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Walking the contractual tight-rope: a Transaction Cost Economics perspective on social impact bonds

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Keywords

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Impact Statement

Policy-makers and managers are increasingly looking to outcomes-based contracts, including social impact bonds, as a way to improve social outcomes. Naturally, the success of these contracts is predicated on how well-specified the outcomes are within them. This article provides practitioners a useable framework for assessing outcomes specifications, suggesting that they consider the clarity of the eligible cohort, alignment of payable outcomes to overarching policy intent, and the accuracy of prices for attributable outcomes. We suggest that practitioners aim for a 'requisite' contract: one that minimizes service provider and investor opportunism whilst balancing the costs associated with developing a more robust outcomes specification.

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Introduction

Public service commissioning remains one of the most challenging tasks faced by public managers. In this article, we view a particular type of government commissioning, outcomes-based contracts financed using social impact bonds (SIBs), through the lens of Transaction Cost Economics (TCE) in order to explore ways in which commissioners might seek to improve public service contracts.

'Payment-by-results' financed through SIBs are *de facto* contractual arrangements intended to transfer the financial risks of complex and innovative services away from government commissioners and direct service providers. Third-party investors shoulder the financial risk and are only reimbursed by the commissioner if the desired social outcomes are achieved. The involvement of investors makes SIBs a unique form of public-sector contracting which offers, according to proponents, not only risk transfer but also more intensive performance management resulting in better social outcomes.

The wider debate on SIBs, however, is polarized. In a review of the largely conceptual literature, Fraser et al. (2016) identify an optimistic 'narrative of promise' where SIBs – by transferring risk, expanding preventative services, fixing government 'wrong-pockets' problems, and enabling smaller voluntary sector organizations to win contracts – (Gustafsson-Wright and Gardiner, 2016; Carter et al., 2018) – are framed as a solution to an implied lack of public-sector innovation and entrepreneurship (Mulgan et al., 2011). The veracity of risk transfer, and indeed other cited benefits, is contrasted by Fraser et al.'s 'narrative of caution', where SIBs exemplify a reprehensible process of "financialization" where public policy-making and voluntary sector endeavours are subordinated to financial sector profit-seeking (Warner, 2013; Lake, 2015; McHugh et al., 2013). Ideological debates aside, the involvement of government, service providers, *and* investors greatly increases the complexity – and thus potentially the cost – of the commissioning process. SIBs are notorious for their high set-up and management costs (so-called 'transaction costs') though these are often defended on the basis of the novelty of the arrangements (Keohane et al., 2013; Roberts, 2013; Ronicle et al., 2016). For example, the Worcestershire Reconnections SIB incurred £200,000 of direct set-up costs, which were covered by various development grants. Nevertheless, evaluation material suggests that stakeholders believed these costs were justified given the "innovative nature of the SIB as the first to address social isolation" (Ronicle et al., 2016, p. iv).

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SIBs have been actively promoted by the UK government since the financial crisis of 2007-08 and are increasingly adopted internationally (Fraser et al., 2016). However, a theoretical basis for evaluating the effectiveness of SIB contracting is lacking. We suggest that TCE can offer such a framework. Developed by Oliver Williamson (1985) building on the work of Ronald Coase (1937), in TCE, the relationship between a purchaser and a supplier of goods or services is viewed as an exercise in reducing the 'transaction costs' (TCs) of negotiating and managing the relationship, while acknowledging the human characteristics of *opportunism* and *bounded rationality*. A well-specified ('complete') contract is the purchaser's defence against opportunism ('self-interest seeking with guile' (Williamson, 1985, p. 47)) on the part of the supplier. But the purchaser has incomplete knowledge of the current and future situation ('bounded rationality' (Simon, 1957)) and so cannot reliably predict all risks and contingencies required to fully specify a contract. If the purchaser was aware of their own incomplete information and not worried about the supplier's opportunism, they might conversely decide to rely on a 'general clause' contract that specifies only that both parties will act in good faith.

