of learners having a successful and efficient journey through the country's education system is apparent. The literature explored above clearly points to the critical role that ECD interventions play in ensuring these objectives are realised through education. The key challenge remains finding innovative financing solutions to enable the realisation of ECD's transformative and economically empowering potential.

2.5 Impact Investing

Impact investing is an approach to investment strategy as opposed to a distinct asset class itself. Given that impact is highly context specific, the investment approach is often project specific and can be made in both emerging and developed markets. Typically, the investment seeks to improve social or environmental issues.

While the term 'impact investing' is relatively new, the activity of investing for impact has been in practice for decades. Community development finance and microfinance for example are both subsets of impact investing that have their origins in the 1900's and 1970's respectively (Monitor Institute, 2009).

Figure 3 below reflects the growing impact investor segment classified into two broad groups. The impact first cohort are primarily motivated to improve societal or environmental outcomes, but do however have a minimum return requirement, typically even foregoing a portion of return. The financial first cohort on the other hand are more profit motivated and hence seek out commercial returns which deliver concomitant social or environmental benefits (Monitor Institute, 2009).

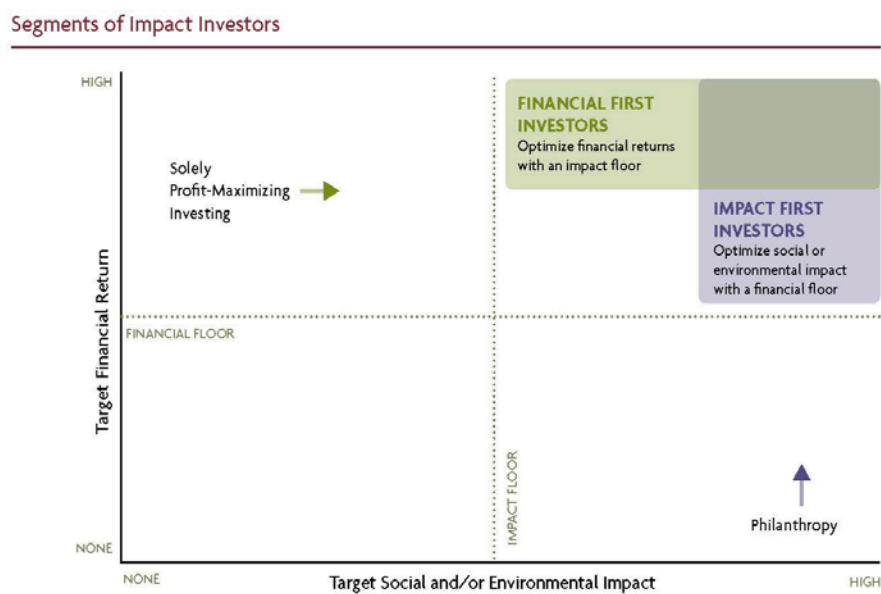


Figure 3: Impact Investor demographics

Figure 6: Impact Investor demographics

Source: (Monitor Institute, 2009)

The literature points to an intentional blend of wider societal returns (be they social or environmental) along with financial returns. In 2010, impact investing was aptly described as investments intended to create positive impact beyond financial returns (Donohoe, Leijonhufvud, & Saltuk, 2010). The description of impact investing was further refined as being a profit-motivated investment strategy seeking to intentionally generate measurable benefits for society (Grabenwarter & Liechtenstein, 2011).

According to Eurosif in 2012, there was no common definition for Impact Investing. They go on to describe Impact Investing as being a catch-all descriptor for the funding of social and environmental projects, with profits ranging from zero to market-based. They go on to further develop the concept to include three key strands:

- There is an intention to generate social and environmental impacts
- Whilst at the same time delivering financial returns
- Highlight the need to be financially sustainable in the long run

Finally they note Impact Investing to be distinct from philanthropy as the investor retains ownerships whilst expecting financial returns to accrue (Eurosif, 2012).

The Global Impact Investing Network (GIIN), defines impact investments as investments with the intention to generate measurable social and environmental impact alongside a financial return (Global Impact Investment Network, 2014).

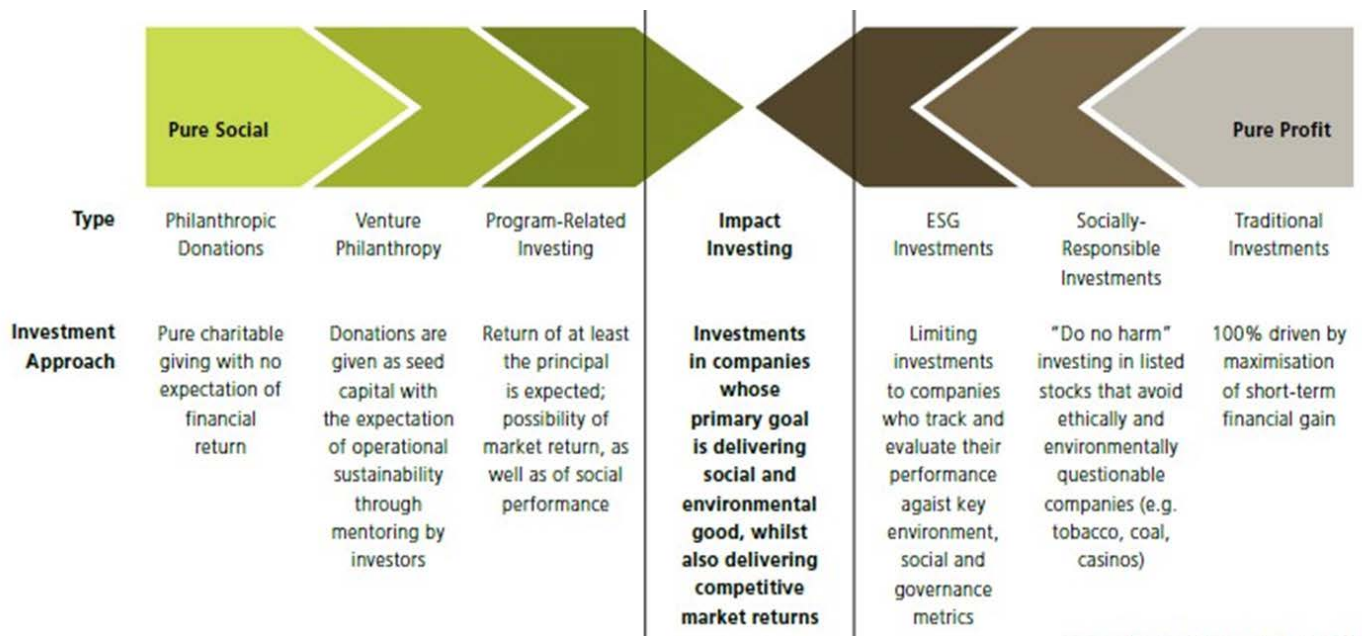


Figure 7: A representation of where Impact Investing resides within investment approaches.

Figure 4: A representation of where Impact Investing resides within investment approaches.

Source: (Seegull, 2013)

The Monitor Institute in 2009 estimated the potential size of impact investing to grow to approximately US\$ 500 billion or 1% of total managed assets within 5 – 10 years. Attaining this potential will however necessitate overcoming three key challenges. Firstly, there is a need to develop more efficient intermediation capacity that would serve to reduce high transaction costs and information asymmetry. Secondly, by developing enabling infrastructure, through the creation of reliable industry metrics, standards, terminology and models, role-players will be empowered to operate in a more structured manner. Thirdly, increasing the absorptive capacity for capital through increasing the available bankable opportunities for impact investors (Monitor Institute, 2009).

