Evaluation of the Social Impact Bond Trailblazers in Health and Social Care
Appendices

Alec Fraser, Stefanie Tan, Kristy Kruithof, Megan Sim, Emma Disley, Chris Giacomantonio, Mylene Lagarde and Nicholas Mays

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Appendices

Publications arising from the report
Appendix 1: Narratives of promise, narratives of caution: A review of the literature on Social Impact Bonds
Appendix 2: Grant-Maximizing but not Money-Making: A Simple Decision-Tree Analysis for Social Impact Bonds

Interview documents
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Appendix 1. Narratives of promise, narratives of caution: A review of the literature on Social Impact Bonds

A literature review of academic, governmental and practitioner publications globally. The citation for this publication is:

Narratives of Promise, Narratives of Caution: A Review of the Literature on Social Impact Bonds

Alec Fraser, Stefanie Tan, Mylene Lagarde and Nicholas Mays

Policy Innovation Research Unit, Department of Health Services Research & Policy, London School of Hygiene & Tropical Medicine, London, UK

Abstract

Social Impact Bonds (SIBs) are a new mechanism for delivering public services. This article reviews the emerging SIB literature in high-income settings. It identifies three distinct narratives: a public sector reform narrative; a financial sector reform narrative; and a cautionary narrative. These are analyzed relative to three themes: public versus private values; outcomes contracting; and risk allocation. The first two narratives are complementary and offer a ‘win-win’ portrayal of SIBs. The third narrative challenges this dominant commentary by highlighting potential risks. There is limited empirical evidence on active SIBs to support these narratives. SIBs may have the potential to align public and private interests while improving outcomes for people affected by entrenched social problems, but this is yet to be established and appears less probable than the third more cautionary narrative. More empirical research is needed to consider the potential risks, drawbacks, benefits and alternatives of SIBs in different settings.

Keywords

Social Impact Bonds; Public sector reform; Outcomes-based performance management; Social entrepreneurship

Introduction

Social Impact Bonds (SIBs) are a new mechanism for the delivery of public services. SIBs usually involve four different parties: commissioners – normally central or local government bodies responsible for ensuring relevant services are made available to target populations; service providers who will deliver the services commissioned; external investors who cover (all or some of) the upfront costs of service provision, in exchange for a commitment by commissioners to re-pay their initial investment plus a return if pre-defined target outcomes are achieved.

Author Emails: alec.fraser@lshtm.ac.uk; stefanie.tan@lshtm.ac.uk; mylene.lagarde@lshtm.ac.uk; nicholas.mays@lshtm.ac.uk

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achieved; and specialist intermediaries who are often involved in developing the project, securing the contract with commissioners, facilitating investment and managing the project’s delivery. Given the emphasis on outcomes, a SIB contract can specify the appointment of an independent evaluator responsible for measuring the effects of the intervention provided to the target population compared with a control population not receiving the service.

The term ‘Social Impact Bond’ is misleading. SIBs do not follow the financial logic of a ‘bond’, as the return is contingent, rather like equity, on the out-turn of the projects being financed. And there is as yet no indication that any significant financial market for SIBs may develop between financiers, after the project is initially established. SIBs frequently focus on the prevention or reduction of challenging social problems – e.g. reducing crime through targeted anti-recidivism programmes – as in Peterborough in the UK (Disley et al. 2011) and Rikers Island in the USA (Rudd et al. 2013), reducing youth unemployment rates by improving young people’s skills, as in Nottingham and London in the UK (DWP 2014), Utah in the USA, and Rotterdam in the Netherlands (Goodall 2014) or reducing loneliness amongst the elderly through befriending schemes as in Worcester in the UK (Tan et al. 2015). The emphasis on prevention relates in large part to the idea that all or part of the pay-out by the public commissioner to the investor will be funded from actual or hypothetical ‘savings’ in public service budgets generated by improving outcomes (e.g. lower recidivism rates will accrue savings in police, courts, prison, probation, etc.). Those who invest may be seeking a financial or social return on their investment – in reality, these goals may or may not be aligned. Opinion is divided with both enthusiasm and caution around the potential that SIBs may hold for financing complex social interventions and reallocating performance and financial risk from the public towards the private sector. For some, the SIB represents, in theory, a solution to postulated public sector sluggishness by introducing private sector entrepreneurship and linking the traditionally separate private financial and social services sectors (Mulgan et al. 2011; Cohen 2011). For others, it represents the worst of both sectors, involving the ‘financialization’ (a process whereby both macro-economic and public policy-making are subordinated to financial sector interests) of the public sector (Lake 2015; Dowling and Harvie 2014) and perverse incentivization of the philanthropic and non-profit sectors to pursue commercial interests over their social missions (McHugh et al. 2013), as well as the risk that the public sector will encourage commercial investors to make social investments by offering excessively generous terms. Moreover, it is possible that the subcontracted service will be suboptimal compared to a publicly provided service (Mullins et al. 2011).

There are now 32 active SIB projects in the UK (Cabinet Office 2016), and over 100 other SIB projects have been planned or started around the world (Vanderwal 2015) since the first SIB was launched at Her Majesty’s Prison Peterborough in the UK in 2010. There is significant international policy interest in SIBs, and a growing commentary is emerging about SIBs from proponents, participants, observers and critics. SIBs have split opinion since they emerged from UK Prime Minister Gordon Brown’s Council on Social Action in 2007. This article comprehensively reviews the theoretical
and empirical academic, and ‘grey’ literature on SIBs for the first time, and provides a ‘Critical Interpretive Synthesis’ (Dixon-Woods et al. 2006) of the emerging concepts and narratives that underpin this developing policy area. The review explores two research questions. First, what are the main themes and concepts within the emergent literature on SIBs? Second, what broader theories, or lines of argument, do different groups writing about SIBs in recent years draw upon?

Methods

Both academic and ‘grey’ literature were included since this is a novel field and it was important to synthesize as much of the available literature as possible. Following an initial discussion amongst the research team, and an informal review of pieces of ‘grey’ and academic literature about SIBs already known to the team, two search strategies were used to locate the remaining literature. First, a list of search terms was devised to include the different labels used internationally for SIBs. These terms were then used to search a selection of electronic databases chosen for their coverage of both academic and grey literature. Details of the search terms and databases are given in table 1.

The search was conducted in March 2015 with no time or language filters. No non-English language papers were found. Nothing was found published before 2009. Overall, 51,293 references were retrieved. Of these, 406 deemed potentially relevant based on their titles were downloaded into Endnote and duplicates were removed. The abstracts and keywords of these 406 papers were read and screened during April and May 2015 allowing the exclusion of: (1) articles that did not refer to SIBs or any of our other search terms in their title, abstract or keywords; (2) those that focused on related concepts (e.g. impact investing, Development Impact Bonds) but did not refer to SIBs or other similar terms in the body of the text. For example, we chose to

<table>
<thead>
<tr>
<th>Search terms</th>
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<tr>
<td>‘social impact bond’</td>
<td>IBSS, CINAHL, Cochrane Library, EMBASE,</td>
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<tr>
<td>social AND impact AND bond</td>
<td>ERIC, Ethos, Global Health, GreenFILE, Health</td>
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<tr>
<td>‘pay* for success bond*’</td>
<td>Systems Evidence, HEED, HMIc, NCJRS,</td>
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<td>‘pay* for success contract*’</td>
<td>NBER, NICE (evidence search), Open Grey,</td>
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<td>‘development impact bond*’</td>
<td>Pubmed, Scopus, Social Policy &amp; Practice, Web</td>
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<td>‘impact invest*’</td>
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<td>‘impact-first invest*’</td>
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Table 1

Search strategy for literature review
focus on high-income countries’ experiences because their actors and social problems are significantly different from low or middle-income countries thus reducing the relevance of Development Impact Bonds; and (3) those which referred to SIBs or related terms in the body of the text but were considered not to be analyzing SIBs in sufficient depth when reviewed by two members of the research team (Alec Fraser and Stefanie Tan). For example, a number of sources referred to SIBs only in passing (i.e. on fewer than three occasions in the text). Based on this screening, we identified a total of 87 papers for synthesis, comprising 34 academic articles and 53 pieces of ‘grey literature’.

We performed a further search based on the reference lists of these 87 selected papers and also received additional recommendations from experts which identified a further 14 papers (four academic and ten ‘grey’) giving a total of 101 references (38 academic and 63 grey literature papers). Two members of the research team then read each paper. Since this was primarily an interpretive and conceptual review of a new field, there was no assessment of the quality of studies. From each paper, we extracted information on the place and date of publication, main focus, study design (where empirical), methods used and key points made. Through an iterative process of reading, re-reading and discussing the included primary sources, a number of themes, concepts and narratives began to emerge which were intellectually linked to broader theories of New Public Management (NPM) (Hood 1991; Ferlie et al. 1996) and social entrepreneurship (Porter and Kramer 2006; Bugg-Levine and Emerson 2011).

Results

Description of studies identified

All 38 academic papers identified (see Appendix table A1 which shows the different narratives which these publications develop) were very recent (published since 2011), with the majority emanating from English speaking countries (23 from the USA, 11 from the UK, three from Canada, and one from Australia). Likewise, the 63 ‘grey’ sources (see Appendix table A2 which shows the different narratives and the sectors from which these publications emerge) were very recent, all published since 2010. The vast majority of these came from the UK (38) and the USA (16). The grey sources included publications by think tanks (eight), consultancies – including practitioner, intermediary and investment organizations such as Social Finance, an intermediary organization involved in promoting and running SIBs in the UK (13), government, or government-affiliated organizations (14), civil society organizations, including charities (six) and others – e.g. non-peer-reviewed academic reports and speeches (eight). The majority of papers – both academic and grey – described or commented on SIBs in theoretical terms. There were however, 14 publications (mostly located in the ‘grey’ literature) describing the early implementation of SIBs or characteristics of SIBs (see Appendix table A3 which summarizes the empirical research). Of the 13 qualitative sources on active or proposed SIBs, nine were from the UK, three from the USA and one from Australia. We found just one quantitative study reporting on SIB outcomes.
Cross-cutting themes and narratives. We identified three major themes in the literature. The first relates to competing public and private values. Whilst the concept of competing public and private values is contested and dynamic in both theoretical and ideological terms (Noordegraaf and Abma 2003), ‘public values’ (Beck Jørgensen and Bozeman 2007) and ‘private values’ (Watson et al. 2004) have been analyzed across organizations. Empirical comparative work by Van der Wal et al. (2008) identified both differences and similarities between values espoused within public and private sector organizations in the Netherlands. They found that:

‘lawfulness’, ‘impartiality’ and ‘incorruptibility’ were considered the most important public sector values and were absent from business’ [private sector’s] top values. ‘Profitability’ and ‘innovativeness’ were at the top of business values and absent from the public sector’s top values. ‘Profitability’ according to this measure could even be considered the least important public sector value. (Van der Wal et al. 2008: 473)

SIBs (through both new funding mechanisms and new service delivery relationships) may challenge not only the values supporting the historic ways in which services have been delivered by public, non-profit and voluntary providers (through clearer outcomes specifications), but also the logics and normative assumptions of the private financial services sector (Moore et al. 2012; Nicholls and Murdock 2012). This raises questions about the extent to which the public sphere should be influenced by private sector values such as profitability and aligned techniques for resource allocation such as competition, market incentives, diversity of providers and new forms of investment, and, in turn, whether the dominant values and resource allocation techniques of the financial services sector should be reoriented towards more socially minded, ‘blended returns’ rather than traditional profit maximization.

The second theme relates to the introduction of, or increased primacy given to, outcome measurement in public services’ contracting as a result of financing mechanisms such as SIBs. Whilst there are conflicting views about the utility derived from, and the impacts of, new regimes of measurement outside the SIB literature, both proponents and critics of SIBs tend to be in broad (though not universal) agreement about the potential benefits of a shift to outcomes-focused measurement. The third theme relates to the transfer and calculation of risk amongst different actors through SIB mechanisms, and the ideological and practical implications that this may have for specific services and policy more broadly.

Through the interrogation of these themes, we identified emerging ‘lines of argument’ (Dixon-Woods et al. 2006); that is, broader, theoretically distinct narratives that differentiate the approaches taken by groups of authors and policy actors. This was a reflexive, iterative process and involved going beyond the SIB-specific texts into the wider theoretical literature in accordance with the principles of interpretive synthesis (Dixon-Woods et al. 2006). We identified three theoretically distinct narratives about SIBs: a public sector reform narrative located within broader theories of NPM; a private
financial sector reform narrative located within broader theories of social entrepreneurship; and a cautionary narrative sceptical of public and financial sector developments such as NPM and social entrepreneurship, and thus of SIBs. There are some significant elements of convergence between the first two narratives (see Appendix table A2) which dominate the grey literature and highlight the political salience of SIBs and how they have come to be seen as ‘win-win’ options by some proponents, particularly in the context of public sector financial austerity in the UK following the 2008 financial crisis. In contrast, the third cautionary narrative was more prevalent within the academic literature, and diverges from the first two by taking a more critical view of SIBs on pragmatic and ideological grounds (see Appendix table A1). These three narratives are described and explored in relation to the three themes of values, outcomes measurement and risk, identified above.