The types of contracts expected under the two dimensions of opportunism and bounded rationality are shown in Table 1 (adapted from Williamson, 1985, p. 67). Williamson notes, however, that only the lower-right quadrant 'accords with reality' as opportunism and bounded rationality are never wholly absent (Williamson, 1985, p. 67). Thus, a general clause contract may be inexpensive to set up, but leaves the purchaser at risk of the supplier's opportunistic behaviour, particularly if the supplier takes advantage of their own informational advantage about the service they offer. Such information asymmetries are known to lead to output distortions (Dixit, 2002; Dixit & Picard, 2002; Girth, 2014), and because of bounded rationality, a 'complete contract' is costly and simultaneously incapable of guarding against unforeseen types of opportunism.

<<<<<<<<<<< TABLE 1 ABOUT HERE >>>>>>>>>>>>

Williamson's theoretical framework has proved extremely influential, and TCE has received empirical support from private-sector studies (Rindfleisch and Heide, 1997) and increasingly public-sector ones (Brown et al., 2006; Kim et al., 2016; Lonsdale et al., 2016). In adopting the TCE framework, we are not suggesting that opportunism is always present, nor even wholly negative. Opportunism – in the sense of 'taking opportunities' – can simply be viewed as a way of aligning the supplier's self-interest with the purchaser's desired

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outcomes, ensuring each party receives some benefit. Further, if trust is built through negotiation between purchaser and supplier, a more general contract may be effective. The level of trust between purchaser and supplier can alter over time (Vanneste et al., 2014), and purchasers do not universally view their suppliers with distrust but identify a range of levels of opportunism or trustworthiness (Gulbrandsen et al., 2017; Noorderhaven, 1996; Xue et al., 2016). However, from the point of view of a public service commissioner, an ideal contract will limit opportunism while offering flexibility to deal with unforeseen contingencies.

This paper offers original theoretical insights and generates testable propositions by applying TCE to the growing and diverse use of SIBs in public service delivery. This has important lessons for public service practitioners who are keen to minimize their exposure to 'gaming' in payment-by-results contracts. The TCE framework is particularly relevant when commissioners have little information on the costs and outcomes of suppliers as is common in outsourced services even when commissioners engage in careful 'market engagement' before the publication of a tender. For practitioners, this framework can help structure thinking on ways to mitigate opportunism, which in the field of SIBs is embodied as the *overpayment* of outcomes by the commissioner: payment for outcomes that were likely to have been achieved anyway (unattributable), or outcomes which fail to sufficiently capture meaningful changes in the lives of service users and thus fail to achieve overarching policy and programme ambitions.

Social Impact Bond Contracting

Applying a TCE framework to SIB contracting requires discussion on two fronts: an account of how TCs are incurred over the life-cycle of a SIB, and by whom; and illustrations of how key TCE concepts are realized in existing SIB projects. To set the scene, we should note that SIBs do not represent a straightforward purchaser-supplier relationship. A SIB is typically a tripartite relationship between a commissioner (government) who defines the outcomes and expresses a willingness-to-pay for them; a service provider, who delivers the social intervention; and an investor, who covers the up-front costs of the intervention in order to make a risk adjusted return via payment from the commissioner if the desired outcomes are achieved. In practice, these arrangements vary greatly (Ronicle et al., 2014). For instance, a 'special purpose vehicle' (SPV) may be set up to run the SIB, it may employ or coordinate several delivery organizations to provide the service, and it may obtain finance from one or more investors (see Ronicle et al. 2014: Table 2.1 for examples).

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The contractual relationships are similarly varied. In this analysis we concentrate on the primary contract from the commissioner's point of view, the contract between the commissioner and what we call the 'SIB supplier.' As noted above, a SIB supplier can take several forms, reflecting the involvement of delivery organizations, investors, and SPVs (see Ronicle et al., 2014). Surprisingly, few UK SIB contracts are directly between investors and commissioners even though investors theoretically face the main financial risk (Fraser et al., 2018). 'Arms-length' investors nevertheless have an interest in approving the contract terms on which their reimbursement depends. However, because the TCE framework assumes that contracts are made between two parties – a purchaser and a supplier – we conflate the investor and the service provider (or SPV) as the 'SIB supplier". Consideration of contractual arrangements 'within' a SIB (e.g. between investor or SPV and service provider) is beyond the scope of this article. TCs incurred by these parties are not the main focus of the commissioner. Those costs will either increase the *direct* costs paid by the commissioner to the investor in the outcomes payments or reduce the investor's profits.