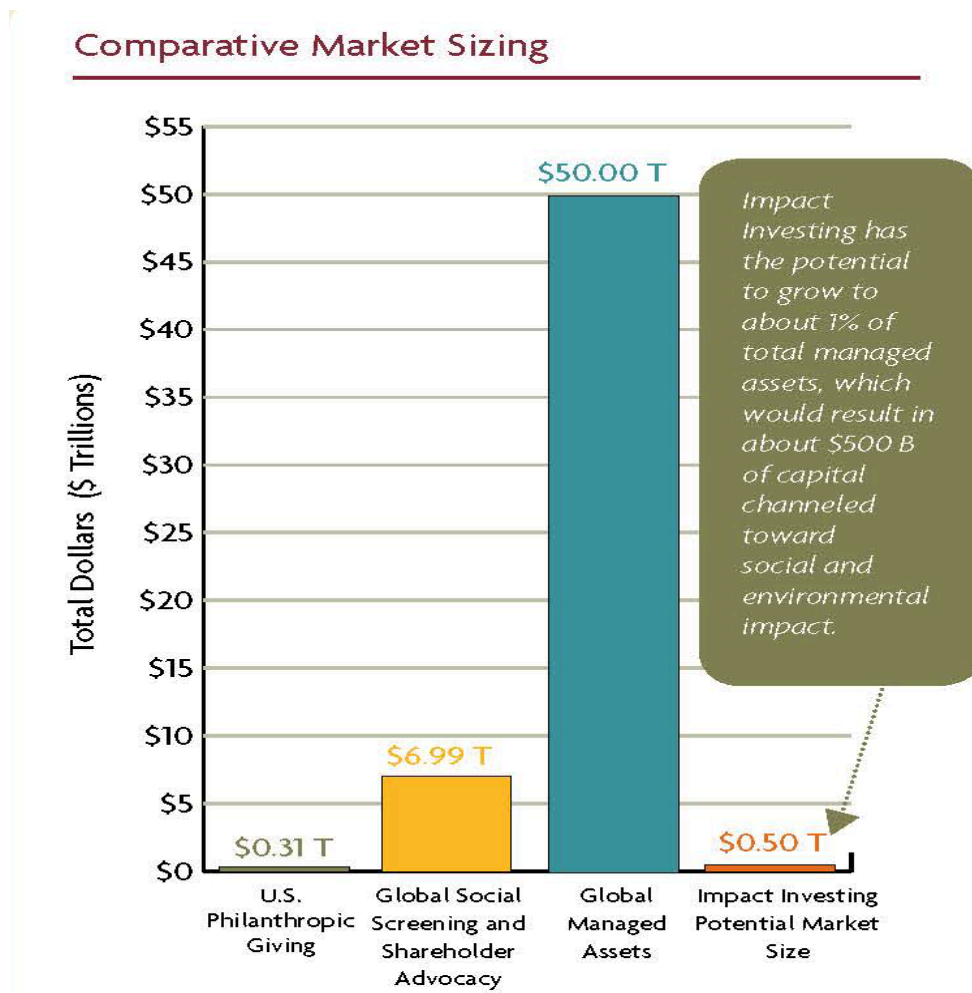


Figure 8: Monitor Institute’s 2009 Estimate of potential market size.

Source: (Monitor Institute, 2009)

In 2009, the Monitor Institute estimated the potential size of Impact Investing funds could be as much as 1% of all Assets Under Management (Monitor Institute, 2009). Five years on, and despite some evolution to financing models, a 2014 OECD report, still notes the same challenges facing this investment strategy. In addition to a lack of sufficient risk / return adjusted investment products, a continued shortage of intermediaries and poorly developed market mechanisms, high transaction costs and various market failures are also noted (Wilson, 2014).

2.6 Outsourcing, Pay by Results and Public Private Partnerships

As previously noted, outsourcing, PbR and PPPs are different types of arrangements between governments and private providers. Outsourcing and PbR are not arrangements for the exclusive use of governments alone. They are widely employed by private institutions in the normal course of business. Government usage of these mechanisms or arrangements will depend on the particular issue at hand. By definition, PPPs include government, though this may be at different levels of government, e.g. national, municipal or regional etc. Each arrangement is briefly explored below with the view to reflect on how SIBs may be viewed as a synthesis of certain of their characteristics.

2.6.1 Outsourcing

Outsourcing is an action whereby an organisation contractually shifts certain aspects of its operation to a third party. Typically, outsourcing is used to reduce costs, improve quality of

products (Hecker & Kretschmer, 2010; Lu, Ng, & Tao, 2012; Mudambi & Venzin, 2010; Relph & Parker, 2014), ensure organisational focus on core activities, increase the efficiency and effectiveness of value creating processes process (Mudambi & Venzin, 2010) and access unique skills or expertise (Hecker & Kretschmer, 2010). Context specific, outsourcing may also be employed to develop small business, such as in South Africa, where black economic empowerment legislation rewards such endeavours (Luiz, 2002).

Outsourcing was only formally identified as a business strategy in 1989. The key drivers behind this strategy were cost reduction and allowing the organisation to focus on core activities. However prior to 1989, organisations certainly utilized external expertise, particularly for non-core functions and to meet ancillary business services requirements (Relph & Parker, 2014). It can be argued that an outsourcing strategy is one seeking to coordinate and improve an organisations overall value proposition (Mudambi & Venzin, 2010). For governments, allocation of certain risks, such as operational, completion and financial risk, to a specialist outsourced contractually appointed provider, lowers its own risk portfolio whilst absolving government from developing the specialist skills itself.

The key threads, originating from outsourcing, pertinent to SIBs are the contractual shift of (service) delivery, with related risk, the expected improvement in efficiency and effectiveness, and the anticipated cost reduction. In many respects we are seeing the privatisation of risk and reward.

2.6.2 Pay by Results

PbR, also known as Performance based Payments or Pay for Success instruments, have been employed by governments in an effort to ensure payment follows successful outcomes, as opposed to simply paying for project inputs (OECD, 2013). While well intentioned, the reality has been that payment tends to follow certain outputs being delivered instead of upon a successful outcome (De Wit, 2013). A distinct disadvantage with PbRs relate to the incentives they create. Providers, instead of focusing on achievement of the desired outcomes, work towards contractual milestones (McHugh et al., 2013).

PbRs can be described as a form of contract that organisations (public or private) use to engage suppliers and pay them for achieving specific outcomes. They are the most common contracts governments enter into. Fundamentally government also retains control of the payment decision (Wong et al., 2013) and the selection of the service provider (McHugh et al., 2013) in these contracts. The providers typically fund their own business activities and consequently bear the risk of success or failure with respect to the service contracted for (Ragin & Palandjian, 2013).

In short PbR contracts are utilized by governments to pay outsourced providers for delivery of services relating to measured outcomes, whilst at the same time transferring financial risk of failed delivery to the provider (McHugh et al., 2013).

The key threads, originating from PbR arrangements, pertinent to SIBs are the contractual shift of (service) delivery and financial risk together with the aspiration to pay only for successful outcomes. Again, this may be viewed as the privatisation of both risk and reward.

2.6.3 Public Private Partnerships

In essence, a PPP is an agreement or arrangement between the public sector and a private party. The South Africa National Treasury, having constituted a PPP Unit in 1997, legally defines a PPP as a “contract between a public sector institution/municipality and a private party, in which the private party assumes substantial financial, technical and operational risk in the design, financing, building and operation of a project” (National Department of Treasury, 1997).