The public sector reform narrative. This narrative starts from the premise that public, non-profit and voluntary sector organizations have important shortcomings in terms of service design, delivery and accountability, and have so far been unable to find solutions to entrenched social problems. Public sector reform advocates therefore promote the application of private sector management techniques and values, such as introducing market incentives and ‘market discipline’ to remedy these issues (Mulgan et al. 2011; HM Government 2011, 2013; Liebman 2011). From this perspective, SIBs relate to a belief in the exposure of more activities to competitive tendering and the application of private sector-influenced audit systems (Power 1999), as well as the fostering of entrepreneurship in the public sector (Osborne and Gaebler 1992). For example, Ronald Cohen, one of the main UK advocates of SIBs, argues that ‘[S]ocial enterprise and impact investment could dramatically change the role of the social sector in the way that venture capital and business entrepreneurship did in mainstream business in the 1980s and 1990s’ (Cohen 2011). Whilst this view aligns with ‘pro-market’ and NPM values (Hood 1991; Ferlie et al. 1996), SIBs (as part of a broader trend towards innovation in service delivery and socially-minded investment) go further by creating the space for the potential symbiosis between the public, private, non-profit and voluntary sectors. For example, Callanan and Law (2012), in a report produced by McKinsey & Company, amongst the earliest such reports from the consultancy sector, emphasize that social innovation occurs ‘at the intersection of the public, private, and social sectors’. From this perspective, the opportunity offered by SIBs to merge public and private values is seen as advantageous.

The public sector reform narrative presents SIBs as an extension of outcomes-based contracting and payment for performance in public services (Lagarde et al. 2013). The aim of outcomes-based contracting is to incentivize managers and service providers through performance pay or outcomes payments which reflect the extent to which pre-agreed metrics of success are achieved. Thus, SIB contracts create a mechanism to improve the ways in
which non-profit and voluntary sector organizations measure their performance (Cox 2011; Liebman 2011), and, in theory, they introduce greater accountability between commissioners and service providers by setting clearer expectations of what funds will be used to achieve (Stoesz 2014). Grey literature produced by individual charities and umbrella groups emphasizes how SIBs may offer them strategic opportunities to innovate, collaborate, and capitalize upon the changed economic and policy context following the banking crisis of 2008 and subsequent public spending cuts through increased engagement with intermediary organizations, and a focus on outcomes and measurement on the part of commissioners (Fitzpatrick and Thorne 2010; Griffiths and Meinicke 2014; Joy et al. 2011; Seymour 2010; Roberts 2013; Thomas 2013; Eames et al. 2014). Outcomes-based contracts tend to be longer term than the traditional block service contracts offered directly to service providers, so a proposed advantage of SIBs is that they offer more financial stability to non-profit and voluntary sector organizations delivering these services. Moreover, as the contracts are outcomes- not process-based, it is said that they can lead to increased innovation and greater personalization of services (Social Enterprise UK 2013; Leventhal 2012; Jackson 2013; Clark et al. 2014).

The public sector reform narrative also highlights the potential for SIBs to transfer the financial risk of failure for interventions – that might otherwise be seen as too experimental or risky for traditional forms of public funding – from the state to private/social investors. This is said to be appealing as the state does not need, in theory, to release any public funds unless projects demonstrate success and, even then, payments should come out of savings to public budgets as a direct result of the SIB-financed intervention through the prevention of ‘downstream’ social problems (Mulgan et al. 2011; Social Finance 2011b; Callanan and Law 2012; Rotheroe et al. 2013). This argument is frequently articulated in UK government publications, which particularly stress the potential virtues of SIBs by emphasizing how they may foster innovation, and prevent or ameliorate complex social problems. These potential benefits are seen as particularly salient in the contemporary policy climate, given the current cuts in public spending on public services in the UK (Griffiths and Meinicke 2014; Dodd and Moody 2011; Jackson 2013; Young Foundation and NESTA 2011), because SIBs have the potential to transfer risk from the public sector to the private sector (HM Government 2011, 2013; Cabinet Office 2013).

The private financial sector reform narrative. The financial sector reform narrative adopts the perspective of private actors. It proposes that blending public and private values will offer private sector actors (particularly financial institutions) an opportunity to effect socially worthwhile change through social entrepreneurship whilst simultaneously pursuing commercial interests (Social Investment Task Force 2010; Cohen 2011; Liebman, 2011; Mosenson 2013; Nicholls and Murdock 2012; Moore et al. 2012). Advocates of social entrepreneurship see this as part of a wider move towards more socially responsible investment and business practices globally.
(Porter and Kramer 2006; Bugg-Levine and Emerson 2011). Through a demonstration of its social usefulness, it is argued that the anti-social, dangerous aspects of financial capitalism may be offset (Shiller 2013), and SIBs may enable investors to improve their public image (Barajas et al. 2014). Whilst this aligns with conventional notions of corporate social responsibility, social entrepreneurship’s proponents and observers suggest that there needs to be a more fundamental cultural change in approaches to investment, to which SIBs could contribute (Nicholls 2013). Social impact investing through SIBs also offers a new potential revenue stream for private financiers (Wilson 2014). If and where SIBs might prove to be effective, they will also supply investors with a return on their investment, which, whilst theoretically being based on ‘savings’, nevertheless comes from public funds. Thus the private financial sector could gain access to more public funds in a similar way to the Private Finance Initiative (PFI), a type of contract popular in the UK introduced in the 1990s allowing private finance to fund capital investment in public infrastructure projects (e.g. new hospitals and prisons) (Sussex 2001) and other mechanisms of private contracting for public services. The commentary on SIBs suggests that such access to public revenue streams could be made lucrative if they were included in risk-adjusted portfolios destined for the social or impact investment market (Lehner and Brandstetter 2014).

The financial sector reform narrative emphasizes the expertise that new players such as management consultancies and specialist intermediaries, in particular, may bring in linking public, private, non-profit and voluntary sector actors for a fee. These intermediaries are seen as crucial to the implementation of SIBs (Bafford 2012; Haffar 2014). For example, they are expected to bring enhanced data monitoring techniques and skills to non-profit and voluntary sector providers which have traditionally been thought to have limited capacity to monitor their own behaviour and validate achieved outcomes (Callanan and Law 2012). The central importance of extensive, ongoing performance monitoring and concurrent independent evaluation by external actors is emphasized in the literature by many authors as a way of ensuring that outcome payments are earned in a valid and attributable way (Cox 2011; Burand 2012; Leventhal 2012; Nicholls 2013).

The financial sector reform narrative further articulates a strong desire to see the social impact investment market ‘grow’ (HM Government 2011, 2013; Liebman 2011; Cohen 2011; Clark et al. 2014). However, there is a distinction between those who see SIBs as a niche for pro-social investors who will take higher risks and smaller returns, in contrast to those who desire guaranteed returns or higher yields in the evolving social investment field. A number of authors suggest that if social investment and social entrepreneurship are to grow beyond their niche status, there needs to be greater standardization in how social impact is measured, communicated, and assessed for risk (Antadze and Westley 2012; Nicholls 2013), for example, through the use of instruments such as the Global Impact Investing Rating System, and Impact Investing and Reporting Standards (Bugg-Levine and Emerson 2011). Liebman (2011), a key proponent of SIBs, sees them as an ‘impact first’
opportunity for potential investors (in which the primary aim is a social return on investment), rather than a ‘finance first’ opportunity (in which the primary aim is a financial return on investment). Nevertheless, a significant strand of this literature focuses on how the risk to investors can be made sufficiently attractive to incentivize them to invest in the nascent market. These discussions focus on ways to reduce the level, and uncertainty, of the risk to investors (Bafford 2012; Cox 2011; Burand 2012; Leventhal 2012; Dagher 2013; Shiller 2013).

The cautionary narrative

In contrast to the generally positive public sector and private sector reform narratives, the cautionary narrative questions the appropriateness of ‘private sector’ values and mechanisms in the field of public services. A number of authors suggest that SIBs represent a further extension of neo-liberal logic in public policy making (Warner 2012, 2013; Whitfield 2012; McHugh et al. 2013; Malcolmson 2014; Sinclair et al. 2014). Lake (2015), for example, draws on the notion of financialization to highlight the destructive potential of SIB logic in urban policy-making in the USA. Financialization is the process whereby both macro-economic and public policy-making are subordinated to financial sector interests. In this way, public policy simply exists to support, stabilize or expand the economy rather than to meet social needs (Lake 2015). For a number of authors, SIBs represent the inappropriate intrusion of private sector and financialized values in social policy, and a reversion to pre-welfare state methods of service funding and provision. Dowling and Harvie (2014) discuss the rise of SIBs in the context of the 2010–15 UK government’s Big Society agenda. These voices are also critical of the financial and intermediary organizations at the vanguard of ‘venture philanthropy’ and the way that the SIB social investment model utilizes (often unpaid) charitable work for social ends whilst also pursuing profit for investors (Dowling and Harvie 2014).

SIBs are also criticized for diminishing transparency in the use of public funds. Warner (2012) emphasizes the relative ‘openness’ of public sector contract making and contrasts this with the closed nature of private sector contracts such as SIBs that are not publicly disclosed for reasons of commercial sensitivity. She suggests that a degree of public oversight is essential to ensure accountability to citizens and taxpayers in relation to these contracts, as private sector investors or providers may place profit motives above the interests of service recipients. Others have expressed concerns that allowing private financiers to foster a competitive ethos and introduce performance management regimes to non-profit and voluntary sector provider organizations may lead to a diminution, or distortion, of their social mission (Joy and Shields 2013). These critics also stress that, in the worst case, these contracts may be a precursor to the full privatization of service provision and can diminish the advocacy roles that non-profit organizations play in civil society because a reliance on long-term government sanctioned contracts may ultimately impinge on their independence (McHugh et al. 2013; Whitfield 2012; Joy and Shields 2013).
For the most part, the cautionary narrative is favourably disposed, in principle, to the focus on outcomes-based contracting central to SIBs. Fox and Albertson have written extensively on SIBs and their application to the criminal justice sector and probation services in the UK (Fox and Albertson 2011, 2012; Fox et al. 2013), and suggest that a strength of SIBs is that, by reducing reliance on process measurement, they challenge the output ‘target culture’ associated with the NPM. Indeed, from this perspective, the shift from process to outcome measures aligns SIBs to an ‘evidence-based’ approach where what matters is what works (Deering 2014). However, there is recognition that outcome measures need to be very carefully defined and calibrated by commissioners, providers and investors (Warner 2012, 2013). The focus on measurement also raises significant questions about the attribution of outcomes to the actions of providers and financiers, and how any ‘SIB effect’ can adequately be interpreted and validated (Fox and Albertson 2011; Fitzgerald 2013; McHugh et al. 2013; Sinclair et al. 2014).

Lastly, the cautionary narrative emphasizes the problems inherent in calculating risk in SIB contracts. McKay (2013a, 2013b) evaluated a number of risk-cost scenarios in a proposed SIB in Maryland aimed at reducing recidivism, and concluded that, in this setting, the government would increase operational risks by using a SIB model through increased transactions costs and greater contractual complexity. Pauly and Swanson (2013) suggest that risk calculations are likely to be highly context-specific, making it difficult to benefit from the accumulation of past experience in SIB investing, thereby maintaining the complexity of the process of establishing SIBs. SIB projects in the UK have benefited from government support – e.g. through the Social Outcomes Fund, Commissioning Better Outcomes Fund, Fair Chance Fund, Innovation Fund and Youth Engagement Fund (Cabinet Office 2015). Famously, the New York Rikers Island SIB project was underwritten by Bloomberg philanthropy in order to secure Goldman Sachs’ investment (Warner 2012). This suggests that private sector investors may be more risk-averse than some SIB proponents have claimed, and are likely to require government or philanthropic funds to guarantee, or underwrite their investment, to reduce their financial risk if they choose to invest in a SIB.

**Early empirical findings**

In this section, we report findings from 14 mainly qualitative studies reporting on SIB projects, mostly from the UK and the USA (see Appendix table A3 for details of the actual and prospective SIB projects described). Many of these early empirical studies were funded by government agencies keen to explore SIBs as an innovative option for public sector reform. Reflecting this, the studies are largely framed within the public sector reform narrative in that they focus on how services funded through a SIB may foster innovation and improvements in outcomes in policy areas where previous public or non-profit and voluntary sector provision was deemed problematic.
The process evaluations of SIBs in different countries and policy areas have identified a considerable number of challenges associated with setting up SIBs and establishing outcomes-based contracts. First, they frequently point to the difficulty of agreeing what should be measured in the contracts – by whom and how often – as well as the length of time needed to establish SIB contracts among the parties involved (KPMG 2014; Tan et al. 2015; DWP 2014; DCLG 2014, 2015; Disley et al. 2011). This literature reflects on the potential difficulties of the negotiations surrounding SIB outcomes-based contracts. These challenges are attributed to a combination of the intrinsic complexity of SIBs; the novelty of the process; how SIBs often involve innovative services; and the fact that contracting for outcomes raises new issues for the actors involved and requires substantial discussions to account for all possible contingencies. The reports on the SIB at Peterborough Prison in the UK highlighted the extent of the discussions that continued even after the contract had been signed (Disley et al. 2011; Disley and Rubin 2014), specifically relating to the statistical methods used to measure outcomes, the definition of the beneficiaries, the limitations of the data on outcomes (Jolliffe and Hedderman, 2014), and the need to account for changing circumstances over time (Disley et al. 2011; Disley and Rubin 2014). More recent empirical studies of UK pilot SIBs suggest that robust counterfactual groups are often hard to find and thus not prevalent in approaches to evaluating or measuring their outcomes (Tan et al. 2015; DWP 2014). This has also been highlighted as a growing problem for SIB development in the USA (Butler et al. 2013).