As noted, TCs are costs associated with developing and managing a contract, that is, 'all costs borne by the consumer that are not transferred to the seller of the good' (Wallis and North, 1986, p. 98). Considering the primary SIB contract, this represents any costs to the commissioner in excess of those reimbursed to the SIB supplier including costs associated with assuring that a SIB is feasible and preferable to 'in-house' delivery or other kinds of commissioning; designing and negotiating the contract and governance structure of the SIB; running the tendering and contract-awarding process; monitoring outcomes; arranging payments to the SIB supplier; and providing any enforcement or sanctions. In some cases, the commissioner may also be responsible for securing social investment, identifying suitable delivery organizations, and monitoring service delivery quality, although those costs are typically borne by the SIB supplier (and hence for this discussion are considered supplier's costs rather than commissioner's TCs). Grey areas do exist, such as maintaining the flow of information between all partners in the relationship, where TCs may accrue to the commissioner and to the SIB supplier.

There is, of course, potential for trade-off between TCs and the direct costs paid by the commissioner to the SIB supplier for outcomes. For example, careful population segmentation and expected performance calculations at the development stage may result in more accurate outcomes payments or eligibility criteria being agreed in the contract thus lowering or accurately targeting eventual payment by the commissioner. While prolonged negotiations increase TCs they can produce benefits such as 'better' contracts, good

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relationships between stakeholders, and increased institutional capacity to enable more expedient production of future contracts. It is therefore impossible to argue that TCs should be zero, just that they should produce a contract that defends against opportunism at a reasonable cost of transaction.

While TCE is supported by a great deal of empirical work (Rodrigues et al., 2012), measuring TCs remains extremely difficult and methods are highly contested (Wang, 2003; 2007). Apart from formalized situations such as buying shares, a complete account of TCs in monetary terms is rarely attempted. Instead, proxies such as opinion surveys on the difficulty of designing and managing specific contracts are often used (Marini and Street, 2007; Shelanski and Klein, 1995; Xue et al., 2016). Although SIBs might be expected to attract high TCs due to their novelty, relationship complexity, and often lengthy negotiation periods, it is well-nigh impossible to put a monetary figure on such costs, which are rarely explicitly reported (Disley 2015, p. 10). Estimates can be gleaned from set-up grant amounts, when reported. For example, Worcestershire County Council's Reconnections SIB reported development costs of over 9% of the total outcomes payments, with these costs largely being met by central government grants (Ronicle et al., 2016, p. 5). Scholarly work is emerging – an ex-ante quantitative estimate of the TCs of a US SIB intended to reduce reoffending estimated that TCs would be about 10% of the total contract value over the seven-year lifetime of the SIB assuming a 40% fall in incarceration days (Pandey et al., 2018).

It is also very difficult to compare SIBs with traditional public service commissioning as TCs are rarely systematically reported by commissioning departments due to commercial sensitivities and measurement difficulties. A study of public-private infrastructure projects in the UK found that TCs to the public sector were typically 2-3% of the final contract value, rising to 8% for projects below £25 million (Dudkin and Valila, 2006). However, some commonalities exist between SIBs and more conventional approaches to third-party service arrangements. For example, most public-service procurements require commissioners to assess population need; set eligibility criteria; identify services to meet the need of the cohort; and select and run an appropriate procurement process (Heinrich and Choi, 2007; Romzek and Johnston, 2005). Thus, a more productive estimation approach is to identify TCs that are *unique to* or *significantly higher for* SIBs than for other forms of commissioning.