The World Bank notes that there is no global standard definition for a PPP (The World Bank, 2014), which points to the likelihood of numerous tailored arrangements. They go on further to provide their own definition as being “A long-term contractual arrangement between a public entity or authority and a private entity for providing a public asset or service in which the private party bears significant risk and management responsibility” (The World Bank, 2014).

PPPs have been gaining renewed momentum given their success in the past 15 years (GAVI Alliance & The Global Fund, 2013; McKinsey & Company, 2009). The business focus on profits through increasing efficiencies and discipline that is brought to bear through PPPs has huge upside potential for social change. It is widely believed that PPPs can and should deliver even more, and that this would require even more private sector resources, notably private sector expertise. These arrangements work best where there is mutual benefit for both the public and private sector (McKinsey & Company, 2009).

In 2009 a World Bank Report cited increased PPP use in the provision of strategic public service goods such as education in developing countries, where private sector know how and profit seeking efficiencies provide upside benefits of risk transfer, realizing required

outcomes at reduced cost. The downside risks noted include loss of government control and the exclusion of marginalised learners amongst others. The arguments in favour tend to support improving the desired and contracted outcomes. The arguments against tend to focus around non-outcome related concerns such as union fears and loss of control (Patrinos & Barrera-osorio, 2009).

Various countries use different terms or names to describe PPPs. Government-pays arrangements fall into the category of Private Finance Initiatives for new assets, with older existing assets being referred to as franchises in the UK. The term PPP is strictly for government pays contracts in France. Chile uses the term concessions for all forms of PPPs, - whilst Brazil distinguishes between PPPs which are strictly government-pays and concessions where end-users bear the costs (The World Bank, 2014). A key factor driving the need for inclusive, innovative and mutually beneficial PPPs is the need for alternate sources of finance (GAVI Alliance & The Global Fund, 2013).

The key threads, originating from PPP contracts, pertinent to SIBs are the bringing together of public and private entities, with private expertise, willing and able to shoulder both risk and responsibility, being critical in allowing government to realize its aspiration to pay only for successful outcomes. Once again, we see both risk and reward being privatised.

2.7 Challenges facing SIBs

Despite a number of SIBs currently in operation worldwide, all but one has commenced in developed economies. High degrees of information asymmetry coupled with the highly customized nature of each project and a requirement for exhaustive evidence, translates to financing mechanism with high transaction costs (Patton & De Wit, 2015).

Jed Emerson is considered the first proponent of blended value within a broader impact-investing context. His 2000 paper, “Social Return on Investment” (SROI), illuminated aspects of value generation originating from non-profits that had previously gone largely unnoticed. It furthermore highlighted the link between the social and economic values generated. At the same time he points to the use of cost savings or income generation in providing a socio-economic value associated with a social intervention (Emerson & Cabaj, 2000). He further noted that SROI analysis was one of many factors to consider in the investment decision. Even as far back as 2000, the challenge in accessing information that allows for the analysis of social capital investments were made (Emerson, 2000).

More than 10 years later, measuring social impact remains a complex, costly and subjective task, this despite the introduction of certain reporting standards such as the Impact Reporting and Investment Standards (IRIS) (Donohoe et al., 2010). The Young Foundation cite fair measurement of the impact as the most technically complex issue facing SIBs, going on to indicate the need for the output funder to have confidence in the metric used (Mulgan et al., 2011). The need to improve measures of social impact is key to increasing the amount of investment that might be attracted, through SIBs, to fund improved social outcomes. The risk-return decision faced by mainstream investors is currently facilitated by well-established financial measures. For SIBs to attract a greater share of mainstream capital, and impact investor capital for that matter, social risk and return decisions similarly need to be supported by reliable, transparent and verifiable measures (Scherer & Schenk, 2012).

Finding or creating viable measures for the social outcomes being funded thus remains a key challenge for SIBs (McHugh et al., 2013). The OECD, in supporting this view, highlights the need for clear and robust metrics to be established (OECD, 2013). While financial returns are quantifiable, measuring social returns continues to prove challenging with little consensus of how to value or price this aspect (Wilson, 2014). In supporting Wilson’s assessment, the

Expert Group on Social Entrepreneurship in their 2014 report note that in measuring social impact, no “one-size-fits-all” solution can be applied, as what little quantitative indicators do exist tend to ignore the qualitative aspect (Expert Group on Social Entrepreneurship, 2014).

The highly bespoke nature of each SIB, varying terminology and the relative newness of the financing mechanism creates high degrees of information asymmetry. This in turn drives high transaction costs given the complex legal contracts, financial modelling and requirement for data collection, monitoring and evaluation and provision of evidence to substantiate results (Nicholls & Tomkinson, 2013; Wilson, 2014). Lengthy planning and development phases require dedicated and technically competent staffing commitment from the outcome funder, typically governments (Federal Reserve Bank of San Francisco, 2013).

In terms of developing / emerging market countries, the challenges are even greater given the competencies within government, the restrictive nature of legislation or statutory duties, together with the associated complexity of such new forms of funding arrangements (Early Intervention Foundation, 2014; Gustafsson-Wright et al., 2015).

Consequently, few easily accessible social investment SIB products exist in the investment market. Closely linked to this is the lack of intermediaries with the experience and skills-set to facilitate social investment for impact (City of London Corporation, 2014).

Unintended consequences remains a concern as SIBs, driving innovative delivery and partnership arrangements, risks incentivising undesirable or perverse actions by various parties (McHugh et al., 2013; Mulgan et al., 2011; Pauly & Swanson, 2013).

These may for example result in funding being decanted to activities with more easily measured outcomes. Similarly, the SIB asset class may encourage the privatisation of certain public / government functions (McHugh et al., 2013). Similarly, investors may drive

agenda's that steer financing and delivery resources away from high-risk, innovative projects that society requires in order to address some of its greatest challenges (Nicholls & Tomkinson, 2013; Warner, 2013).

2.8 Overview of Worldwide Educational Social Impact Bonds in operation

The section below will explore the machinations of a number of SIBs / DIBs currently in operation, with the view of comparing and contrasting the various aspects in order to provide a series of recommendations for the implementation of a SIB within an emerging market context such as found in the South African education environment. Currently, no SIBs or DIBs exist in the South African market.

Given the particular focus of this paper on educational interventions within an emerging market, only SIBs and DIBs already in existence within the educational sector and/ or an emerging market are explored.

2.8.1 Utah High Quality Preschool Program SIB (USA)

This represents the first SIB launched to finance an early childhood education (ECD) intervention and has been financed through a partnership between Goldman Sachs Urban Investment Group and J.B. Pritzker, with the outcome funder being the State of Utah in the USA. It was launched in August 2013 (Bloomgarden et al., 2014; Gustafsson-Wright & Atinc, 2014; UK Cabinet Office, 2013).

The Social Issue

The social issue seeking redress is noted as being limited access to ECD for low income 3 and 4 years olds (Gustafsson-Wright et al., 2015). The United Kingdom's Centre for Social Impact Bonds within the Cabinet Office details the ECD issues as stemming from a the large low income population with poor English first language skills. This initial disadvantage precipitates poor educational attainment and a reliance on remedial education services at significant cost for schools and the state (UK Cabinet Office, 2013). The Wall Street Journal cites the issues as being disadvantaged low-income preschool children that are most likely to require expensive specialized and costly educational interventions as they progress through the schooling system (Barret, 2013).