Discussion

This review has brought together the academic and ‘grey’ literature on SIBs from high-income countries in the form of an interpretive synthesis. Overall, there is a paucity of evidence about SIBs – most of the material identified is best described as commentary. Nevertheless, we identified three main themes in the 101 sources which met the inclusion criteria – the role of public versus private values, the importance of outcomes contracting, and the problematic nature of calculating and allocating risk for SIB projects. We also identified three distinct narratives in the literature on SIBs – a public sector reform narrative, a private financial sector reform narrative and a cautionary narrative. The small number of predominantly qualitative empirical studies of SIB projects (under development and signed) focused on difficulties in establishing SIBs and determining measurable outcomes. In this final section, we reflect on the appeal of SIBs for policymakers and analyze the respective plausibility and relative logic of each of our three identified narratives; next, we question what the enthusiasm of policymakers may overlook; and, lastly, we highlight issues that policymakers may wish to consider carefully as SIBs develop.

In recent years, SIBs have spread across a range of public policy domains in a number of countries, promoted on the basis that they can offer ‘win-win’ solutions to governments, investors, service providers and service users. The
appeal of SIBs as a financing mechanism aligns with the wider public sector reform goals of the NPM movement (Warner 2012). Paying for outcomes achieved rather than relying on process measures or upfront payments for services delivered is part of a longer-term trend to increase accountability through reimbursement tools that enable explicit performance measurement. Furthermore, for its proponents, the SIB represents a fresh alignment or collaboration between private finance, non-government providers and public service commissioners which cuts through traditional public, private and non-profit barriers (Callanan and Law 2012). For policymakers, the logic of the SIB lies in the potential it may hold to foster greater financial sector involvement with respect to both financing and knowledge exchange to augment public and non-profit service delivery.

In the absence of much empirical data, very little quantitative evaluation of impacts versus the status quo and the fact that most operational SIBs are in the early implementation stage, we are left to assess the respective plausibility of each of these narratives from what is already known in related fields. The public sector reform narrative can appear plausible (e.g. to policy makers and commissioners of services) provided one is confident in the superior effectiveness of third and private sector providers and the superiority of outcomes-based contracts over more conventional forms. However, the evidence suggests that use of other than public sector providers is no guarantee of superior performance (Dunleavy et al. 2006) and that performance-related contracts have mixed success (NAO 2015). The financial sector reform narrative is likely to underestimate the tension between the aims and objectives of ‘finance first’ and ‘impact first’ investment models, as well as the many challenges involved in tackling complex social problems, which may not necessarily be solved more cost-effectively by better management or private sector expertise.

By contrast, the cautionary narrative emanating mostly from actors not directly party to SIB market development, is currently closest to the limited evidence available (Tan et al. 2015) since it identifies the new challenges created by SIBs which can be seen in the research on SIB implementation. While private financing via SIBs might help commissioners manage the financial risks associated with commissioning innovative responses to embedded social problems, they are still faced with the operational and reputational risks associated with failure since the responsibility for tackling these issues ultimately rests with the public commissioner. From this perspective, the benefits of SIBs may be more limited than anticipated.

The enthusiasm some policymakers have for SIBs may overlook some problematic issues with the policy. First, as highlighted above, performance-related funding of service providers is no panacea for poor service delivery (NAO 2015) and there is limited empirical evidence that payment for performance or payment by results delivers better outcomes than conventional reimbursement methods when applied to public services (Lagarde et al. 2013). This has been explored in health at the primary (Campbell et al. 2007) and secondary health care level (Kristensen et al. 2013), and also in education (Podgursky and Springer 2007). There is also much evidence on UK government outsourcing and subcontracting that
highlights serious failures therein (King and Crewe 2014). Furthermore, authors such as Mazzucato (2013) highlight the relative superiority of the public sector to innovate and take risks. Second, it is possible that over time, outcome measures may develop their own ‘tyrannical’ implications just as process measures did for professionals and service providers previously, where the need to work towards specified outcome metrics may come to be seen as targets that dominate performance management regimes. Third, as already highlighted in the early SIBs, there is potential for creaming or more explicit ‘gaming’ (DWP 2014), especially if outcomes or the target population are not carefully specified in a SIB contract. Fourth, SIBs may side-line service user interests and pose questions around democratic accountability (Joy and Shields 2013; Warner 2013). Lastly, it is not known what the impact of financial incentives will be on service delivery organizations, particularly on the organizational missions or ethos of non-profit service providers (Joy and Shields 2013), however, there is reason to be circumspect (Stout 2014). Furthermore, whilst commissioners can indeed defer payments for services using SIBs, they will still have to budget to pay in the end since they cannot guarantee that savings equal to the outcome premia will necessarily be realized even if outcome targets are met, and might (as with the PFI experience in the UK) end up paying more than if they had commissioned the service in a more conventional way. Many of the savings in SIB schemes appear to be based on hypothetical rather than real cost reductions, are complicated to calculate and in the absence of (quasi) experimental impact evaluations, hard to attribute (Tan et al. 2015).

Given these issues, it remains important that policymakers considering a SIB contract make a realistic ex ante assessment of the likely benefits and drawbacks of a SIB in each case rather than assuming that any SIB will deliver a ‘win-win’ solution. To date, across all active SIBs, there has been very little rigorous counterfactual comparison of SIBs versus alternative methods of finance to deliver the same service to the same type of users, and thus a lack of evidence of costs and benefits compared with the alternative approach to procurement. Given that SIBs are expected to bring more rigour in measurement and performance monitoring to the non-profit and voluntary sector, the lack of quantitative data and evidenced cashable savings is worrying. It is hoped that the future implementation of SIBs will allow researchers to assess whether, and, if so, the extent to which, SIBs bring about the benefits espoused by their proponents and how this is done. This may be achieved through longitudinal comparative mixed-method studies of the same services provided by the same providers through SIB and non-SIB funding mechanisms, for example, by drawing on in-depth qualitative interviews with service users, provider organizations, commissioners, intermediaries and investors. It will also require detailed examination of SIB contracts and access to high quality quantitative data about the target population, and ideally, also a counterfactual group, and where possible, randomized controlled trials. There is a need for careful ex ante consideration of the complex balance of risks, drawbacks and benefits in each case, and far more empirical studies ex post.
### Table AI

Academic papers included in the Review

<table>
<thead>
<tr>
<th>Narrative/concept</th>
<th>Public sector reform narrative</th>
<th>Financial sector reform narrative</th>
<th>Cautionary narrative</th>
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<td>Lake (2015)</td>
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<td>Joy and Shields (2013)</td>
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<td>Dowling and Harvie (2014)</td>
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<td>Fox et al. (2013)</td>
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<td>Jackson (2013)</td>
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<td>Crowley (2014)</td>
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<td>McKay (2013b)</td>
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<td>Dodd and Moody (2011)</td>
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<td>Galloway (2014)</td>
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Table A2

Grey papers included in the review

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<td>Liebman (2011) 1</td>
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<td>Bafford (2012) 5</td>
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<td>Bafford (2012) 5</td>
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Notes: 1 = think tank. 2 = consultancy (including practitioner/intermediary/investment organizations). 3 = government/government affiliated. 4 = civil society (including voluntary organizations). 5 = other (non-peer reviewed academic reports/short papers/speeches).
### Table A3
Empirical papers included in the review

<table>
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<tr>
<th>Author</th>
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<th>Title</th>
<th>Place of publication</th>
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<th>Study type</th>
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<tr>
<td>Disley et al.</td>
<td>2011</td>
<td>Lessons learned from the planning and early implementation of the social impact bond at HMP Peterborough</td>
<td>UK (MoJ and RAND)</td>
<td>Probation/recidivism</td>
<td>Qualitative</td>
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<tr>
<td>Social Finance</td>
<td>2011a</td>
<td>Social Impact Bonds, the one service, one year on: Overview of the Peterborough Social Impact Bond</td>
<td>UK (Social Finance)</td>
<td>Probation/ recidivism</td>
<td>Qualitative</td>
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<tr>
<td>Marsh et al.</td>
<td>2011</td>
<td>Cost–benefit analysis and social impact bond feasibility analysis for the Birmingham Be Active scheme</td>
<td>UK (Matrix Evidence)</td>
<td>Deprivation and physical activity</td>
<td>Economic analysis</td>
</tr>
<tr>
<td>Dugger and Litan</td>
<td>2012</td>
<td>Early childhood ‘pay-for-success’ social impact finance: A PKSE bond example to increase school readiness and reduce special education costs</td>
<td>USA (Kauffman Foundation and Ready Nation Working Group on Early Childhood Finance Innovation)</td>
<td>Early years intervention</td>
<td>Qualitative</td>
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<tr>
<td>Rotheroe et al.</td>
<td>2013</td>
<td>The future for children bond: identifying the lessons learned from Allia’s bond offer to retail investors</td>
<td>UK (NPC)</td>
<td>Youth care/foster care</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Rudd et al.</td>
<td>2013</td>
<td>Financing promising evidence-based programs: early lessons from the New York City social impact bond</td>
<td>USA (MDRC)</td>
<td>Recidivism</td>
<td>Qualitative</td>
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<tr>
<td>McKay</td>
<td>2013a</td>
<td>Evaluating Social Impact Bonds as a New Reentry Financing Mechanism: A</td>
<td>USA (Maryland Dept of Legislative Services)</td>
<td>Recidivism</td>
<td>Qualitative</td>
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<td>DWP</td>
<td>2014</td>
<td>Case Study on Reentry Programming in Maryland</td>
<td>UK (DWP)</td>
<td>Youth engagement, training and employment</td>
<td>Qualitative</td>
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<td>Disley and Rubin</td>
<td>2014</td>
<td>Phase 2 report from the payment by results Social Impact Bond pilot at HMP Peterborough</td>
<td>UK (MoJ and RAND)</td>
<td>Probation/recidivism</td>
<td>Qualitative</td>
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<td>KPMG</td>
<td>2014</td>
<td>Evaluation of the Joint Development Phase of the NSW Social Benefit Bonds Trial</td>
<td>Australia (NSW Treasury)</td>
<td>Youth care/foster care</td>
<td>Qualitative</td>
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<tr>
<td>DCLG</td>
<td>2015</td>
<td>Qualitative evaluation of the London homelessness social impact bond: Second interim report</td>
<td>UK (DCLG)</td>
<td>Homelessness</td>
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<tr>
<td>Tan et al.</td>
<td>2015</td>
<td>An Evaluation of Social Impact Bonds in Health and Social Care</td>
<td>UK (PIRU and RAND)</td>
<td>Health and social care</td>
<td>Qualitative</td>
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Acknowledgements

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References

Butler, D., Bloom, D. and Rudd, T. (2013), Using social impact bonds to spur innovation, knowledge building, and accountability, Community Development Investment Review, 9, 1: 53–58.


Dixon-Woods, M., Bonas, S., Booth, A., Jones, D. R., Miller, T., Smith, J., Sutton, A. J. and Young, B. (2006), How can systematic reviews incorporate qualitative research? A critical perspective, Qualitative Research, 6, 1: 27–44.


Fox, C. and Albertson, K. (2012), Is payment by results the most efficient way to address the challenges faced by the criminal justice sector? *Probation Journal*, 59, 4: 355–73.


Development of a conceptual framework for analysis, presented in Chapter 3 of this report. As part of this work, a separate output was developed that has since been published as a decision-tree analysis of reasons why commissioners might choose not to commission a SIB (Giacomantonio, 2017).

The citation for this publication is:

Grant-Maximizing but not Money-Making: A Simple Decision-Tree Analysis for Social Impact Bonds

Chris Giacomantonio

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Grant-Maximizing but not Money-Making: A Simple Decision-Tree Analysis for Social Impact Bonds

Chris Giacomantonio*

RAND Europe, Westbrook Centre/Milton Rd, Cambridge CB4 1YG, United Kingdom

ABSTRACT
Social impact bonds (SiBs) are a form of impact investing that challenge traditional investor and government rationalities in financing or funding social services. SiBs are often presented optimistically as a self-evident ‘win-win’ for public commissioners and potential non-governmental investors in public services. While the use of SiBs has grown recently, SiBs have not been used as extensively as many proponents expected, raising questions around whether investor and government interests can be adequately aligned. A decision tree is developed that explains why SiBs may not appeal to investors and governments as much as initially hoped by their proponents, specifically addressing the value of SiBs in relation to alternative investments available to governments and investors. The decision tree shows that SiB-financed initiatives that are rational choices for governments are unlikely to be attractive to investors (and vice versa). This explains the ‘SiB paradox’ and why it has proved difficult to create a vigorous investment market for SiBs. This issue remains even where efforts are made to reduce transactions costs or investor risk in SiB-funded initiatives. The analysis also suggests that SiBs may offer philanthropic and charity funders rather than private investors a way to make the most of their limited granting capital.