Again, looking to TCE, if TCs exceed expected savings and/or other advantages of undertaking the transaction, we anticipate organizations opting for 'in-house' delivery (Williamson, 1991) or alternative commissioning strategies (i.e. fee-for-service). The TCs most associated with SIBs include prolonged negotiation periods (Disley et al., 2015;

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Neyland, 2017) and related increases in personnel hours; higher reliance on technical assistance to provide population segmentation, outcomes specification, pricing, financial modelling, and evaluation; increased evidentiary requirements resulting in additional data collection and monitoring; and additional time and effort required for relationship management throughout the life cycle of the SIB (Disley et al., 2015; Griffiths et al., 2016). Still, it might be argued that just as TCs are hard to measure, it is equally hard to put a value on their benefits. Arguably, some TCs can lead to a better understanding of the needs of the population served, a clearer articulation of the service, and a more active management of the contract as compared to alternative commissioning strategies. If commissioners do not engage in these activities outside a SIB arrangement, their value will be reflected in the additional benefits that accrue to the target population. SIBs are a relatively recent initiative and high TCs are sometimes justified by their potential to improve the effectiveness of future commissioning rounds through relationship- and capacity-building. For any particular commissioning exercise, however, the commissioner's aim is to minimize their own TCs while producing a contract that enables the delivery of desired social outcomes.

We argue that the goal of the commissioner entering a SIB agreement should be to negotiate a 'requisite' contract. In the spirit of Phillips (1984) and Jaques (2017), we define a 'requisite contract' as one whose form and content minimizes the scope for opportunism by SIB suppliers without breaking the bank. Thus, a requisite contract increases the likelihood of achieving best value for commissioners while balancing the costs associated with developing a tighter, more specified contract. We note that a degree of uncertainty is inherent in outcomes-based contracts where the precise intervention is not specified, allowing innovative interventions to be piloted. Nevertheless, unspecified interventions do not necessarily reduce TCs. As we argue below, this approach requires correspondingly more accurate specification and pricing of outcomes. The prevailing question for commissioners, then, is whether a contract provides adequate defence against opportunism at a reasonable cost of transaction.

In the sections that follow, we suggest a framework for commissioners to reflect on whether they have struck the appropriate balance in this regard, or consider if there is more they can do on particular contractual dimensions to better walk this tightrope. We then illustrate this framework with two examples from the UK context: the case of Her Majesty's Prison Peterborough, where the outcomes specification was very tight but TCs may not have been justified; and the Department for Work and Pensions Innovation Fund, where the outcomes specification was rather loose and the TCs lower, but evidence of impact suggests commissioners overpaid for outcomes (Salis et al., 2018).

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A Framework for Assessing Outcomes Specifications

In terms of bearing down on contract 'requisiteness' to guard against opportunism, there are two major components of an outcomes-based contract through which commissioners can drive SIB supplier behaviour: (i) a specification of desired outcomes, and (ii) risk-sharing arrangements in the event of underperformance. The focus of this section is to explore how outcomes specifications can guard against various types of opportunistic behaviour. While beyond the scope of this article, we will return to risk-mitigation as a point of discussion.

Within outcomes frameworks we identify three essential criteria (Figure 1). We contend that an outcomes-based contract that does not address these three aspects – cohort definition, outcome alignment, and accurate pricing – leaves the commissioner open to opportunistic behaviour on the part of SIB suppliers, and hence to reimbursing investors for outcomes of dubious value. Nevertheless, it is important to remember that the goal for commissioners is a requisite contract, a tight-rope walk of balancing protections against opportunism with the cost of transaction.

<<<<<<<<<<< FIGURE 1 ABOUT HERE >>>>>>>>>>>>

First, the perennial concerns around opportunism within outcomes-based contracts are 'cherry-picking', when suppliers choose only the easy-to-help participants in referral; and 'creaming' and 'parking', when suppliers concentrate efforts post-referral on easy-to-help participants and ignore more difficult cases (Carter and Whitworth, 2015). A first line of defence from such behaviour is to tightly define the cohort of eligible beneficiaries. By tightly defined, we mean that the rules for determining who receives the intervention leave little room for interpretation (e.g. attendance thresholds, age cut-offs, other benefit/statutory eligibility requirements); the referral process is independent such that the SIB supplier cannot exert undue influence on case selection; and that variation in difficulty-to-help – that is the amount of effort (and by extension, cost) to support a programme participant to generate a payable outcome – across the cohort is either minimal or well-understood. Objective eligibility criteria and an independent referral process reduce the likelihood of 'cherry-picking' by ensuring that commissioner preferences, as opposed to supplier whim, determine who receives services and who doesn't. Minimal or well-understood variation in difficulty-to-help allows commissioners to devise appropriate payment and monitoring schemes to reduce

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'creaming' and 'parking'. In instances where there is variance in difficulty-to-help, this could mean the introduction of referral and case-note auditing or differentiated payments to incentivize suppliers to work with the most difficult cohort members.