Stakeholders and Financing

The outcome funder is the State of Utah, with two investors, namely Goldman Sachs Urban Investment Group (as the Senior Investor) and J.B. Pritzker (an individual and the Subordinate Investor). Goldman Sachs invested US\$ 4.60 million with J.B. Pritzker contributing US\$ 2.40million to provide total funding of US\$ 7.00 million. Both funders were at risk of losing their entire investment (Gustafsson-Wright et al., 2015).

The pay-out to the investors is funded through directly attributable cost savings made by the State of Utah (Early Intervention Foundation, 2014; Temple & Reynolds, 2015). The return is capped at 7.26% (Gustafsson-Wright et al., 2015), with a maximum of six annual payments. While the benefits from the intervention are likely to continue to accrue, the State

of Utah (along with the School system and Government holistically) will claim all future benefits beyond that point (UK Cabinet Office, 2013).

A number of service providers were drawn into the arrangement, led by the Granite School District, who were successful providers lacking capital to scale interventions (UK Cabinet Office, 2013) and Park City School District, along with smaller independent providers (Gustafsson-Wright et al., 2015).

The SIB construction also has an intermediary, United Way of Salt Lake to project manage and verify payments, along with technical assistance provided by Voices for Utah Children and Granite School District (Gustafsson-Wright et al., 2015).

The Intervention and Outcome Metrics

A special, high impact and targeted programme, had been designed to improve school readiness for the cohort of kindergarten children with the desired result being a reduced uptake of remedial programmes by the children. This reduced uptake of special education programmes will result in cost savings to the outcome funder (Bloomgarden et al., 2014; Gustafsson-Wright et al., 2015; UK Cabinet Office, 2013).

Linking directly to the cost savings, the outcome metric measured was the number of year of remedial / special education that was avoided. The timeframe spanned kindergarten through to grade 6 and the payment cohort were selected after having tested two standard deviation below the mean on the Peabody Picture Vocabulary test (PPVT) (Gustafsson-Wright et al., 2015). This selection criteria identified the children as being below average and was hence seen as a predictor of required future need for costly remedial education (Stump & Johnson, 2016).

Critical Success Factors

The 2015 Brookings Global Economy and Development reports lists two issues as being critical to the successful launch of a SIB. Firstly; both the legal counsel and social service provider had backgrounds in finance and economics and; secondly there were existing relationships between the various parties involved (Gustafsson-Wright et al., 2015). An obvious, but no less critical observation, is that the quality of how early education is “organised, streamlined, and cost-effective as a system” may indeed determine how successful an intervention will be (Kagan & Gomez, 2014, p. 127). To some degree this view is supported by Chiodo who notes that existing USA ECD SIBs provides little new innovation to delivery services given an established provider, hence the SIB simply provides greater access to new funding that can expand service delivery (Chiodo, 2015).

Strong government support, the need for evidence based interventions and data along with role clarity are cited as early lessons in the Economics and Private Sector Topic Guide on Non-Traditional Financing for Education (Bellinger & Fletcher, 2014). Similarly, Stump and Johnson highlight the positive role that formalised State support, in terms of passed legislation allocating funds to support the various SIB role players, thus allowing the project to commence (Stump & Johnson, 2016). Lester, in comparing the Rikers Island (N.Y.) and Salt Lake County (Utah) SIBs, notes opposing views as to the successes claimed, though there are indications that a willingness of stakeholders for continuous improvement is key. This especially pertinent as pertains to the way governments and the provision of social services evolve through learning by trying new approaches (Lester, 2015). An ability to verify successful outcomes within a relatively short time-frame is seen as attractive for investors (Federal Reserve Bank of San Francisco, 2013).

2.8.2 Child-Parent Centre Pay for Success Initiative SIB (USA)

This SIB was launched in October 2014 with an objective to improve education outcomes through working with kindergarten (4 year old) children in low-income areas of Chicago, Illinois in the USA (Gustafsson-Wright et al., 2015). It was the fifth SIB in the USA (Temple & Reynolds, 2015). Goldman Sachs Social Impact Fund, along with Northern Trust Corporation were the senior investors along with J.B and M.K. Pritzker Family Foundation (City of Chicago, 2014).

The Social Issue

As with the Utah High Quality Preschool SIB, the social issue seeking redress was the limited access to early childhood education for low income children (Gustafsson-Wright et al., 2015). The City of Chicago highlighted the need to enable low-income families to access pre-kindergarten education, which in turn links a strong educational foundation to ongoing educational success. Furthermore, empowering parents through upskilling, enables them to become active partners in their children's continuing education. (City of Chicago, 2014). Temple and Reynolds note the potential of such special early childhood education interventions delivering sufficient savings to cover the cost of preschool. Furthermore, Child-Parent-Centre programmes had already been in existence for some years already and this innovative financing initiative represented an opportunity to roll-out a more comprehensive programme (Temple & Reynolds, 2015).

Stakeholders and Financing

The outcome funder in this instance was the City of Chicago Office of the Major along with Chicago Public Schools. Interestingly each of the two outcome funders pay for distinctly separate outcomes, a unique aspect of this particular SIB construction (Gustafsson-wright & Gardiner, 2016)

Two senior investors participated in the SIB namely; Goldman Sachs Social Impact Fund and Northern Trust Corporation (Gustafsson-Wright et al., 2015). Goldman Sachs provided US\$ 7.40 million, with the Northern Trust Corporation providing US\$ 5.40 million. A total thus of US\$ 12.8 million in senior investment financing was provided (Stump & Johnson, 2016).

In terms of subordinate loan financing, J.B and M.K. Pritzker Family Foundation provided some US\$ 4.00 million. Once again the full face value of both senior and subordinate investors invested capital was at risk should the funded interventions not realise the required improvement in academic results (Chiodo, 2015; City of Chicago, 2014; Gustafsson-Wright et al., 2015; Temple & Reynolds, 2015).

The returns paid to investors were funded through cost savings that would be achieved as a result of reduced take up of special education programmes. The return is capped at 6.00% per annum across the various funders over a 4 year period (Chiodo, 2015; Gustafsson-Wright et al., 2015). Child-Parent-Centre programme, having been in existence for some time, had an established record for successful outcomes in both the long and short term, with longitudinal analyses indicating considerable savings to government (Temple & Reynolds, 2015). We thus might expect the benefits to accrue into the future to the outcome funders and society at large.

Chicago Public Schools were the service provider (Gustafsson-Wright et al., 2015) and comprised six public schools (Stump & Johnson, 2016). As with the Utah SIB, the service provider already had a track record and the SIB allowed the Child Parent Centre initiative in Chicago to be further scaled (Temple & Reynolds, 2015).

The intermediary in Chicago was the Illinois Facilities Fund with the Metropolitan Family Foundation and the Harvard Kennedy SIB Lab providing technical assistance (Gustafsson-Wright et al., 2015). The Harvard Kennedy School SIB team provided analytical monitoring and evaluation services with respect to procurement and data analysis (Stump & Johnson, 2016). Furthermore, the Harvard Kennedy School SIB team worked with the City of Chicago to create the pay for success contract with reference to an evidence based programme (Temple & Reynolds, 2015). Their services were provided at no charge as they sought to better understand the SIB model, or tool, could be employed for the benefit of target populations through better utilisation of existing state or government data (Harvard Kennedy School, 2013).

The Intervention and Outcome Metrics

The intervention involved an expansion, or a further scaling, of Child Parent Centre enrolments on bespoke pre-kindergarten programmes (Temple & Reynolds, 2015). The half-day programmes for pre-kindergarten children was coupled with parent engagement programmes and had a clear objective of improving educational outcomes (Gustafsson-wright & Gardiner, 2016). The SIB financing allowed for impactful revision to the existing Child Parent Centre programme offering that could be delivered with in specific guidelines and

requirements. Consequently it has been hailed as proven and preventative model for school reform that will improve school readiness of participants (Temple & Reynolds, 2015).