KEYWORDS
Social impact bonds; impact investing; decision analysis; decision tree; government commissioning; payment by results

Introduction
Impact investment is meant to be a way for individuals and organizations to invest in ‘blended’ returns, where an investment generates positive financial outcomes for investors while also creating measurable social benefits (Ormiston et al. 2015). Impact investing is a form of investment that has been increasing in popularity for over two decades (Nicholls 2010), and differs from other socially minded investing (such as ‘ethical investing’) by an interest in achieving ‘clearly defined and measurable social impact’ rather than simply limiting harms or ensuring ethical corporate practice (Ormiston et al. 2015).

The field of impact investment proceeds upon an uncertain normative basis where ‘investment logics and investor rationalities are in flux’ (Nicholls 2010), and despite international growth in the market an academic understanding of the motivations for investors investing for social returns is not yet well-developed (though some progress has been made to this end; for example see Ormiston et al. 2015). Recent activity in the market suggests a movement from a ‘blended’ investor rationality, characterized by a balance between the ‘logics of gift-giving and investment’ to a means-ends driven rationality1, characterized by traditional investment principles of achieving net financial gains, if
potentially at below-market returns (Nicholls 2010: 90-92; see also Nicholls 2014); however the ultimate institutionalization of values in the field remains very much uncertain.

The impact investment market continues to grow globally, and while exact estimates of the size and growth of this market remain elusive – a point the paper returns to in the next section – there are clear indications that investors (including traditional ‘financial-first’ investors as well as philanthropic investors and traditional granting agencies) remain somewhat hesitant to take part. This may be due among other things to immature institutional processes and a continued preference among investors for ‘financial-first’ investment aiming to maximize returns, even in the impact investment community (Ormiston et al. 2015). In this context, social impact bonds (SIBs)2 were developed with the intention of directly linking investment to outcomes, and translating outcomes into savings for the public sector which could then be returned in part to the investor. Specifically, SIBs are meant to allow some or all of the cost of a social intervention or initiative to be financed by private sources of capital, and if the initiative achieves a specified social outcome, the investor receives a return paid by government. If the outcome is not met, then the investor loses some or all of their investment, thus limiting up-front costs and minimizing risk to the government funder for an unsuccessful service, while socially minded investors or investment-minded grantors could potentially achieve a financial return funding something with social benefit.

Along with being a form of impact investment3, SIBs are also part of wider movements toward payment by results (PbR) government commissioning, which in general terms refer to initiatives where government commissions services and only pays when those services produce a desired outcome. In this way, SIBs act as a means to transfer performance and implementation risk from governments to external parties, and encourage better performance management and an outcomes focus (Gustafsson-Wright, Gardiner, and Putcha 2015; Tan et al. 2014; Warner 2013).

Even taking into account the intended benefits to commissioners provided by the risk distribution of SIBs, from an investor perspective SIBs combine the main downside of bond investing (i.e. a capped return) with the main downside of equity investing (i.e. the potential to lose some or all of the investment), with the added problem that in practice most existing SIB investments cannot be sold onwards (as one could do with bonds or equities – though re-selling of SIB investments has been developed in at least one initiative in Australia), thus tying up capital in ways other investments would not (Azemati et al. 2013; Disley et al. 2011; Gustafsson-Wright, Gardiner, and Putcha 2015). SIBs therefore tend to be high-risk/low-reward investments, and as has been noted elsewhere (Azemati et al. 2013) the term ‘bond’ is not really representative of what a SIB offers.

SIBs provide a useful window into the practical problems that impact investment can face when trying to align competing interests within an impact investment initiative or policy. As discussed further below, many government commissioners and potential financiers of public services have explicitly considered SIB funding approaches and decided not to take them forward, and this suggests that when considered alongside other funding possibilities (such as providing a grant, or avoiding external investment by using a block contract or a non-SIB form of outcomes-based contract) a SIB may not always be attractive or feasible to either the government or the investor, or both.

Unlike certain other forms of impact investment (such as for example, microfinance initiatives or clean energy investment, which may proceed without direct government financial support), SIBs require government to guarantee payment if an outcome is achieved for the model to be viable, and in turn the financial commitment by government needs to be cost-effective compared to other ways the government might spend that money. While outside the scope of this paper to consider in detail, governments may be thought of as exhibiting a form of ‘blended’ rationality here as well, seeking positive social outcomes at the best (or at least a reasonable) price. Of course, as Warner (2013, 313) points out, ‘the cost-benefit analysis… is not the only criteria of interest to government planners’ in the decision to use a SIB, and they must consider additional normative, procedural and institutional factors in weighing financing and funding options.
This paper considers prevalent arguments for and against SIBs, and attempts to provide a more systematic structure to these than has previously existed in academic or grey literature. Through this, the paper provides a more robust perspective on how the interests of the key players in a SIB align with one another, and whether and in what ways SIBs can be considered ‘investments’ for those interested in generating a financial return (whether below-market, blended, or better). In the remainder of this paper, a brief review of the state of development of the SIB market is presented. Following this, the ‘SIB paradox’ is described, which considers the central problems of aligning investor and commissioner interests within a SIB initiative. This is then illustrated through a set of hypothetical decision tree examples, followed by analysis of implications for future SIB investment, particularly examining their ‘grant-maximizing’ potential. The approach in this paper assumes a primacy of actual financial returns in the SIB modelling approach, but does consider the viability of non-financial returns in making the case for SIBs in relation to other methods of capitalizing social interventions.

The decision tree in this paper is a simple normative model intended as an expositional device to illustrate a set of core issues surrounding the choices of the two key actors in the decision to establish a SIB. Specifically, these are the government commissioner and the private investor or funder. The decision tree is not a descriptive analysis of actually existing government or investor rationalities; as noted above, these are clearly mixed within the market. Nonetheless, the analysis proceeds on the central assumption that both commissioner and investor are rational actors seeking to maximize value or utility in their decisions. Whether these are financial-first or ‘blended’ forms of utility (including non-financial utility), as a starting point the model assumes that both actors would look for the best means to achieve their goals, and consider SIBs as one possible means to achieve their desired outcomes. The predictive limitations of the model, including its relevance to strictly values-driven investors; how it may incorporate changes in parameters such as implementation risk; and additional relevant factors for a more complex model, are considered where appropriate.

While this analysis is SIB-specific, it may also have implications for other impact investing vehicles (existing now or in the future) where private investors hope to achieve positive investment returns from governments in return for up-front capitalization of social initiatives. This may be particularly relevant as the SIB concept is exported into the development arena via Development Impact Bonds, where similar alignment issues between investor and government interests could conceivably occur.

Have SIBs failed to launch?

SIBs are relatively young investment vehicles within the impact investing context, having only been in use since 2010. SIBs are also a relatively small part of the global impact investing market; while both the current SIB market and the global impact investing market are hard to estimate, recent estimates place the existing impact investing market up to $89 billion (in figures cited by Ormiston et al. 2015), though estimates vary widely (see also OECD 2015). Although many SIB investments are not public, the known capital investments in SIBs as of mid-2015 totalled less than $200 million (drawing on data in Gustafsson-Wright, Gardiner, and Putcha 2015), and it can be reasonably surmised that even incorporating the unknown investments the SIB market remains a small fraction of the wider market.

Despite their generally limited place in impact investing, SIBs have captured government attention and the imagination of policymakers. When SIBs are pursued, documentation justifying their use tends to present the net cost-benefit of the SIB-funded initiative relative only to the current status quo, and while this often looks compelling it reveals little about what other financing or funding approaches may have achieved in the same circumstances with the same total capital input. Recent reports (e.g. Ronicle et al. 2014) have presented SIBs as ‘win, win, win’ opportunities for all parties, but present the ‘benefits of SIBs’ against no clear comparator (see e.g. pp. iv–v) and, when looking at impact of SIBs (at s. 2.5 of their report) tend not to separate the SIB (a financing mechanism) from the intervention (which may have similar effects whichever way it is financed – see also Disley et al. 2015).
 Nonetheless, based on perceived benefits of SIBs, there has been a substantial amount of government seed funding, acceleration and incentive money pumped into the establishment of SIBs in both the UK and the US (in the hundreds of millions in USD in total). Yet, despite the rhetorical appeal of SIBs as well as the significant funding input, the uptake of SIBs as a way of funding public services has not caught on at the rates expected by proponents as both commissioners and investors appear to be wary of SIBs (Palandjian and Hughes 2013; Azemati et al. 2013; Schinckus 2015). The market to date has been predominantly financed through ‘philanthropic venture capital’ (Warner 2013) rather than ‘finance first’ investments (see also Azemati et al. 2013), and has struggled to attract for-profit investors.

It is hard if not impossible to estimate a rate of uptake for SIB initiatives. Many interventions have been considered as potentially suitable for SIB funding but have not, or not yet, been slated for SIB investment for one reason or another. To illustrate this issue, while by September 2014 at least 24 states as well as the federal government in the US had sought to develop either a specific SIB or conditions encouraging SIBs (Social Finance 2015), only four SIBs were established and five more were in development in the country at the time. In another example, in 2013 the UK government provided seed funding for a group of nine initiatives collectively referred to as the ‘Trailblazer’ SIBs in health and social care. Each initiative was given funding to conduct feasibility assessments as to whether the initiative was suitable for establishment under SIB funding. By December 2014, only four of these were operational as SIBs, with four having been abandoned as SIBs for a variety of reasons, and in one further initiative two of four sites were not proceeding with the SIB financing option (Tan et al. 2014).

The most recent comprehensive report on the matter (Gustafsson-Wright and Gardiner 2015) records 49 SIBs in operation worldwide as of October 2015; however, it remains an open question as to whether this is good uptake given the hundreds of millions of dollars spent to date in government support of the SIB ‘ecosystem’. Moreover, the progress of SIBs mirrors the wider gap between supply (investment) and demand (initiatives seeking investment) in the impact investing landscape (Ormiston et al. 2015).

**Risk estimation and transactions costs in the establishment of the SIB market**

Part of this arguably slow uptake of SIBs as a financing mechanism could be because they are new and therefore risky. SIBs finance social interventions that, while they may have an evidence base, are usually untested in some way (e.g. they are being scaled up to a level not previously attempted, implemented in a new location, or modified to be more intensive), so the probability of success is often unknown and, unlike for example an equity or commodity investment, there are much more limited means of prediction or forecasting the outcome of the investment (though some work has begun to emerge in modelling risk estimations in SIBs, e.g. Schinckus 2015).

The SIB instrument itself also creates risks in terms of timely and efficient delivery. Despite attempts by government to provide templates and guidance for SIB contracting (see e.g. Cabinet Office 2015b), each SIB initiative is uncharted territory for the partners involved, leading to uncertainty about the implications of various contracting approaches. This has led, in particular, to extensive debates between investors and commissioners about payment triggers and outcome metrics, which in turn increases transactions costs relative to better-understood commissioning models including alternative PbR schemes (Azemati et al. 2013; Demel 2012; Disley and Rubin 2014; Tan et al. 2014; Warner 2013).

Alongside the transactions costs related to negotiations and navigating uncertainty (which could conceivably be lowered as the SIB model becomes better-understood), SIBs also have commensurately high fixed transactions costs relative to other forms of government commissioning, and these costs are probably unavoidable (see esp. Azemati et al. 2013; Demel 2012; Warner 2013). First, additional players (beyond the standard commissioner-provider relationship) and consequently additional contracts are required for a SIB – at minimum, this includes the investors, but may
also include an intermediary and an evaluator to ascertain that the required outcomes have genuinely been obtained. Because returns on investment in a SIB initiative require proof that the intervention worked, this generally requires additional layers of governance and evaluation that are not required in traditional block contracts, and at a level that is not usually seen in non-SIB PbR initiatives either.

It is important to recognize that existing research on SIB transactions costs is limited, and non-SIB approaches have their own transaction costs that are not encountered by many SIBs. Most notably, many SIBs do not require the kind of annual or semi-annual contracting often used in block-contract government commissioning, and SIB-financed initiatives can have a longer funding horizon than other commissioning approaches (though at least some SIB contracts do have annual review mechanisms that allow investors to withdraw, which may generate a different kind of cost in the process).

Nonetheless, as a starting assumption, it seems highly likely that SIB transactions costs will be comparatively higher than other approaches. For example, in a feasibility study for a possible SIB-funded intervention in Maryland, McKay (2013b) estimated that a prison-based intervention costing just over $3.1M (USD) would have fixed additional SIB-related costs of approximately $700,000 in an optimistic scenario to cover costs of additional contracting, evaluation and consultancy fees. The fixed costs alone for the SIB approach (before the initiative cost or the potential return to investors) outweighed the total measurable financial benefit to government (of just under $250,000) by a ratio of almost 3:1. Similarly, Azemati et al. (2013, 27) estimate that the fixed costs for a SIB will likely only be worth incurring for a SIB contract worth ‘at least $20 million [USD].’