Second, the payable outcomes must be valid and aligned to the policy objective as defined by the commissioner. Causal validity is particularly important; if the specified targets are poor proxies for the intended outcomes (i.e. their causal relationship is suspect or unproven), the SIB supplier can manipulate proxy outcomes for financial benefit while leaving the underlying social need unaddressed. Commissioners, therefore, should ensure that specified outcomes *meaningfully* distinguish successful programs from failed ones. We suggest that three interrelated criteria ensure such policy alignment: evidence of the validity of a program's cause-and-effect chain, also called a logic model or theory-of-change; the durability of payable outcomes, understood as the likelihood that payable social outcomes will be sustained without continued intervention support; and a tracking period which is long enough to capture an appropriate temporal blend of outcomes, that is, outcomes which are reasonably attributable given the validity of the cause-and-effect chain, and suitably durable to ensure that commissioners are paying for lasting change.

Still, there are several reasons why commissioners may allocate some payment for activities rather than pursuing 100% outcomes contracts:

(i) Payment based solely on outcomes can lead to opportunistic behaviour due to the SIB supplier's desire to recoup their costs and the only route to this being through outcome-related payments. US healthcare experience suggests that opportunistic behaviour may be reduced by contracts that offer only a proportion of outcomes-based payment, the remainder being input- or process-based (de Bruin, Baan, and Struijs, 2011; Van Herck et al., 2010). In SIBs, this strategy would reduce the risk to SIB suppliers of non-payment in the event of failing to reach targets (a strong incentive to 'game' the reporting of outcomes), while still instilling a focus on improving outcomes. A version of this strategy is seen in UK SIBs aiming to reduce homelessness and increase employment in young people: the Fair Chance Fund paid for up to three assessment meetings with each participant, regardless of whether the participant achieved longer-term outcomes (DCLG 2014, p.20).

(ii) Some activities are considered sufficient proxies for the longer-term outcomes because the intervention's cause-and-effect chain is well-evidenced. While the

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use of proxies is common in UK SIBs, commissioners should proceed with caution given the ease with which they can be manipulated by suppliers (Goodhart, 1975; Strathern, 1997).

(iii) Practically, it can encourage SIB suppliers to respond to tenders while offering value-for-money for the taxpayer. While activity payments revert some of the financial risk to the commissioner, they ensure a more even cash-flow to the investor. This drives down the overall cost of the contract, as investors see an earlier return on their capital. With this consideration, the commissioner may choose to include some payment for activity in the contract, as well as the fees for outcomes.

The last criterion, accurate price-setting, means that outcome prices must balance the following factors: attribution of outcomes to the intervention; social benefits to the participants; direct cashable savings for the commissioner; and wider public benefit. For example, if attribution of outcomes to the intervention is not robust, the SIB supplier can claim payment for outcomes that would have occurred anyway (so-called 'deadweight' or non-additional/non-attributable), and the outcomes payments should be lowered accordingly. For programmes which provide immediate and substantial cashable savings for the commissioner, such as moving children from residential care into home placements, this criterion can be met more easily as the benefit is well-defined and temporally proximate. Similarly, price-setting for programs that have a well-established evidence base may be more tractable – but in those cases, a fee-for-service contract may be more appropriate as the value of transferring risk is somewhat reduced. For many SIB contracts, where the cause-and-effect chain is less well understood or savings accrue across several agencies or over a prolonged period, price-setting is correspondingly more complex.

A TCE perspective on two UK Social Impact Bonds

We now describe two examples of actual SIB projects to illustrate the points above.