The intervention programme being funded will see a reduced uptake in remedial and special education services from kindergarten through to the 12th grade. The increased readiness of the pre-schoolers will be assessed utilizing standard assessment tools with a further required improvement assessed against increased 3rd grade reading scores. Improvements in these metrics in turn obviates the requirement for accessing costly remedial education services, this results in reduced costs which outcome funders would be required to pay in future years (Gustafsson-Wright & Gardiner, 2016; Stump & Johnson, 2016; Temple & Reynolds, 2015).

Critical Success Factors

Child parent centres had been in operation since the 1960's in Chicago and were thus well placed to deliver the requisite interventions given their pre-existing track record of achievement (Gustafsson-wright & Gardiner, 2016). The involvement of the public commissioner and a high degree of freedom and scope to reconfigure how delivery architecture seen as positives. Chido goes on however to highlight that there are no delivery innovations and the SIB construction merely ensure new sources of funding are available to expand and innovate existing service delivery (Chido, 2015).

Whilst short-term savings fund the payments to investors, additional measures more closely tied to longer-term positive externalities were also included, thus seeking to ensure long-term savings to the outcome funders and society as a whole. Furthermore, demonstrable cost savings from the reduction in the need to provide remedial education, ensured critical political buy-in enable project success (Gustafsson-wright & Gardiner, 2016).

Similar to the Utah ECD SIB, the support of government, through the US Department of Education providing a grant from its Investing in Innovation Fund, was an important signal that allowed the SIB project to develop (Stump & Johnson, 2016).

2.8.3 Junior Code Academy SIB (Portugal)

This represents Portugal's first ECD SIB, and it is financed by the Calouste Gulbenkian Foundation, with the outcome funder being the Municipality of Lisbon. Launched in January 2015, the contract period is only 20 months and the target population is small in comparison to the Utah (up to 3,500 low income 3 and 4 year-olds) and Chicago (2,600 low income 4 year-olds) SIBs, at only 65 3rd and 4th grade students (Gustafsson-Wright et al., 2015).

The Social Issue

The Portuguese Social Investment Taskforce cites figures of some 17.4% of young people dropping out of school with a concomitant youth unemployment of 34.5% (Portuguese Social Investment Taskforce, 2015). The social issue seeking redress in this instance is primary school grade repetition and drop-out rates (Noya & Galitopoulou, 2015). The intervention is very much a pilot that is being implemented in three public schools in Lisbon (Giguere, Bonaglia, & Noya, 2015).

Stakeholders and Financing

The outcome funder is the Municipality of Lisbon in Portugal, who was ultimately responsible for the primary education system. Only one primary investor participated, the Calouste Gulbenkian Foundation, a private public utility foundation in Portugal. Financing amounting to US\$ 0.114 million was provided. The entire amount was provided at risk (Giguere et al., 2015; Gustafsson-Wright et al., 2015; Portuguese Social Investment Taskforce, 2015). The Calouste Gulbenkian Foundation provided a further US\$ 0.034 million in the form of a grant, this was utilized to acquire robots and equipment (Gustafsson-Wright et al., 2015). To date, this is the smallest SIB, however this pilot, if successful may be scaled to a further 90 school throughout Lisbon by the year 2017 (Vennema, 2016).

The service provider in this instance was the Code Academy, a for profit business (Gustafsson-Wright et al., 2015). Assistance was provided in the form pro-bono services from the Social Investment Lab and the Nova School of Business and Economics. These assisted the service provider in structuring the SIB and developing the financial model along with identifying the various metrics and evaluation methods (Noya & Galitopoulou, 2015). The technical support was provided by the University of Aveiro in Portugal (Gustafsson-Wright et al., 2015).

The IRR (Internal Rate of Return) for the investment was set at 2.0% with only two payments due from the outcome funder. The first was due after 12 months and upon achieving improvements in assessed logical thinking and problem solving. The second payment was due at the end of 20 months and this was linked to improvements in performance in the national exams (Gustafsson-Wright et al., 2015).

Interestingly, unlike in the two American ECD SIBs discussed earlier, there is no indication from available literature that links any anticipated savings to the outcome funder to how the outcome funder will finance the payments to the investor.

The Intervention and Outcome Metrics

The intervention in this instance involved utilizing computer programming as a learning intervention (Noya & Galitopoulou, 2015). As with the Utah and Chicago SIBs, a special programme was created. A salient difference in this instance however was that it was not an expansion or scaling of an existing intervention (Gustafsson-Wright et al., 2015). The 30 week programme was however integrated and aligned with into the school curriculum seeking to improve performance and problem solving abilities (Noya & Galitopoulou, 2015; Portuguese Social Investment Taskforce, 2015).

This measure of efficacy of this SIB has been based on objective and measurable indicators with a direct causal link back to the training intervention provided. Furthermore, these are validated against progress displayed in the compulsory Portuguese national examinations for mathematics and Portuguese language proficiency. The Nova School of Business and Economics (the intermediary), using randomized control trials, performs the evaluation (Vennema, 2016). A 10% improvement was set as the target to indicate a successful outcome (Boggild & Bronson, 2015).

Critical Success Factors

The use of randomized control trials significantly increases the validity of the outcomes evaluated. It is however acknowledged that this is likely only possible given the size and scope of the this small SIB (Vennema, 2016). Considerable effort in monitoring and evaluation during the pilot programme, improves the likelihood of further funding for future programmes and scaling, whilst providing better evidence of success (Giguere et al., 2015).

Furthermore, given the intervention is computer based, daily performance assessments are possible. This in turn allows for rapid optimization interventions thus enabling better monitoring and evaluation for the programmes (Portuguese Social Investment Taskforce, 2015).

2.8.4 Educate Girls Development DIB (India)

Launched in mid-2015, this represents the world's first DIB, in India, seeking to improve education outcomes. A single investor, UBS Optimus Foundation, has financed the interventions, with the outcome funder in this instance the Children's Investment Fund Foundation (CIFF) (Instiglio, 2015; Thorpe, 2015). Given the nature of DIBs, we thus see a foundation as the outcome funder as opposed to the government or government agency / municipality as seen in the previous three examples discussed in the preceding sections. A Forbes article cites this DIB as an experiment that has the potential to marry impact conscious investors with a more results focussed development community (Thorpe, 2015).

The Social Issue

Globally India has the largest illiterate population despite significant investments made in education. The nature of the prevailing culture further discriminates against girls who are most frequently denied regular access to education, be that through being required to remain home to care for younger siblings or poor hygiene and safety conditions. Consequently, illiteracy rates in girls exceeded that of boys, with some 44% of girls classified as literate whereas some 77% of boys are (Instiglio, 2015). This education gender gap is particularly notable in rural Rajasthan given it has the highest number of districts recording the worst gender indicators in India, with a staggering 15% of girls being married before they are 10 years old amongst others (Dastoor, 2015).

Stakeholders and Financing

The outcome funder is the UK based Children's Investment Fund Foundation (CIFF), with UBS Optimus Foundation as the only investor. An amount of US\$ 267,000 is invested over the three year contract period and the full amount is provided on risk. The funds are to be disbursed in two equal tranches, the first upon conclusion of the contractual aspects in June 2015 and the second a year later in June 2016 (Instiglio, 2015).