Similar complications within more straightforward PbR contracting have been recently noted by the National Audit Office (NAO) in the UK; in a recent report, the NAO stated that, ‘[w]hile supporters argue that by its nature PbR offers value for money, PbR contracts are hard to get right, which makes them risky and costly for commissioners.’ (NAO 2015, 8) This persistence of contracting issues in the PbR realm suggests that, even with improvements over time, the transactions costs related to SIB contracting are likely to remain comparatively higher than other commissioning options, especially compared with non-PbR approaches.

The SIB paradox

However, other explanations for the slower than expected take-up of SIBs – beyond their novelty as funding vehicles and associated transactions costs – need to be considered. It may be that, even reducing or removing the transaction or up-front costs associated with SIB financing, the choice to take part in a SIB is unlikely to look good to both an investor and a government at the same time, unless they each make considerably different estimations regarding the likelihood of success, or unless they each have different forms of utility attached to their choice to participate.

In a SIB, if an intervention succeeds, the public service commissioner has to pay the cost of the intervention plus a return to the investor, as well as any transaction and set-up costs borne by the commissioner, such as legal and evaluation fees. The choice to use a SIB will always cost more in the aggregate than the choice to commission the same intervention through a block contract (taking into account both the investors’ and the commissioner’s costs – see esp. Demel 2012), assuming that the cost of an intervention is constant. This is not to suggest that the same intervention will have the same cost regardless of who is implementing it. Rather, the cost of providing the service is ‘constant’ in that the same initiative, implemented by the same provider, should have the same service-related costs whether funded through SIB or non-SIB funds (though transactions costs in establishing the contract and monitoring approach may differ). Assuming that both investor and commissioner seek ultimately to be better off financially by using SIBs, the choice to use a SIB thus presents a paradox for both the commissioner and investor.

The paradox may be understood as follows: in short, if a commissioner believes an initiative will succeed, they should not commission a SIB, since it will cost the government more over the long run than other ways of capitalizing an intervention. If an investor believes a SIB will fail, they should...
obviously not invest. If both actors expect success, the commissioner ought not to use a SIB, and if either commissioner or investor expects failure they should not get involved.

Considered in financial terms, a SIB can only therefore make sense to both actors when the probability of success is unclear to one or both actors, or where the commissioner seeks to limit its risk in the case of failure. In this sense, a SIB can minimize the ‘worst-case scenario’ for commissioners (i.e. with investors bearing all or some of the cost of a failed intervention) and therefore be suitable for risk-averse commissioners or commissioners considering highly risky interventions. Indeed, transferring risk may be considered the primary benefit to commissioners from SIBs (Barclay and Symons 2014; Disley et al. 2011). Recent data on the first 38 SIBs for which relevant data was available showed that in 32 of these, 100% of the capital investment was at risk (Gustafsson-Wright, Gardiner, and Putcha 2015; appendix 2), meaning that in practice there appears to be substantial risk transfer to investors.

Of course, SIBs may not be primarily justified on financial terms. While understanding commissioner risk is not straightforward – since this can include inter alia risks of failure in implementation, higher-than-expected costs, as well as associated political consequences – SIBs are in part intended to insulate against both financial and political risks. Moreover, a SIB may also provide an opportunity to improve organizational processes (especially around performance management) whether or not the initiative itself succeeds (Disley and Rubin 2014). Commissioners and investors may also value the knowledge gained from a failed intervention – and even if an initiative fails to reach the agreed threshold for repayment, it may nonetheless have provided a social benefit, though as discussed later in the paper not all new interventions have net positive benefits and these can cause harm as well.

These are not new arguments, and many have been around since the advent of SIBs under New Labour. To date, arguments by governments and other groups that take a more optimistic view of what SIBs may achieve (Barclay and Symons 2014; Ronicle et al. 2014) focus on the kinds of benefits SIBs represent while rarely directly comparing to other funding or financing options. On the other hand, some researchers such as McKay (2013a, 2013b) and Demel (2012) have taken a more sceptical approach, focusing on the downside of SIBs, particularly around the transactions costs and fixed costs inherent to SIBs.

Each perspective points to a certain form of value or utility that can be assessed in the decision to establish a SIB, or not. Distributing risk, learning about new interventions or scaling up existing ones, improving performance management, and creating opportunities for social investment with positive financial returns are all reasonable arguments for commissioning an intervention through a SIB. Conversely, the arguments against a SIB – increased costs to commissioners in the case of success, high levels of risk and relatively low returns for investors, and the seemingly inevitably high(er) transactions costs – are also worthy of consideration in such a decision. Rather than consider these arguments individually, this paper will examine them in conjunction with one another through a decision tree approach.

It should be noted that certain arguments against SIBs, such as those by McHugh et al. (2013), Warner (2013) and Joy and Shields (2013) have examined the potential wider social, institutional and ideological consequences of the establishment of SIBs. While not dismissive of such a critique, incorporating these claims is outside of the scope of the paper.

A SIB decision-tree model

The decision tree presented here is a simple normative model intended as an expositional device to elaborate the interrelation of arguments surrounding SIBs. To better operationalize the outcomes of using a SIB to fund an intervention or initiative, a decision-tree model is an appropriate approach that can consider the value of multiple outcomes rather than focusing, as much existing literature does, on either possible advantages or possible disadvantages (Fraser et al. 2016). A decision-tree model can be used to understand the potential consequences of complex decisions and provide
structure to the decision-making process, especially where uncertainty exists regarding the outcome of a path of action (Goldie and Corso 2002).

The assumptions underpinning the tree (e.g. around rates of return and estimated value of outcomes) are based primarily on existing qualitative work on SIBs, including work undertaken by the author and colleagues (Disley et al. 2015; Tan et al. 2014) as well as the broader academic and grey literature concerning SIBs. Systematic data on, for example, average rates of return, transactions costs, commissioner or investor preferences and estimations of monetary value or non-financial utility in social investment is currently unavailable in the scale required for testing of this model. However, such data are in many ways unnecessary for the illustration in this paper, the central goal of which is to set out the paradox that likely underpins any effort to establish a SIB as a viable investment vehicle.

In the case of a SIB, decisions within the tree structure can be taken by commissioners as well as by the investors as to whether and how to proceed with external (non-public) funding. In this model, the three available options are: to implement a SIB; to grant-fund a social initiative; or for the government to commission an initiative through a block contract (i.e. with no external investment). Other options – such as creating a service within the government, or using alternative distributed-risk funding mechanisms such as non-SIB PbR contracts are not explored here, though similar analyses on these options would be a worthwhile future exercise.

In a decision tree, a root node represents the first decision node to be made in a sequence. These are traditionally represented as squares, and in the proposed model there are two decision nodes. As illustrated in the model in Figure 1, the root node represents an identified service need.
The commissioner is the first decision-maker, and has the option of deciding whether or not to seek external financing or grant funding to support an initiative to address the identified need. If the commissioner decides not to seek external financing or grant funding, a block contract option is developed. If the commissioner decides to seek external funding, then an investor makes a choice at the next decision node in the tree. Assuming that the commissioner has proposed a SIB, but would also accept a grant, the investor can then choose to provide a grant, take part in a SIB, or decline to provide funding. If the last option is chosen, a block contract again is developed. If a SIB is chosen, then a SIB is pursued, and if a grant is chosen, then a wholly or partially grant-funded approach is taken. An additional ‘do nothing’ option could be added to the model to identify that a commissioner may decide that an intervention is not worth pursuing, however this does not seem necessary to include for the following analysis to hold.

Following these decisions, the ‘chance’ nodes (i.e. where known or unknown probabilities exist) represent implementation by a service provider and other conditions (e.g. ‘nature’ or ‘luck’), and these will determine whether or not the intervention selected will work (with s representing success and f representing failure of the intervention). In an actual SIB both commissioners and investors will take part in guiding the intervention, but some aspects of success are obviously out of their control and ultimately unknown in this model is whether or not an initiative will work.

Success or failure are characterized as absolutes – while this is not necessarily accurate in terms of all SIBs since some may partially fail and partially succeed, the threshold at which ‘success’ is determined here can be generally conceived of as equivalent to the level at which an investor would have been paid a return over and above their initial investment, regardless of whether or not an investor was ultimately brought in (i.e. success for all decision paths is at an equivalent threshold). The terminal nodes – where outcomes are represented – contain the value of each outcome for both the investor and the commissioner.

Many factors will influence the commissioner’s decision to seek to establish a SIB or to abandon the SIB route and proceed by block contract, and for an investor to invest, provide grants or other similar support (i.e. support that would not need to be paid back), or opt not to take part. In Figure 2, equations are presented to represent the costs to commissioners and investors, and the potential outcomes under success and failure scenarios for each model. The model assumes the important costs for the intervention are the implementation costs for the intervention (the costs associated with commissioning, establishing and operating the intervention over its lifespan), and where a grant is involved, the grant funding must also be included. The model assumes that the intervention costs the same amount, whether or not a SIB is used (and the intervention costs include intervention commissioning and set-up costs, as well as ongoing service delivery costs). However, based on the discussion earlier in the paper, the model assumes additional transactions costs (TC) are required to establish a SIB that would not be borne under other models.

The model assumes that the relevant benefits to be measured are the value to the commissioner of success of the intervention (which can include cashable savings, learning from the experience, and/or broader social benefits); the value to the commissioner of failure of the intervention (which can include learning as well as any positive changes taking place despite overall failure to achieve a designated level of outcome, considered against any costs or disruptions incurred from the intervention) and the return to be paid in cases of both success and failure (as it is not certain that ‘failure’ in all cases means no return to be paid, though in many cases this may be assumed to be zero). The return in this model is not risk-adjusted; as Nicholls (2010: 72) notes, in traditional investments returns should take account of risk, but the relationship between risk and return is not as straightforward in the impact investing context. Moreover, the established pattern of SIBs being high-risk, low-reward investments noted earlier suggests that returns may rarely be risk-adjusted in SIBs.

While all of the potential influencing factors will be too numerous to model here, some of the complexity can be reduced by grouping various kinds of value and costs together in this model. For simplicity’s sake, the model thus subsumes any costs to government under intervention costs
(such that a grant from one government agency would be included as a cost, rather than a rebate, since all ultimately comes from the public purse), and any value or cost for other public agencies is assumed to accrue to the commissioners (so that any wider public value is assumed to be factored into the value calculations).

The notation shown at Table 1 is used. Since the probability of success is represented by $p$, the inverse probability of failure is thus $1-p$. This notation produces the decision tree shown in Figure 2.

From this model, the statements shown in Table 2 can be developed, which summarize the outcomes of each situation from the perspective of both commissioner and investor.

---

**Table 1. Model notation.**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$TC_c$</td>
<td>SIB transactions costs for commissioners</td>
</tr>
<tr>
<td>$TC_i$</td>
<td>SIB transactions costs for investors</td>
</tr>
<tr>
<td>$I$</td>
<td>Intervention costs</td>
</tr>
<tr>
<td>$G$</td>
<td>Grant funds</td>
</tr>
<tr>
<td>$V_s$</td>
<td>Value to commissioner for success of intervention</td>
</tr>
<tr>
<td>$V_f$</td>
<td>Value to commissioner for failure of intervention</td>
</tr>
<tr>
<td>$R_s$</td>
<td>Return to investor for success of intervention</td>
</tr>
<tr>
<td>$R_f$</td>
<td>Return to investor for failure of intervention</td>
</tr>
<tr>
<td>$p$</td>
<td>Probability of success</td>
</tr>
<tr>
<td>$O_c$</td>
<td>Outcome for commissioners (value minus costs)</td>
</tr>
<tr>
<td>$O_i$</td>
<td>Outcome for investors (return minus costs)</td>
</tr>
</tbody>
</table>

---

**Figure 2. SIB decision tree model with equations.**
Some of the implications of the above model are relatively easy to discern. First, an investor always makes a negative return in the grant scenario, and has the highest potential rewards and losses in the SIB scenario (since, even if the amount of grant funding is equivalent to the intervention cost, the SIB scenario assumes higher transactions costs so the loss from failure will always be higher).

Second, the worst-case scenario for the commissioner will likely be failure of a service commissioned through a block contract. This is particularly important to recognize, as it makes the SIB option especially palatable to a risk-averse commissioner. Third, and conversely, the worst-case scenario for an investor will be the failure of a SIB-financed intervention, since the investment is lost as well as the transactions costs that were absorbed during establishment of the SIB, which is assumed to be higher than the cost of giving that money as a grant or not investing.

Fourth, the best case scenario for a commissioner is likely a successful intervention that has been partly grant funded, but the failure scenario for the commissioner under a partial grant model is worse than the worst case under the SIB, unless the transactions costs for the SIB are greater than the intervention cost minus the value of the grant.

Any estimate of probability in the kinds of interventions funded by SIBs will have some uncertainty, and in turn a sensitivity analysis on probability is performed later in the paper. Where the probability of success is uncertain, this model highlights the different choices that are likely to be made based on different levels of risk tolerance. For example, a SIB will be a ‘safe bet’ for a commissioner (and thus particularly suitable for a risk-averse commissioner) where both of the following conditions are true:

(a) The value of success is greater than or equal to the transactions costs to the commissioner plus the return to be paid in a successful intervention, and;
(b) The value of failure is greater than or equal to the transactions costs to the commissioner plus any return to be paid in a failed intervention.