Department for Work and Pension's Innovation Fund

Perhaps the closest example of a general clause contract in the SIB space is the Department for Work and Pension's (DWP) Innovation Fund. Launched in 2012, the Innovation Fund was part of a £60 million support package to improve outcomes for young people who were or at-risk of becoming not in employment, education, or training (NEET). The vision was to provide support for a small number of pilot programs to "test the effectiveness of a range of

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social investment models and innovative programmes aimed at disadvantaged young people and those at risk of disadvantage" (DWP, 2012, p. 2). The DWP expressed three overarching goals: 1) to deliver support to young people and improve their employability (and thus, reduce their dependence on longer-term out-of-work benefits); 2) to test whether cashable savings can be realized alongside other fiscal and social benefits; and 3) to develop the social investment market, the capacity of smaller delivery organizations, and the evidence base for social investment arrangements. Ten SIB contracts were awarded in two bidding rounds.

The DWP set out general eligibility criteria and outcomes payments based on a rate card, a list of outcomes and their associated payments. The 'general' nature of the contract was evidenced by the non-prescriptive nature of the invitation-to-tender (ITT here: https://data.gov.uk/data/contracts-finder-archive/download/344819/6767fc6c-ff3e-4f23-8a3a-bc065874a04e; contracts here: https://data.gov.uk/data/contracts-finder-archive/contract/793927/), allowing projects to define the intervention model, the referral criteria and mechanism, and their preferred mix of outcomes from rate card options. Rated against the three criteria in Figure 1, we find that the outcomes specifications evidenced limitations on at least two criteria. For criterion 1 (eligibility), these SIBs could specify their own referral criteria. This could potentially have led to opportunism, but we have no evidence for any lack of compliance to the criteria agreed in the project-specific contracts. In fact, there is qualitative evidence that delivery organizations had a strong desire to target the most disadvantaged young people (Griffiths et al., 2016, p. 41). However, criterion 2, the alignment of achieved outcomes with policy objectives, was weak. While the logic of the rate card assumed progression through outcomes – from better attendance and behaviour at school to additional qualifications and eventually sustained employment, a proposed cause-and-effect chain – in practice SIB suppliers chose their own mix of outcomes. SIB suppliers were paid for the mix of outcomes actually achieved even if it differed from the original specification subject to a per capita and total monetary cap. As stipulated in the contract:

> "the Contractor shall be entitled to an Outcome Payment in respect of each Outcome achieved by each Participant (and shall not be limited by the proposed number or total price specified for each Outcome in the table below), provided that the total sum of all Outcome Payments to be paid by the Authority to the Contractor under this Contract shall not exceed the Total Outcome Payment Cap."

Criterion 3 was similarly weak as no upper limit was placed on the number of participants, which allowed over-recruitment and hence weaker attribution of outcomes to the intervention. This is because some outcomes will be achieved without the specific

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intervention, and a larger cohort will naturally produce more such unattributable outcomes. As the contracts specified only total numbers of outcomes (with no lower thresholds or requirements for numbers of outcomes per participant), projects that detected lower than expected numbers of outcomes tended to increase recruitment (Griffiths et al., 2016, p. 40). The quantitative impact evaluation of the Innovation Fund (Salis et al., 2018) suggests that the outcomes achieved by programme participants have not been, in the main, better than those of similar individuals not participating in SIB-backed interventions and in some cases have been worse. So, if participant outcomes were the same or worse than outcomes for individuals not enrolled in the program, we can say with some confidence that outcomes which were paid for were neither additional nor did they meaningfully distinguish programme failure from success: commissioners overpaid for them, a finding fully consistent with our analysis of weak outcome specification.

Overall, the potential for opportunistic behaviour does not appear to have featured as a major concern in the design of the fund (Carter, *forthcoming*), marking a clear shift toward a relational or negotiated approach to contracting through a general clause. A successor programme (the Youth Engagement Fund (YEF)) was rolled out in 2015, suggesting that the DWP considered this approach to be of value. No estimates of the Innovation Fund set-up or management costs were published though Bridges, a major social investment organization in this space, notes that the set-up time for contracts under the successor programme was considerably shorter than for the original contracts (Bridges, 2017, p. 11).