Unlike the two American ECD SIBs discussed earlier, there are no attributable savings from the funded intervention, which can fund the repayments to the investor. It is thus more akin to the Portuguese pilot SIB with the distinction being that in this instance the exogenous savings and benefits accrue to the Indian government and society, whereas in the Portuguese SIB, the outcome funder representing government (Municipality of Lisbon) would itself accrue the exogenous benefits.

Instead, the outcome payments are linked to the historical programme delivery costs incurred by the service provider, Educate Girls, who has been operating, with a solid track record in delivering impact, for almost a decade (Dastoor, 2015; Instiglio, 2015). The project manager, providing technical assistance to ensure appropriate design and measurement metrics are in place, is Instiglio, a Columbian not for profit organisation. Evaluation services are provided by IDinsight, a US impact investment multinational firm who verify outcomes and Dalberg Global Development Advisors (a multinational consulting firm), who will evaluate the process (Instiglio, 2015).

The Intervention and Outcome Metrics

The intervention in this instance seeks to improve both literacy and numeracy amongst Rajasthan girls, whilst at the same time aims to ensure disadvantaged girls firstly get into school (i.e. enrolment), and secondly remain there (Thorpe, 2015). Educate Girls, a non-profit, collaborates with administrators and teachers in government primary school, to ensure a better quality of education is provided for girls (Dastoor, 2015).

The interventions required significant non-educational project management to identify out of school girls and educate their parents and communities about the benefits of attending school. It also requires addressing infrastructure concerns such as lack of female toilets and unsecure school premises. This is coupled with a child-centric curriculum delivered primarily by young female volunteers from the communities (Instiglio, 2015).

Broadly speaking, two key outcome metrics need to be achieved to be considered successful. Firstly, enrolment targets, attributable to Educate Girls efforts must be met. The enrolments are independently verified using sampling techniques and seeks to ensure reward continued

enrolment through to the contractual end. Secondly, the student's academic performance in a widely used literacy and numeracy assessment, needs to reflect an improvement against a control group's performance over the contract period (Instiglio, 2015).

Critical Success Factors

Aligned with the two American ECD SIBs, we once again have a service provider, in the form of Educate Girls, with a proven track-record for delivering successful interventions (Instiglio, 2015; Thorpe, 2015). Furthermore, they work with existing government funded schools to reinforce education for girls through reducing drop-out rates and facilitating the return of girls that had previously dropped out (Dastoor, 2015). A critical innovation, by Educate Girls, saw technology utilized in real time to improve performance management and ensure ongoing refinements to improve performance (Gustafsson-wright & Gardiner, 2016).

A further benefit seeking recognition from this DIB is that of 'proof of concept' (akin to a pilot) in showing other donors / investors that such an innovative financing structure might be employed to delivery both financial returns and positive societal impact. This may in turn lead to further investment in such programmes (Instiglio, 2015; Thorpe, 2015).

While the size of the target group in this instance is enormous at approximately 18,000 girls, the investment amount provided is relatively small compared to the two US ECD SIBS previously discussed. The self-stated proof of concept objective makes this DIB more akin to the Portuguese SIB in that it is laying the groundwork for future scaling of interventions.

2.9 Summary data of all active SIBs

The summary data contained in appendix 1 (Table 5: Summary data of active SIBs (as at February 2016)), provides the potential for insight into the typical SIB contract duration (Finance for the Good, 2016).

The data is summarized below:

Sum of Months			2758.8
Count (n)			57
Average (mean)			48.4
High (months)			120.0
Low (months)			12.0
Variance			482.2
Standard Deviation			22.0
% Standard Deviation from Mean			45.4%

Table 1: Active SIBs contract duration variation and standard deviation

The percentage standard deviation, at 45.4% from the mean (average), reflects a very high degree of volatility. Essentially this indicates that contract duration is not clustered particularly closely around an average set timeframe. This is not surprising given the relatively small sample size, the wide disparity of interventions funded and the number of different stakeholders involved. Furthermore we see that a longest duration of 120 months, with the shortest being only 12 months.

2.10 Conclusion of Literature Review

The literature review has explored SIBs in order to provide a greater understanding of origins and the factors influencing their successful adoption in a developing market context. The need for an innovative financing arrangement to improve education outcomes at the ECD level was examined, with particular focus on the South African context. The evolutionary trajectories of both PPPs and Impact Investing revealed that SIBs are a logical next step for government to transfer risk and reward to the private sector whilst ensuring improved social outcomes are achieved. Both the positive characteristics and the challenges facing SIBs were highlighted to provide a balanced understanding of the potential and limitations these innovative financing mechanisms possess. The existing active ECD SIBs / DIBs were then compared and contrasted to how stakeholder in the South African ECD context might develop and implement a successful SIB.

CHAPTER 3

ANALYSIS AND DISCUSSION OF RESULTS

3.1 Introduction

This chapter looks into the learnings garnered from Chapter 2 by comparing and contrasting the various aspects of the active ECD SIBs. This thesis set out to provide lessons for the implementation of SIBs to improve ECD outcomes in an emerging market context. An extensive review was conducted which explored the origins and the purpose of SIBs. It also reviewed the need for improving education outcomes in South Africa. The review also examined the broader impact investing arena and how SIBs may be view as the next evolution of public-private partnership mechanisms. The conclusion is discussed further below.

3.2 Summary of active SIB's

The table below summarises certain aspects of the SIBs / DIBs that are already active and which focus on improving education outcomes. The information is distilled from the literature review above.

SIB / DIB NAME	Utah High Quality Preschool Program	Chicago Child - Parent Pay for Success Initiative	Junior Code Academy	Educate Girls DIB
COUNTRY STATUS	Developed	Developed	Developed	Developing
TARGET POPULATION (NUMBER)	3,500	2,600	65	18,000
CONTRACT DURATION (MONTHS)	60	48	20	48
OUTCOME FUNDERS (NUMBER)	1	2	1	1
INVESTORS (NUMBER)	2	3	1	1
SERVICE PROVIDERS (NUMBER)	6	1	1	1
MAXIMUM LOSS EXPOSURE (%)	100%	100%	100%	100%
MAXIMUM RETURN (%)	7.26%	6.00%	2.00%	15.00%
FUNDING (AMOUNT IN US\$)	7,000,000	16,900,000	148,000	267,000
FUNDING PER PERSON (US\$)	2,000	6,500	2,277	15
FUNDING PER PERSON PER MONTH (US\$)	33	135	114	0.3

Table 2: Summary of active ECD SIB / DIB information

Source: (Dastoor, 2015; Gustafsson-Wright et al., 2015; Instiglio, 2015; Thorpe, 2015)

Given that only four such SIBs / DIBs are currently active, it would be inappropriate to attempt any form of regression analysis or detailed quantitative analysis. There are however a few interesting points to highlight. These are highlighted below:

- a) There is a huge disparity in the quantum of funding provided. The two US SIBs are both multi-million Dollar investment projects. The Portuguese and Indian interventions combined are less than half a million Dollars.
- b) There is a huge disparity in the size of the target population. The largest, the Indian DIB, targets 18,000 learners, whereas the smallest, the Portuguese SIB, targets only 65. The

Portuguese SIB, is clearly identified as a pilot programme, which may explain the low quantum of investment Dollars required. However, the opposite does not hold true of the Indian DIB, which has the largest target population, yet only attracts a small fraction of investment dollars compared to the US SIBs.

c) At its launch on October 2014, the Chicago SIB was the largest ever by investment value at US\$ 16.9 million. The Utah SIB, launched in the previous year, attracted only US\$ 7 million, 60% less than the Chicago SIB. The other two have attracted substantially less funding. (Refer to Table 2 below).