In turn, where the return on failure to the investor is zero, the value of failure to the commissioner should be equivalent to or greater than the transactions costs required to establish the SIB for the commissioner to consider failure ‘safe’.

Equally, a rational commissioner should never invest in a SIB where the value to the commissioner of success is lower than the cost of the initiative succeeding. Such a consideration should always precede questions such as the level of return to be offered to investors, and should be realistic about the levels of transactions costs involved relative to more traditional commissioning methods.

Similarly, a ‘finance-first’ investor should also never invest in a SIB if the return from success is less than the transactions costs plus the costs of the intervention, since such a proposition is guaranteed to have negative or zero value under all circumstances. However, a rational private investor into social services (who is willing to lose some or all of their investment to support social innovation) may prefer a SIB over a grant even where both have negative financial implications, since the same social outcome can be achieved for a lower cost to the granter in the ‘success’ situation where a return is paid, thus replenishing granting capital for additional social investments.

Even where these basic parameters are met, to make a SIB a sensible investment for an investor and a sensible commissioning option for a commissioner, both actors still need to make assumptions regarding the probability of the SIB-funded intervention being successful and, in turn, an outcome.
payment being made. In the next subsection, an illustrative example is provided using a hypothetical initiative, to demonstrate the effects of probabilities of success, transaction costs, and return on the choice to take part in a SIB, or to use other funding mechanisms.

**An illustrative example using expected value calculations**

A hypothetical example will be used at this stage to illustrate the implications of this model, since key data relating to actual SIBs – particularly the levels of transactions costs and indeed even levels of return on investment for some SIBs – remain largely unknown (Demel 2012), and probabilities of success of the kinds of innovative social interventions used for SIBs are outside the scope of this paper. Nonetheless, the following estimates are tenable within the context of existing SIB returns and valuations of success, for example from the Peterborough or Rikers Island reducing reoffending initiatives (See e.g. Burand 2013; Disley et al. 2011). In these initiatives, returns to investors are in the range of 8-15%, and the value of success to the commissioners is estimated beginning at around 20% higher than the cost of the intervention and then scaling upwards, depending in both cases on level of success achieved (up to over 100% higher in the case of Riker’s Island in a very optimistic scenario – see the 2012 Able Project Fact Sheet). Moreover, while this example is hypothetical, it can provide a structure for analysis of decisions where such data are available, and the principles are likely to be relevant to many initiatives for which SIBs are being considered.

For this example, an intervention costing 100 units is proposed by a government to address a social need. If successful, government estimates that it is worth 150 units in aggregate savings, new knowledge and wider benefits. An investor has been identified who may be willing to finance the full cost of the intervention as a SIB, or alternately fund 25 per cent of the intervention as a grant. To establish a SIB, each party will incur additional transactions costs of 5 per cent of the total cost of the initiative for additional legal and administrative costs. If a SIB approach is followed, the investor will be paid a return of 15 per cent plus the value of their original investment if the initiative is successful and, like most SIBs to date, will lose their entire investment if it fails. The government commissioner also judges that, even if the initiative fails, the learning will have been worth at least 20 per cent of the cost of the intervention. The intervention has a good evidence base, and is thought to have a 75% chance of reaching the success level required for the investor to make their return. Based on the decision tree, this creates a number of possible outcomes in this situation, shown in Table 3.

This hypothetical but not unrealistic example highlights in particular the primary benefit of the SIB model – that it helps avoid the worst-case scenario for government (failure in a block contract model) by distributing risk and making failure of the intervention potentially neutral or even positive for the commissioner in net terms, at least in a SIB with conditions similar to this one.

The next step in evaluating the decision to undertake a SIB is to determine the expected value (EV, also known as probability-weighted utility see e.g. Goldie and Corso 2002: 106) of the decision to commission or invest in a SIB. EV calculations provide a rational approach to determining the relative risks and rewards of different decisions, and can be used in situations where aspects of the judgement will be subjective (Goldie and Corso 2002; see also Korobkin and Guthrie 2004). There are well-documented shortcomings to normative models that assume rational decisions from EV calculations,

<table>
<thead>
<tr>
<th>Decision</th>
<th>Intervention</th>
<th>Outcome for commissioner</th>
<th>Outcome for investor</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIB</td>
<td>Success</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Fail</td>
<td>15</td>
<td>105</td>
</tr>
<tr>
<td>Grant</td>
<td>Success</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Fail</td>
<td>-55</td>
<td>-25</td>
</tr>
<tr>
<td>Block</td>
<td>Success</td>
<td>50</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Fail</td>
<td>-80</td>
<td>n/a</td>
</tr>
</tbody>
</table>
firstly because people normally make heuristic-based rather than evidence-led decisions, and secondly because risk aversion may lead to safer, rather than utility-maximizing, decisions (ibid). This should not, of course, preclude a rational re- 

EV calculations are suitable for risk-neutral decision makers as well as where a decision is expected to be repeated (Mian 2002); in this case, EV is particularly appropriate if a commissioner or investor is considering taking part in more than one SIB. The EV calculation takes the probability of each outcome against the value of that outcome, which gives us the EV equation for each decision for each actor in Table 4.

Returning to the hypothetical example generates the EVs set out in Table 5.

A SIB can be expected to be pursued by a commissioner where, first, the EV for the SIB is positive for the commissioner; second, the EV for the SIB is greater than or at least reasonably comparable with the EV for a block contract (recognizing the added value of distributing risk); and, possibly, third, where no grants have been offered (and even where grants have been offered, small grants may be less beneficial than a SIB with full up-front investment by a private source in terms of protecting against loss). An investor may pursue a SIB where the EV for the SIB is above zero, and a grant funder may pursue a SIB where the EV for the SIB is greater than the EV for the grant option (whether or not these are above zero).

In the above example, a SIB is beneficial for the commissioner and also is the only option that provides a win-win outcome for the commissioner as both terminal node outcomes from this decision (i.e. success and failure) result in net benefits to government. However, given the hypothetical probabilities, the SIB is better than a grant for the investor or funder, but worse than not investing at all, from a ‘finance-first’ standpoint. In other words, the EV still suggests that a SIB under these conditions is a losing proposition for an investor.

**Sensitivity analysis of SIB parameters**

By examining levers through which this situation might be made more attractive for investors by conducting ‘one-way sensitivity’ analyses (Goldie and Corso 2002 114–116) of the model, for example by varying probability of intervention success, increasing return on investment, or reducing transactions costs, the ways in which these might influence the viability of SIBs can be understood. Keeping all other parameters consistent, as the probability of success approaches 1 (in other words, as initiatives with higher likelihood of success are considered), the EV increases for both parties. However, as illustrated in the following graphs, the point at which the EV for the investor breaks zero (the point at which a finance-first investor might choose to take part in a SIB) is past the point at which the EV for the commissioner for a SIB is higher than the EV for a block contract, seen in Figure 3.

Increasing the level of return on investment, and thus improving the EV for the investor, has a similar effect on the attractiveness of the SIB to the commissioner. As shown in Figure 4, as return on investment goes up, the EV goes down for the commissioner, and again it can be seen that as EV crosses zero for the investor, the EV for the commissioner drops below that for a block contract.

<table>
<thead>
<tr>
<th>Table 4. EV equations.</th>
<th>EV for Commissioner</th>
<th>EV for Investor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SIB</strong></td>
<td>$p(V_i - T.C_c - R_i) + (1 - p)(V_i - T.C_c - R_i)$</td>
<td>$p(R_i - T.C_i - l) + (1 - p)(R_i - T.C_i - l)$</td>
</tr>
<tr>
<td><strong>Grant</strong></td>
<td>$p(V_i + G - I) + (1 - p)(V_i + G - I)$</td>
<td>$-G$</td>
</tr>
<tr>
<td><strong>Block</strong></td>
<td>$p(V_i - I) + (1 - p)(V_i - I)$</td>
<td>$0$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 5. Hypothetical EVs.</th>
<th>EV for commissioner</th>
<th>EV for investor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SIB</strong> (.75 £ 30) + (.25 £ 15) = 26.25</td>
<td>(.75 £ 10) + (.25 £ 105) = −18.75</td>
<td></td>
</tr>
<tr>
<td><strong>Grant</strong> (.75 £ 75) + (.25 £ 55) = 42.5</td>
<td>−25</td>
<td></td>
</tr>
<tr>
<td><strong>Block</strong> (.75 £ 50) + (.25 £ 80) = 17.5</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
As with investments more generally, SIBs that will be good financial investments will be initiatives that have high probabilities of success or relatively high rates of return. However, as either of these levers is improved from an investor perspective, the SIB starts to look less attractive from a commissioner perspective. This is essentially a graphical reiteration of the SIB paradox set out earlier in the paper.

As noted earlier, another lever through which government has sought to improve the SIB ‘ecosystem’ is by reducing TCs (through for example technical support and financial guarantees). Assuming that TCs can be reduced through efficiencies in process, this would obviously improve the outlook of the SIB option for both actors. However, even entirely eliminating TCs from the equation, the EV for the investor remains negative given the high-risk/low reward nature of the SIB bargain, as shown in Figure 5.

Conversely, as transactions costs increase for the investor to establish a SIB, the grant option begins to look more appealing. In Figure 6, the grant produces a higher EV for the grant-funder once the TCs for the grant-funder reach about 12 per cent of the initiative cost (or just under half of the alternative grant amount) in the hypothetical situation.

While this may seem to be a high level of TC, existing studies of SIB initiatives have shown unexpectedly high amounts of effort (and commensurately extended initiation timelines and associated costs) in the SIB set-up phases, and such a figure appears eminently possible in certain SIB initiatives from literature referenced earlier in the paper. As Demel (2012) rightly notes, it is unreasonable to believe that the addition of so many extra actors – including investors and intermediaries alongside commissioners and service providers – into a service contracting situation can result in lower TCs, and empirical findings to date bear this out. However, systematic data on TCs in SIBs is perhaps the least developed area of SIB research to date, and an empirical account of the actual TCs involved remains a key priority for understanding the viability of SIBs going forward.

Figure 3. EV as a function of probability of success.

Figure 6. EV as a function of probability of success.
Some additional factors for a more complex model

The above model is intended to reflect the basic decision to undertake a SIB, or not. For simplicity’s sake a number of factors that may be worth considering (and could augment the EV calculation, possibly increasing or decreasing the viability of SIBs) have been excluded, but bear discussion here.

The ‘SIB effect’ on the potential for success

An argument by SIB proponents for using SIB funding is that the SIB model may increase the chance of intervention success by improving performance management, motivating commissioners and enabling entrepreneurial intermediaries to innovate. If such an assumption is to be believed – and this is an empirical question that has never been properly tested – then the probability of an initiative succeeding would be increased where such an initiative was SIB-funded. Of course, the converse is also possible – that the use of a SIB could be detrimental to the progress of an initiative by over-complicating the set-up and monitoring of an initiative, extending implementation timelines, or disrupting existing services or demotivating front line staff – and so a ‘SIB effect’ should be left out of any modelling until more concrete evidence of the impacts of SIB funding on programme implementation is developed.
The pre-SIB transactions costs

The model does not include the cost borne by commissioners in advance of SIB contract negotiations, such as identifying and developing the specification for an initiative that would be suitable for SIB funding, approaching potential investors, and so on. This is an initial cost that could be modelled into the first (commissioner) decision in the above tree, and weighed against the probability that an investor will ultimately be willing to proceed to negotiation to develop a more nuanced EV calculation for commissioners.

Addressing partial success

It is possible that a middle position is taken in the SIB structure between total loss of investment and net profit for the investor; in such a situation an investor may receive a proportion of the payout but not the whole payout when an intermediate level of success is achieved, thus retaining a fraction of their investment. In some existing SIBs, there is a form of ‘A and not B’ payout – for example, in Peterborough, investor repayment was possible if statistically significant reductions in reoffending of 10% were made per cohort, or 7.5% across all cohorts. Other SIBs may have a more continuous form of payment; some of the newer SIB initiatives, such as the SIB initiative in Essex, UK, provides payments to the investor for each day saved in care for children at risk of entering care (Tan et al. 2014).
Including partial success payouts would create a different form of EV calculation, adding additional possible terminal node scenarios and potentially increasing the attractiveness of the SIB to an investor.

**Non-financial utility for social outcome investing**

As noted in the opening discussion, in impact investing the financial return may be only part of the story, though also as noted existing empirical data suggest that many investors remain concerned with generating competitive financial returns in this field. However, to the degree that an investor is unconcerned about a financial return or potential loss, they should prefer granting over investing, unless they assume the ‘SIB effect’ set out above. Nonetheless, to the degree that an investor places an additional utility on social investing over granting, this would change the investor’s EV calculation to take part in a SIB or not.

**Additional financial incentives**

Novel tax rules, such as the Social Investment Tax Relief scheme in the UK, incentivise social investment. Within the SITR scheme, an investor can claim up to 30% of their investment in tax relief, and can also defer capital gains tax through this programme (Cabinet Office 2015a). Of course, this tax relief is ultimately a cost to government and so in the model above would still make SIBs a less-attractive choice for government, but given the separation of local commissioning and national tax, it would in reality have no bearing on the local commissioner’s decision and would increase the EV for the investor. Other additional incentives might include, as in the case of the Rikers Island SIB, a guarantee of part of the investment by another investor or foundation, such that the actual level of risk to the investor is lowered (City of New York 2012). Again, this still represents a real risk to capital (if

![Figure 6. EV for investors as a function of transaction cost.](image-url)
not the investor’s capital), so it remains difficult to see how such an approach could be made sustainable for all parties involved.