Her Majesty's Prison Peterborough

For an example of a more closely specified contract, we consider the SIB implemented at Her Majesty's Prison (HMP) Peterborough. Launched by the Ministry of Justice in 2010 as the world's first SIB, the Peterborough SIB provided 'through-the-gate' and post-release support to prisoners serving short sentences with the aim of reducing reoffending. Through a newly formed SPV called the ONE Service, the Peterborough SIB coordinated a network of differently-focused provider organizations to handle the complex needs of inmates nearing the end of their sentence. Unlike the DWP Innovation Fund, the Peterborough SIB was very structured in its approach and met all three criteria in Figure 1.

Criterion 1 was addressed through a tightly defined cohort (individuals with prison sentences of less than 12 months housed at HMP Peterborough) and clear and impartial referral mechanisms (everyone eligible would be contacted by the delivery organization(s) although participation was voluntary). Criterion 2 was met as the payable outcome (reduced reconvictions by a specified percentage compared to a comparator group) was well-aligned

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with the policy intent, and not simply a loosely-coupled proxy. The outcome was also thoroughly attributable to the intervention (criterion 3) as it was authenticated through a real-time comparison group using quasi-experimental impact evaluation (a propensity-score-matched national sample group) (Anders and Dorsett, 2017). In terms of performance, the Peterborough SIB achieved the specified decrease in reoffending relative to the comparator group and investors were repaid.

Nonetheless, the TCs of this SIB were considerable. As stated in the official evaluation, "the analytical work and negotiations were time-consuming for the Ministry of Justice, Her Majesty's (HM) Treasury, Social Finance and investors. […][The intermediary] Social Finance has estimated that it has invested approximately 2.5 person-years of its resources, and more than 300 hours of legal advice (provided pro bono), as well as specialist tax advice, in developing the SIB" (Disley et al. 2011).

Discussion

In this paper, we applied TCE to consider how to improve outcomes specifications in SIB contracts. Applying TCE to SIBs allows us to identify ways in which SIB contracts can be designed to balance bounded rationality and opportunism. We argue that improving the quality of outcomes specifications and moving towards a requisite contract is appropriate where a risk of opportunistic behaviour exists and when the corners of the 'outcomes triangle' (Figure 1) can be specified at a reasonable cost.

It appears from the two examples that a more closely specified contract is valuable in promoting SIB effectiveness and reducing the scope of opportunistic behaviour. Importantly however, while the Peterborough SIB achieved the specified decrease in reconvictions, the TCs were considerable. Estimates of the fixed development and management costs of this pilot programme were very likely to exceed any marginal cost savings gained through the outcomes (McKay, 2013). As was seen in other payment-by-results initiatives, these TCs may be considered developmental and likely to reduce over time as the learning from designing and managing SIB contracts grows and the size and experience of providers expands (Bridges, 2017, p. 11; NAO, 2014). This highlights a problem with the small scale of existing UK SIBs where contract values range from approximately £0.5 to £8 million: for plausible values of the fixed overhead costs, including legal counsel fees, intermediary and investor costs, and evaluation expenses, it has been estimated that a SIB contract must be worth at least $20 million USD (£12.6 million) to make those costs worthwhile (Azemati et al., 2013). In other words, neither the DWP Innovation Fund nor Peterborough effectively

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walked the contractual tightrope: the former failed to account for opportunistic behaviour, and the latter failed to specify at reasonable cost.

Still, to what extent can commissioners fairly lean on outcomes specifications to ensure requisite contracts? As noted, the second element of a 'good' contract is the consideration of possible contingencies and risks of underperformance, imparting flexibility and negotiability to the fulfilment of the project. That is because – due to bounded rationality – the outcomes specifications cannot take into account all possible eventualities, meaning some elements of a general clause contract must be incorporated. Social and political changes may render particular outcomes irrelevant or the target cohort may be larger or smaller than expected. We suggest that neglecting either the specification of outcomes or the consideration of contingencies leaves the commissioner open to different forms of risk, including an increase of TCs, as shown in Table 2. Hence, in the top row of the table – where outcomes are well-specified according to the three criteria described above – some flexibility should be built-in to deal with unforeseen events and contingencies. This does not mean writing incomplete or vague contracts, but instead means specifying the responsibilities of the contracting parties in the face of changing circumstances (Barthélemy, 2001). So, the upper-left quadrant is a better position for the commissioner than the upper-right. Likewise, where outcomes cannot be fully specified – perhaps because good proxies do not exist or cannot be measured in a reasonable time – correspondingly greater attention should be paid to the risks of underperformance. The lower-right quadrant is the least favourable position for the commissioner, putting them at risk of paying for outcomes of dubious value. A better position is the lower-left quadrant, where the contract provides scope for renegotiation in the event of unsatisfactory outcomes or changing circumstances. However, contract renegotiation is itself costly, so the greater effort needed to draw up a well specified *and* flexible contract in the first place may prove to be justified.