SIB / DIB NAME	Chicago Child - Parent Pay for Success Initiative	Utah High Quality Preschool Program	Educate Girls DIB	Junior Code Academy
FUNDING (AMOUNT IN US\$)	16,900,000	7,000,000	267,000	148,000
TOTAL INVESTMENT (US\$)	24,315,000			
PERCENTAGE OF TOTAL	69.5%	28.8%	1.1%	0.6%

Table 3: Active ECD SIB / DIB funding proportions.

Source: Author derived from Table 1

d) Despite the relatively small (US\$ 148,000) quantum of total investment dollars in the Portuguese pilot SIB, the per dollar spend per learner of US\$ 2,277, is the second largest of the four active SIBs reviewed. It also represents the second largest per month spend per learner of the active SIBs. While the Utah SIB, which attracted significant gross funding, provides only US\$ 2,000 per learner. This translates to US\$ 33 per learner per month. The Chicago SIB, not only has the largest quantum of investment Dollars, but also the largest spend per learner and the largest per learner spend per month. (Refer to table 3 below).

SIB / DIB NAME	Chicago Child - Parent Pay for Success Initiative	Junior Code Academy	Utah High Quality Preschool Program	Educate Girls DIB
FUNDING PER PERSON (US\$)	6,500	2,277	2,000	15
FUNDING PER PERSON PER MONTH (US\$)	135	114	33	0.3

Table 4: Funding Statistics of active ECD SIBs / DIBs.

Source: Author derived from Table 1

e) The target numbers reflect a large outlier in the India Educate Girls DIB, which seeks to deliver to some 18,000 children, of which 9,000 will be girls. The invested Dollars per learner, and per month spend are significantly smaller than the other SIBs and may well reflect volume efficiency gains, a relatively low cost of scaling the existing interventions within a rural setting of a developing economy or other factors not available from available literature.

f) Besides the Chicago SIB, with two outcome funders, each of the other SIB's has only one outcome funder. This is likely to reduce the contractual complexity.

g) The number of investors is also relatively small, with the Chicago SIB having the highest number with three, followed by Utah's SIB with two and the Portuguese and Indian interventions each with one. The US SIBs share a common investor pool, being Goldman Sachs and JB Pritzker. Goldman Sachs in particular has been active in the impact investment arena and has funded two other SIBs in the US. The first, a 2012 Rikers Island prison recidivism SIB in New York, and secondly a 2014 Massachusetts prison recidivism SIB (Gustafsson-Wright et al., 2015), pointing to having a level of expertise and competence with this new form of innovative financing.

h) Both the Chicago SIB and the Portuguese SIB arrangements featured the involvement of tertiary institution expertise. In the case of the Chicago SIB, the Harvard Kennedy Business School Social Impact Bond Lab provided technical supported. In the case of the Portuguese SIB, Nova School of Business provided evaluation and intermediary service. In both instances, the services and expertise was provided free of charge.

Having compared and contrasted the various ECD SIBs in operations, the following section provides a conclusion as to their applicability in an emerging market context such as South Africa.

CHAPTER 4

SUMMARY, CONCLUSION AND RECOMMENDATIONS

4.1. Introduction

Based on the content review in the previous sections, this section below provides recommendations for the implementation of SIBs to improve ECD outcomes in an emerging market context.

4.2. Recommendations

The overarching purpose of this investigation is to provide lessons that will help the successful adoption and implementation of an ECD SIB (or DIB) in South Africa. This objective has been accomplished through an examination of the challenges facing South African education and exploring the evolution of both impact investing and public private partnerships. Furthermore, an examination of existing ECD SIBs and DIBs already in existence has provided a deeper understanding of the landscape. These in turn have informed the recommendations provided below.

For SIBs and DIBs to become practical and scalable, especially in a developing economy such as South Africa, which is also facing harsh financial realities, the parties will need to overcome the hurdles of high transaction costs, information asymmetry and complexity.

The primary recommendation is that the contract duration should be short, ideally within 5 years. In reviewing the contract duration for all active SIBs, we see that the average (mean) duration is 48.4 months (refer to Table 1: Active SIBs contract duration variation and standard deviation). However as can be seen from Table 2: Summary of active ECD SIB /

DIB information, the longest active ECD SIB is 60 months (5 years), with the shortest being 20 months. The active ECD SIB average duration is 44 months.

The recommendation implies that the benefits or improved social outcomes must also be evident within this timeframe. Furthermore, this implies repayment to investors in the medium to short term. Consequently monitoring, evaluation and gathering of evidence needs to be focussed to ensure project management and early detection of any potential variances. Given the nascent nature of this form of financing arrangement, it is also likely that stakeholder preference would be for short-term contractual commitments.

A second recommendation would be that due cognisance ought to be given on how to ameliorate high initial costs across a number of these financing mechanisms over time. In terms of a SIB, with government as the outcome funder, this may take the form of government piloting multiple SIBs within one of its departments. In this manner, a level of expertise in managing the complexities can be cultivated. At the same time, a requirement for gathering data, documenting processes and learnings could increase the knowledge base within government for use in other areas. This would firstly reduce multiple government agencies from each undergoing a steep learning curve and secondly allow government to develop policy and practice notes for future implementation and scaling across other agencies.

In terms of a DIB, with donors as outcome funders, this may take the form of donor agencies pooling resources to create a DIB Outcomes Fund as suggested by the Centre for Global Development and Social Finance (Centre for Global Development & Social Finance, 2013).

Complimented with greater transparency, process documentation and information sharing amongst government agencies, donors, recipients and service providers, these might over time reduce transaction costs and lead to the development of more robust and replicable models.

A third recommendation is that investor capital be fully exposed to risk should defined social outcomes not be met. As can be seen in Table 2: Summary of active ECD SIB / DIB information above, in each of the active SIBs / DIBs investor or donor funding is provided at 100% exposure to loss should the interventions fail to achieve the stated and measured outcomes. This is likely to be a key factor in persuading risk averse government agencies to participate.

A fourth recommendation is that the number of outcome funders should be kept to an absolute minimum. As can be seen in Table 2: Summary of active ECD SIB / DIB information, all but one (with two outcome funders) of the active SIBs / DIBs have only one outcome funder. Closely linked to recommendation one above, government should consider concentrating efforts within one of its departments.

The final recommendation is that independent expertise, in the form of tertiary institution involvement, should be encouraged. Drawing on the learnings from the literature review, two of the four active ECD SIBs include the participation of specialist university departments / units. The involvement of higher education specialised units not only brings independent expertise to the process, but also provides an outlet for the dissemination of peer reviewed research findings. This may in turn reduce information asymmetry and grow the body of knowledge and best practice with respect to implementation of SIBs.

The following section suggests areas of future research that may further advance the viable use of SIBs in an emerging market context to improve ECD outcomes and deliver a positive social impact for society.

4.3. Conclusion

Improving education outcomes in South Africa is critical for both the economy and the social and economic upliftment for the majority of its citizens. As a distinct subset of education, ECD interventions have been identified by the South African Department of Basic Education, as a critical component of implementing its strategy to improve the school-readiness of learners. Similarly, the Western Cape Government Department has identified improving education outcomes for its youth as one of its five key strategic objectives. At the same time, the South African economy, in the face of global financial uncertainty, continues to perform well below expectation, with growth struggling to breach the 1% level. Funding for the South African government is therefore restricted, limiting funding even for existing government programmes.