**Defection**

In game-oriented decision models (relating to a prisoner’s dilemma-type situation; for an example relating to government contracting see Brown, Potoski, and Slyke 2009), actors involved may have the choice to defect against the initial agreement. While one may argue that contracting mechanisms can be made strong enough to ensure against defection by investors – though how this could be done in SIBs remains somewhat unclear (McKay 2013a) – SIB-funded initiatives will likely be designed to allow governments to change policy direction (and conceivably cancel the SIB-funded initiative) before the agreed end-date. Indeed, this is precisely what happened in the UK’s first SIB at Peterborough prison, which was cancelled early due to wider probation service reforms that complicated the intervention and its measurement (Disley et al. 2015). A more complex model could thus include the probabilities of government or investor defection at its chance nodes (or, alternately, place the choice to defect or continue to cooperate at new decision nodes, for example where contracts offer ‘break points’).

**Negative consequences of interventions**

In most non-academic writing on SIBs, there is an underlying assumption that the intervention will either show no results or positive results. However, there is no a priori reason to believe that the net effect of a social intervention will be neutral or positive. Many social programmes have negative impacts on the people they were meant to help; this has been shown for example with ‘Scared Straight’ programmes (Petrosino, Buehler, and Turpin-Petrosino 2013) and ‘deviancy training’ initiatives (Dishion, Mccord, and Poulin 1999) for at-risk or delinquent youth. In turn, while the above model assumes a positive ‘value of failure’, this may be a generous assumption as failed social programmes can have both internal costs (by disrupting organizational processes) and external costs to service users and wider populations.

**Risks related to multiple SIBs**

The above analysis has not given consideration to the possible risks to commissioners undertaking multiple SIBs, in terms of repaying where all are successful. In turn, an additional parameter in the decision model might be whether or not other SIBs are currently in operation and when they mature – since a form of worst-case scenario could be where multiple SIB-funded initiatives succeed at the same time if there is not enough public funding available to repay all debts. At present, most localities with SIBs in operation have one or at most two SIBs under the same level of government; however, if the market matures in the way envisaged by proponents of SIBs, a scenario where a local commissioner becomes over-leveraged due to repaying SIBs from highly successful social initiatives seems a plausible and possibly perverse outcome where successful social initiatives become negative pressures on government.

**Discussion: should SIBs be considered ‘investments’?**

The distinction between means-ends and values-driven rationalities in impact investment set out at the start of this paper raise definitional questions about what should be called ‘investments’, and the possibility of a blended rationality allows for non-financial utility to enter the discussion in terms of the returns an investor may seek. In the specific case of SIBs, in their initial conception they were believed to have the potential to create a viable investment market with attractive returns, yet in reality have become more a vehicle for ‘philanthropic venture capital’ rather than traditional investment.

Based on the analysis in this paper, under the kinds of conditions in which one should reasonably imagine a government choosing to use a SIB, it is unlikely that SIBs could ever represent a sound investment strategy for an investor interested in generating even a modest return, unless substantial incentives or guarantees are provided by government or third parties (in which case, the financial
viability of these vehicles has to be questioned, particularly to governments such as the UK’s that are operating under austerity. And, the levers most likely to make SIBs attractive to investors simultaneously decrease the value of SIBs to commissioners.

Grant maximizing vehicles

However, such a conclusion should not signal the death of SIBs. This analysis suggests that a SIB may be a reasonable choice under certain conditions for both a risk-averse commissioner and for a grant-funding agency (or individual or foundation) looking to extend grant-making capacities across a portfolio of SIB investments. SIBs may, for example, represent a valuable option for private or third-sector trusts, foundations and individuals who want to maximize limited granting capital. This is a point raised peripherally in some SIB literature (Hughes and Scherer 2014) and may offer a more compelling justification for SIBs than its mainstream conception as a potential profit-oriented vehicle.

Say, for example, that a foundation funds ten SIBs such as the one in the above example. Based on a probability of success of 0.75 across all SIBs, the foundation would probably lose less than a quarter of their investment, as follows. For ten 100-unit initiatives, the funder initially invests 1,000 units, placing all capital at risk. If the probability of success is .75 for each initiative, then it can reasonably be assumed that either seven or eight of the initiatives will succeed. If seven succeed, the funder collects net gain from success (10) seven times (totalling 70) and also collects the net loss from failure (−105) three times (totalling −315). This results in a loss of 245 units against an initial investment of 1000, or a 24.5% loss. If eight succeed, this results in a smaller loss, of 130, or 13%.

Whatever the level of loss, the funder would have been able to fully fund 10 initiatives, and could reasonably expect to retain a substantial proportion of their initial investment for further philanthropy. Had they given all of their funding away as grants, they would have nothing left at the end, and if they had only given partial grants they would have been unable to provide full up-front funding, which may have left certain initiatives under-capitalized. Additionally, the loss (under 25%) in this hypothetical example would be lower than the tax relief currently on offer in the UK for social investment (30%), making this strategy potentially financially worthwhile (or at least more likely to break even).

In turn, if SIBs are seen as more akin to a new form of forgivable loan from investors to governments (via service providers or ‘special purpose vehicles’) and less as an income-generating investment intended to catalyse a new marketplace, this would be a more realistic conception of their likely potential role. In a SIB the repayment only occurs where the desired outcome is met, thus encouraging the loan recipient to take on a more risky venture than they might otherwise do if repayment was unconditional. Forgivable loans of this sort are not unheard of, of course – the UK student loan repayment system is similarly oriented toward repayment only where a student has found a job offering sufficient income.

Like forgivable loans, SIBs appear unlikely to be meaningful ways of maximizing or even consistently generating returns on investment, but they may be financially efficient for investors to encourage certain desirable outcomes relative to other available options. SIBs may continue to be conceived of as ‘investments’ for the purpose of their inclusion in, for example, ethical investing vehicles and mutual funds, but understanding SIBs as essentially a ‘close cousin’ of the forgivable loan would provide more realistic expectations for both those soliciting investment and those considering investing.

Notes

1. Nicholls (2010) derives these rationalities from Weberian ideal-types of zweckrational (means-ends) and wertrational (values-driven), and proposes a third ‘blended’ or systemic rationality to sit between these ideal types.
2. While there is no single SIB model, a number of analogues and analogous terms have been used to describe SIB-like instruments including Social Benefit Bonds, Pay for Success Bonds, and so on, though this paper prefers the SIB terminology as this appears to be the predominant nomenclature in the literature.
3. OECD (2015) and Ormiston et al. (2015) treat SIBs as a subset of impact investing, while Nicholls (2010) treats impact investing as a separate kind of social investment from SIBs. This paper tends toward the former approach and sees SIBs as a form of impact investing in its broader conceptualization.

4. While exploring the signalling aspects of decisions in the SIB process is outside the scope of this paper, from an investor perspective, it may also be worth considering that a commissioner’s decision to pursue a SIB could be interpreted as a signal of low confidence that the SIB-financed initiative will succeed.

5. In this context, ‘investor’ refers to any upfront non-government funder.

6. While rates of return and value of success could be estimated from existing SIBs for the purpose of this model, the likelihood of success could not as no SIBs could be identified that specified a clear similar estimation. As such, this value is hypothetical.

Acknowledgements

This work was funded by the Policy Research Programme of the Department of Health for England, via its core support for the Policy Innovation Research Unit (PIRU). This analysis forms part of the independent evaluation of the Social Impact Bond Trailblazers in Health and Social Care undertaken by PIRU in collaboration with RAND Europe. The views expressed are not necessarily those of the Department of Health or of RAND Europe. The paper was greatly improved by comments from colleagues and specific recognition is due to Nicholas Mays, Megan Sim, Alec Fraser, Michael Spackman and Alex Sutherland for their suggestions and input on this paper.

Disclosure statement

This work was undertaken through research at RAND Europe. Chris Giacomantonio is now the research coordinator at the Halifax Regional Police Service in Canada. The views in this paper are the author’s and do not necessarily represent the views of RAND Europe or the Halifax Regional Police.

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References


Appendix 3: Interview topic guides

Topic Guide - Commissioner Interview

Outline for a semi-structured interview with commissioner involved in SIB negotiation/project

Interview set up
- Introductions
- Informed consent
- Duration of interview: 1hr
- Interviewer to describe the approach of the evaluation

About your involvement in the SIB:
- Can you please outline your role in the CCG/local authority?
- Just briefly, can you describe your role specifically in relation to the SIB?
  - Involvement in the CCG/local authority decision to commission services through a SIB
  - Negotiating technical aspects (valuation of outcomes)/contract
  - Promoting the SIB within the CCG

Decision of the CCG/local authority to take part in the SIB
- Why did your organisation agree to take part/is considering taking part in the SIB?
  - Advantages considered
    - Shifting financial risk
    - Shifting oversight of providers
    - Expectation of better services – why?
  - Disadvantages considered
    - Complexity of set-up (time required)
    - Lack of oversight of services/providers
    - Lack of evidence
    - Challenges to determine outcomes
    - Difficulties to value outcomes
  - Any remaining reservations

Process that led the CCG/local authority to take part in the SIB
- Who promoted the idea/approached the commissioner?
- Who has taken the lead in the discussions?
- Were any other alternative contractual relationships considered?
  - Which ones?
  - If not, why?

Negotiations about the SIB contract
- Types of services provided
  - Are the services provided replacing existing services?
  - What there a particular need for such services?
  - What would happen without these services?
  - Did you know the evidence available on the intervention provided (and expected outcomes)?

- Selection of target population
  - How was the choice of the target population made?
If this population is limited in size, how was it defined?

- Selection of target outcomes
  - What led/is leading the choice of outcomes
  - Understanding of evaluation process to monitor performance (statistical models used)

- Valuation of outcomes
  - Did you discuss the valuation of outcomes (savings made etc)?
  - Were you involved in the choice of methodology used to evaluate the effectiveness of the scheme?

### Technical challenges during negotiations

- Can you describe the challenges you have faced/are facing during the negotiations?
  - Understanding of outcome performance measure
  - Valuation of outcomes
  - Choice of target
  - Legal implications

- What support have you received?
  - Intermediaries (Social Finance)
  - Central government
  - Other SIBs
  - Other

- What resources (time) have you and your organisation invested in the SIB project?
  - Working with central government
  - Working with other local authorities/actors
  - Working with providers
  - Finding investors
  - Agreeing scope of services of the SIB
  - Agreeing financial arrangements
  - Other?

### Looking ahead

- Do you foresee any potential problems with the SIB contract
- Do you foresee any potential problems if such funding mechanism were to be used often?
- Do you have any other suggestions for potential improvements for designing/implementing future SIB?

### Close and thank you, interviewer to:

- Describe reporting of the evaluation
- Provide interviewer contact details
Outline for a semi-structured interview with commissioner involved in SIB negotiation/project

Interview set up
- Introductions
- Informed consent
- Duration of interview: 1hr
- Interviewer to describe the approach of the evaluation

About your involvement in the SIB:
- Can you please outline your role in the Fund/organisation?
- Just briefly, can you describe your role specifically in relation to the SIB?
  - Involvement in Fund/Bank decision to invest in social services through a SIB
  - Negotiating technical aspects (valuation of outcomes)/contract
  - Promoting the SIB within the organisation

Decision of the Fund/private investor to take part in the SIB
- Why did your organisation agree to invest/is considering investing in the SIB?
  - Advantages considered
    - Returns on investment – how much?
    - Interest in services provided
    - Expectation of contributing to better services – why?
    - Trust in providers / long relationship with providers
  - Disadvantages considered
    - Uncertainty of return on investment (pure loss if targets not met?)
    - Lack of oversight of services/providers
    - Lack of evidence
    - Challenges to determine outcomes
    - Difficulties to value outcomes
  - Any remaining reservations or advantages
  - What other alternative investment does your organisation usually make?

Process that led the Fund/private investor to take part in the SIB
- Who promoted the idea/approached the commissioner?
- Who has taken the lead in the discussions?

Negotiations about the SIB contract
- Types of services provided
  - Why did you choose these interventions?
    - Previous experience with the provider, evidence available, etc
  - Did you look at the evidence available on the intervention provided?

- Selection of target population
  - What determined the choice of the target population made?

- Selection of target outcomes
o What led/is leading the choice of outcomes (evidence, provider experience, intermediaries’ advice, etc.)

o How well do you know the statistical methods used to monitor performance (statistical models used)

o Any support provided to understand

• Valuation of outcomes
  o Did you discuss the valuation of outcomes (savings made etc)?
  o Were you involved in the choice of methodology used to evaluate the effectiveness of the scheme?

Challenges during negotiations
• Can you describe the challenges you have faced/are facing during the negotiations?
  o Understanding of outcome performance measure
  o Valuation of outcomes
  o Choice of target
  o Lack of evidence
  o Legal implications

• What advice have you used?
  o Intermediaries (Social Finance)
  o consultants
  o other

• What resources (time) have you and your organisation invested in the SIB project?
  o Working with central government
  o Working with local authorities/actors
  o Working with providers
  o Agreeing scope of services of the SIB
  o Agreeing financial arrangements
  o Other?

Looking ahead
• Do you foresee any potential problems with SIB contracts
• Do you foresee any potential problems if such funding mechanism were to be used often?
• Do you have any other suggestions for potential improvements for designing/implementing future SIB?

Close and thank you, interviewer to:
• Describe reporting of the evaluation
• Provide interviewer contact details
Topic Guide – Service Provider Interview

Outline for a semi-structured interview with commissioner involved in SIB negotiation/project

Interview set up
- Introductions
- Informed consent
- Duration of interview: 1hr
- Interviewer to describe the approach of the evaluation

About your involvement in the SIB:
- Can you please outline the role of your organisation in the SIB?
- Just briefly, can you describe your role specifically in relation to the SIB?
  - Involvement in the decision to enter a SIB
  - Negotiating technical aspects (valuation of outcomes)/contract of the SIB
  - Promoting the SIB within the organisation
  - Contacting investors

Decision of your organisation to take part in the SIB
- Why did your organisation agree to take part/is considering taking part in the SIB?
  - Advantages considered
    - Secure funding (short-term)
    - Freedom of activities
    - More flexible and professional oversight
    - Better commissioners (intermediaries)
  - Disadvantages considered
    - Complexity of set-up (time required)
    - Pressure from investors/others
    - Challenges to determine outcomes/targets
    - Uncertainty
  - Any remaining reservations

Process that led your organisation to take part in the SIB
- Who promoted the idea/approached the commissioner?
- Who has taken the lead in the discussions?
- Were any other alternative contractual relationships/funding mechanism considered?
  - Which ones? Why were they discarded?
  - If not, why?

Negotiations about the SIB contract
- Types of services provided
  - Are the services provided replacing existing services?
  - What would happen without the SIB?
  - Did you know the evidence available on the intervention provided (and expected outcomes)?

- Selection of target population
  - How was the choice of the target population made?
If this population is limited in size, how was it defined?

- **Selection of target outcomes**
  - What led/is leading the choice of outcomes included in the SIB
  - Understanding of evaluation process to monitor performance (statistical models used)

- **Valuation of outcomes**
  - Did you discuss the valuation of outcomes (savings made etc)?
  - Were you involved in the choice of methodology used to evaluate the effectiveness of the scheme?

**Technical challenges during negotiations**
- Can you describe the challenges you have faced/are facing during the negotiations?
  - Understanding of outcome performance measure
  - Valuation of outcomes
  - Choice of target
  - Legal implications

- **What support have you received?**
  - Intermediaries (Social Finance)
  - Central government
  - Other SIBs
  - Other

- **What resources (time) have you and your organisation invested in the SIB project?**
  - Working with central government
  - Working with other local authorities/actors
  - Working with intermediaries
  - Finding investors
  - Agreeing scope of services of the SIB
  - Agreeing financial arrangements
  - Other?

**Looking ahead**
- Do you foresee any potential problems with the SIB contract
- Do you foresee any potential problems if such funding mechanism were to be used often?
- Do you have any other suggestions for potential improvements for designing/implementing future SIB?

**Close and thank you, interviewer to:**
- Describe reporting of the evaluation
- Provide interviewer contact details
**Topic Guide – Intermediary Interview**

Outline for a semi-structured interview with commissioner involved in SIB negotiation/project

**Interview set up**
- Introductions
- Informed consent
- Duration of interview: 2hr
- Interviewer to describe the approach of the evaluation

**About your involvement in the SIB:**
- Can you please outline the role of your organisation in the SIB?
- Just briefly, can you describe your role specifically in relation to the SIB?

**Decision of your organisation to get involved in the SIB**
- Why did your organisation agree to help set up the SIB?
  - Advantages considered
    - Trust in providers / long relationship with providers
    - Evidence about interventions
    - Interest in services provided
    - Expectation of contributing to better services – why?
  - Disadvantages considered
    - Uncertainty of return on investment (pure loss if targets not met?)
    - Lack of evidence
    - Challenges to determine outcomes
    - Difficulties to value outcomes
  - Any remaining reservations or advantages

**Process that led your organisation to take part in the SIB**
- Who had the idea first (your organisation/ the providers)
- When did you start to be involved
- Who has taken the lead in the discussions?

**Negotiations about the SIB contract**
- Types of services provided
  - Why were these particular interventions/services chosen?
    - Experience of the provider, evidence available, etc.
  - Did you look at the evidence available on the intervention provided?
- Selection of target population
  - What determined the choice of the target population made?
- Selection of target outcomes
  - What led/is leading the choice of outcomes (evidence, provider experience, intermediaries’ advice, etc.)
  - How well do you know the statistical methods used to monitor performance (statistical models used)
  - Any support provided to understand
- Valuation of outcomes
Did you discuss the valuation of outcomes (savings made etc)?
Were you involved in the choice of methodology used to evaluate the effectiveness of the scheme?

Challenges during negotiations
- Can you describe the challenges you have faced/are facing during the negotiations?
  - Understanding of outcome performance measure
  - Valuation of outcomes
  - Choice of target
  - Lack of evidence
  - Legal implications

- What have been the main sources of reticence from the different actors?
  - Commissioners?
  - Private investors?
  - Private providers?

- What resources (time) have you and your organisation invested for the SIB project?
  - Working with central government
  - Working with local authorities/actors
  - Working with providers
  - Finding investors
  - Agreeing scope of services of the SIB
  - Agreeing financial arrangements
  - Other?

Looking ahead
- Do you foresee any potential problems with this particular SIB contract?
- Do you foresee any potential problems if such funding mechanism were to be used often?
- Do you have any other suggestions for potential improvements for designing/implementing future SIB?

Close and thank you, interviewer to:
- Describe reporting of the evaluation
- Provide interviewer contact details
Appendix 4: Information sheet for interviewees

Information sheet – Service provider v 21 March 2014

EVALUATION OF THE SOCIAL IMPACT BOND TRAILBLAZERS

Participant information sheet – service provider interviews

Introduction
You are invited to take part in an evaluation of the social impact bond trailblazers being conducted by researchers from the Department of Health-funded Policy Research Unit in Policy Innovation Research (PIRU). Before you decide whether to accept this invitation it is important for you to understand why the evaluation is taking place and what it will involve. Please take the time to read the following information, and feel free to discuss the evaluation with colleagues if you wish. Do not hesitate to contact us if you have any questions about the evaluation.

Context
Social Impact Bonds (SIB) have been introduced recently as a new form of contract to fund the delivery of public services. These contracts involve three parties: public sector commissioners, social investors and service providers. In a nutshell, in a SIB contract, public sector commissioners partner with private for-profit or Third Sector social investors to fund interventions that seek to tackle (usually complex) social problems (e.g. rough sleeping, frail older people with multiple long term conditions, youth offenders, etc.). More specifically, charities and/or private investors cover the upfront costs necessary to set up the interventions implemented by service providers, while the commissioner commits to pay rewards if pre-defined desired outcomes are later reached.

Currently, there are nine projects in the area of health and social care that have received seed funding so that they can analyse whether they wish to provide services through a SIB. The Department of Health’s Policy Research Programme has commissioned an independent evaluation of these projects from the Policy Innovation Research Unit at the London School of Hygiene and Tropical Medicine to explore their potential benefits and costs.

The purpose of the evaluation
The specific objectives of this evaluation are as follows:

(1) To describe and assess the development of the nine SIB trailblazers in order to identify obstacles and enabling factors in finalising SIB contracts.
(2) To describe and characterise the signed SIB contracts in order to unpack the implications in terms of incentives and risk-sharing arrangements for the different parties.

Evaluation design
The evaluation comprises:

- Semi-structured, qualitative interviews of key stakeholders from each of the three parties involved in the preparatory phase of SIBs (private investors, service providers and commissioners).
- document review of project documents and contractual documents signed by all parties
The evaluation also includes a literature review and set of interviews with experts involved with similar schemes in other countries that will be used to develop a typology of the different possible ways in which SIBs can be designed, and the implications for providers, investors and service commissioners.

Why have I been chosen to participate?

You are being invited to take part in the evaluation because your organisation is, or has been, participating in discussions to provide health and social care services funded through a Social Impact Bond. If you do agree to be interviewed, you will be offered a consent form to sign before the interview. You will be able to withdraw from the study at any time, without giving a reason.

Do I have to take part?

No. It is entirely up to you whether you participate in this evaluation or not, and if you do not wish to participate, you do not need to give a reason.

Are any risks involved?

The study has been reviewed by anonymous peer-reviewers, policy experts at the Department of Health, the relevant NHS Research and Development offices and the research ethics committee at the London School of Hygiene and Tropical Medicine. This study involves no personal risk; interviews should cause no distress or discomfort to any participant.

What will happen to me if I take part?

If you agree, we will ask you to take part in one interview with a trained researcher over the telephone or in person. The interview will last for about one hour and will be recorded so that we do not miss anything important. The interview will be arranged to take place at a time and date that is convenient for you.

In the interview you will be asked a number of questions about the Social Impact Bond, including why your organisation decided to consider funding services through this mechanism; what you think are the potential benefits of this type of contract; what you identify as the potential challenges of such an approach; what the negotiations have involved (e.g. selection of performance outcomes, valuation of outcomes, data to be used to measure the performance, population targeted, etc.) and what aspects were important to you in the discussions; what were the technical challenges faced by your organisation during the design of the SIB and discussions with the other parties; reasons why decisions were eventually made [to launch a SIB / not to proceed with a SIB].

You may also be invited to participate in a brief follow-up interview in about six months’ time. It is entirely up to you whether you participate in the follow-up interview. You can limit your participation to just one interview if you wish to.

Why should I take part?

The overall aim of this evaluation is to describe the potential benefits and challenges associated with the use of Social Impact Bonds in health and social care. Although there may not be any immediate benefit to you from taking part in this evaluation, we believe that this evaluation will contribute to an understanding of the practical and financial issues of this innovative alternative funding mechanism and inform future similar initiatives.

Confidentiality and dissemination of data
Information derived from interviews and documents will be used for study reports, conference presentations and articles in research journals. The study report will be submitted to the Department of Health, and will be available to participating organisations. Findings will be reported without identifying peoples’ names, and treated as completely confidential within the research team. If interviewees agree to be tape-recorded and agree that quotes may be used, this will be done in confidence for illustrative purposes in the report or any research papers/ conference presentations. All data will be securely stored in an anonymous form and will only be accessible to the research team. The report is likely to be available summer 2015 and will be available online www.piru.ac.uk

Who is organising the evaluation?
The evaluation is being funded by the Department of Health and is being conducted by a research team based at the London School of Hygiene and Tropical Medicine.

Who has reviewed this evaluation?
The study has been reviewed by the National Department of Health, policy experts at the Department of Health, the relevant NHS Research and Development offices and the research ethics committee at the London School of Hygiene and Tropical Medicine.

What if there is a problem?
If you have a concern about any aspect of the interviews, you can speak to the researcher who will do her best to answer your questions. During the interview, you can stop at any time and decide not to continue. If you could like to make a complaint, please contact either investigator listed below.

Thank you for reading this information sheet.

Nicholas Mays
Professor of Health Policy and Director, Policy Research Unit in Policy Innovation Research
nicholas.mays@lshtm.ac.uk
Chief Investigator

If you have any questions about the evaluation or require further information, please contact us. If you phone and do not get an answer, please leave a message and we will be happy to call you back.

Contact for further information:
Principal Investigator:
Mylene Lagarde – phone 020 7927 2653, email Mylene.Lagarde@lshtm.ac.uk

Consent form – XXXXXXXXX v 9 January 2014

EVALUATION OF THE SOCIAL IMPACT BOND TRAILBLAZERS
**CONSENT FORM – [INFORMANT TYPE] INTERVIEW**

Name of Researcher: ______________________

If you are happy to participate please complete and sign the consent form below

<table>
<thead>
<tr>
<th>Please initial box</th>
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<tbody>
<tr>
<td>1. I confirm that I have read the Participant Information Sheet concerning this study and I understand what will be required of me and what will happen if I participate in this interview</td>
</tr>
<tr>
<td>2. Any further questions concerning this study that I had have been answered by [Stefanie Tan]</td>
</tr>
<tr>
<td>3. I understand that at any time I may withdraw from this study without giving a reason</td>
</tr>
<tr>
<td>4. I consent to the interview being recorded</td>
</tr>
<tr>
<td>5. I agree to share SIB contracts or documents and understand that they will be used unnamed to inform the evaluation report.</td>
</tr>
<tr>
<td>6. I do/do not agree to be quoted unnamed in any reports or publications arising from this study (please delete as appropriate)</td>
</tr>
</tbody>
</table>

I agree to take part in this study

_________________________________________________________________________  ____________________________________________________________________________________________________________________________________________  ____________________________________________________________________________________________________________________________________________
Name of Participant               Date               Signature

_________________________________________________________________________  ____________________________________________________________________________________________________________________________________________  ____________________________________________________________________________________________________________________________________________
Name of Researcher               Date               Signature

1 copy for participant; 1 for researcher, v 9 January 2014