Consequently, both national and provincial government are attuned to improving education outcomes whilst facing significant financial constraints. SIBs present an innovative financing solution through which both national and provincial governments can achieve their objectives, without exposure to financial and performance risk should they elect to proceed with a business as usual approach. The implementation of a SIB in this context is likely to receive widespread support as government / province seek to improve this aspect of social outcomes.

Having concluded that SIBs may be well received as an innovative finance mechanism to improve ECD outcomes in an emerging market, the following Chapter provides recommendations to be considered for their implementation.

4.4. Future Research

This section outlines areas of future study that may advance the improved ECD outcomes in emerging markets through the use of innovative financing mechanisms such as SIBs.

There have been a number of exciting developments in the impact investment arena in South Africa recently. More specifically for SIBs, as an innovative financing mechanism, is the announcement that the Western Cape Government has set aside R 25 million (US \$ 1.62 million) for the development of three SIBs. This will represent the first SIB to be launched in a Lower Middle Income Country (LMIC) / developing market country. The three SIBs will focus on improving ECD and maternal outcomes in the Western Cape (Gardiner & Gustafsson-Wright, 2016).

Given this development, further research into the suitability of SIBs in improving social outcomes would certainly enrich the current dialogue. Possible future research could be conducted in the following areas:

1. The role of Higher Education Institutions

A qualitative study that seeks to understand the role of Higher Education, as thought- leaders, should play in developing and facilitating SIBs. Given that two of the four ECD SIBs in production, as well as the development of the Western Cape SIBs, featured inputs from specialised units within tertiary institutions, it would appear that Higher Education may have a critical role to play.

2. Legal Impediments to SIBs in South Africa

A study that investigates the legal framework (e.g. Public Finance Management Act) under which government contracts with service providers and financiers would highlight the potential legal or regulatory impediments facing SIBs.

3. Measuring Impact – Cost Savings

A quantitative investigation into achievable cost savings to government, would reduce information asymmetry and potentially facilitate a greater willingness by investors and government to enter into SIB arrangements.

4. Measuring Impact – Social Impact

An investigation and development of impact assessment models appropriate to a developing economy setting may provide a better set of monitoring and evaluating metrics to assess impact.

5. Higher Education Institutions as Outcome Funders

As noted earlier in this study, access to education in South Africa is widespread. The problem is the quality of education in the vast majority of schools is poor. Primarily the majority of black school leavers are inadequately prepared for university studies. Incidence of dropouts,

repeat years or need to enrol on extended degree programmes are high. This in turn drives up operating costs for Universities. Universities are also likely to have robust data as to the additional costs incurred. Consequently, a quantitative investigation into potential cost savings for universities, may justify their consideration of taking on a role as outcome funders in a SIB financing construction to improve the quality of 1st year intake cohorts.

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APPENDIX 1

Number	Social Impact Bond Name	Country	Social Issue Area	Year	Length (Months)
1.00	Newpin SBB	Australia	Foster Care Avoidance	2013	87
2.00	Benevolent Society SBB	Australia	Foster Care Avoidance	2013	60
3.00	Duo for a Job	Belgium	Employment	2014	24
4.00	Sweet Dreams	Canada	Foster Care Avoidance	2014	60
5.00	Eleven Augsburg	Germany	Youth Employment and Education	2013	24
6.00	Educate Girls	India	Youth Employment and Education	2014	48
7.00	Homelessness Interventions Limited	Ireland	Homelessness	2016	12
8.00	Buzzinezzclub	Netherlands	Youth Employment and Education	2013	48
9.00	Colour Kitchen	Netherlands	Youth Employment and Education	2015	48
10.00	Code Academy Jr	Portugal	Youth Employment and Education	2015	20
11.00	Seoul SIB	South Korea	Early Childhood Development	2015	36
12.00	ONE Service	United Kingdom	Recidivism	2010	72
13.00	Triodos New Horizons	United Kingdom	Youth Employment and Education	2012	36
14.00	Nottingham Futures	United Kingdom	Youth Employment and Education	2012	36
15.00	Living Balance	United Kingdom	Youth Employment and Education	2012	36
16.00	Thinkforward	United Kingdom	Youth Employment and Education	2012	36
17.00	T & T Innovation	United Kingdom	Youth Employment and Education	2012	36
18.00	Links 4 Life	United Kingdom	Youth Employment and Education	2012	36
19.00	Advance Programme	United Kingdom	Youth Employment and Education	2012	36
20.00	Street Impact	United Kingdom	Homelessness	2012	36
21.00	Thames Reach Ace	United Kingdom	Homelessness	2012	36
22.00	Prevista	United Kingdom	Youth Employment and Education	2012	36
23.00	3SC Capitalise Programme	United Kingdom	Youth Employment and Education	2012	36
24.00	Energise Innovation	United Kingdom	Youth Employment and Education	2012	36

Number	Social Impact Bond Name	Country	Social Issue Area	Year	Length (Months)
25.00	Essex Family Therapy	United Kingdom	Foster Care Avoidance	2012	96
26.00	It's All About Me	United Kingdom	Foster Care Avoidance	2013	120
27.00	Outcomes for Children	United Kingdom	Foster Care Avoidance	2014	48
28.00	Manchester City Council Vulnerable Children	United Kingdom	Foster Care Avoidance	2014	60
29.00	Ambition East Midlands	United Kingdom	Youth Homelessness	2014	36
30.00	Rewriting Futures	United Kingdom	Youth Homelessness	2014	36
31.00	Aspire Gloucester	United Kingdom	Youth Homelessness	2014	36
32.00	Local Solutions	United Kingdom	Youth Homelessness	2014	36
33.00	Home Group	United Kingdom	Youth Homelessness	2014	36
34.00	Fusion Housing	United Kingdom	Youth Homelessness	2014	36
35.00	Your Chance	United Kingdom	Youth Homelessness	2014	36
36.00	Unlocking Potential	United Kingdom	Youth Employment and Education	2015	36
37.00	Prevista	United Kingdom	Youth Employment and Education	2015	36
38.00	Futureshapers Sheffield Ltd.	United Kingdom	Youth Employment and Education	2015	36
39.00	Teens and Toddlers Youth Engagement	United Kingdom	Youth Employment and Education	2015	36
40.00	Ways to Wellness Ltd	United Kingdom	Healthcare	2015	84
41.00	NYC ABLÉ Project (Rikers)	United States	Youth Employment and Education	2012	48
42.00	Utah High Quality Preschool Program	United States	Early Childhood Development	2013	60
43.00	New York State SIB	United States	Recidivism	2013	66
44.00	Juvenile Justice Pay For Success Initiative	United States	Recidivism	2014	84
45.00	Chronic Individual Homelessness Pay for Success Initiative	United States	Homelessness	2014	72
46.00	Partnering for Family Success	United States	Homelessness	2014	60
47.00	Chicago Public Schools	United States	Early Childhood Development	2014	48
48.00	Reconnections Ltd.	United Kingdom	Healthcare	2015	0
49.00	Project Welcome Home	United States	Homelessness	2014	72
50.00	Richmond	United States	Other	2015	60
51.00	Alumah Association	Israel	Youth Employment and Education	2015	96
52.00	Epiqus	Finland	Healthcare	2015	36
53.00	Juvat	Austria	Employment	2015	36
54.00	Fokus Bern	Switzerland	Employment	2015	60
55.00	Coalition for Supportive Housing	United States	Homelessness	2016	60
56.00	Nurse Family Partnership	United States	Healthcare	2016	72
57.00	Connecticut Family Stability Project	United States	Foster Care Avoidance	2016	54

Table 5: Summary data of active SIBs

Source: (Finance for the Good, 2016; Gustafsson-Wright et al., 2015)