<<<<<<<<<<<< TABLE 2 ABOUT HERE >>>>>>>>>>>>

It could be argued that the commissioner is unconcerned about the risk of underperformance, since the investor bears the financial risk of outcomes not being met, and indeed one role of SIBs is to pilot innovative, often unproven, interventions. But in practice, the commissioner faces several risks. First, the commissioner risks paying for outcomes of dubious value if the supplier concentrates on 'low-hanging fruit.' Second, if the outcomes are not achieved the commissioner retains responsibility for the support of the participants

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through traditional services and the TCs already expended. Third, the commissioner faces the reputational risk of the failure of the program. Thus, underperformance risks both financial and reputational loss to the commissioner. One way of mitigating risk is to build relationships between commissioner and SIB supplier. 'Match-making' and trust-building between commissioners and SIB suppliers may result in more trust-based contracts. Indeed, the degree to which SIB contracts have relied on relational values – what Williamson might call probity but can generally be thought of as trust, egalitarianism among stakeholders, or instrumentally, an area for general clause contracting – distinguishes them from more traditional forms of public-sector commissioning. Building such relationships may be expensive and time-consuming, but they may lead to contracts that all parties view as fair and effective.

Conclusion

In this article, we apply TCE to UK SIBs as a way of clarifying the trade-off between a robust value case for government and the TCs associated with specifying an outcomes-based deal. A requisite contract in this context is one that minimizes the scope for opportunism by SIB suppliers – therefore increasing the likelihood of achieving best value for commissioners – whilst balancing the likely increased costs associated with developing and negotiating a tighter, more robust outcomes specification. Through an exploration of two UK SIBs, we demonstrate that this balance may not always have been struck appropriately. In in the DWP Innovation Fund, a weak outcomes specification comes with overpayment. Conversely in Peterborough, we observe a very robust outcomes specification but perhaps unjustifiable TCs. An important limitation of this work, however, is the rather linear view that an increase in the quality of outcomes specifications yields a corresponding decrease in opportunistic behaviour among SIB suppliers. Not only is this an oversimplification commissioning in complex environments, it remains untested. Further empirical work will be necessary to test the performance of outcomes specifications, across the dimensions explored here, in real-world situations. In particular, research should strive to identify policy domains that lend themselves to standardized 'well-specified' contracts, and others that require a more 'relational' approach.

Nevertheless, we suggest that the generally applicable framework for specifying outcomes presented here – the 'outcomes triangle' – is a useful tool for commissioners to reflect on whether they have struck an appropriate balance between specification and cost, and to consider if there is more they can do on particular dimensions to better walk the tightrope and increase the rigor with which they define, measure, and pay for outcomes.

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Table 1. Williamson's two dimensions of opportunism and bounded rationality: a typology of contracting approaches (adapted from Williamson 1985).

Bounded rationality→ **Opportunism↓**	**Absent**	**Admitted**
Absent	**Bliss**	**'General Clause' contracting**
Admitted	**'Comprehensive' contracting**	**Serious contracting difficulties**

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Table 2. Elements of 'well-specified' contracts

Risks and Contingencies→ **Outcomes↓**	**Considered**	**Not considered**
Well-specified	**Outcomes well specified and contingencies considered** Low risk to commissioner (but perhaps high TCs)	**Outcomes well specified but no flexibility in face of contingencies** Risk to commissioner: outcomes may become inappropriate but can't be renegotiated
Poorly specified	**Outcomes poorly specified, flexibility to renegotiate** Commissioner risks paying for outcomes of dubious value, but can mitigate by renegotiation	**Outcomes poorly specified but no flexibility to renegotiate** Commissioner at risk of supplier opportunism

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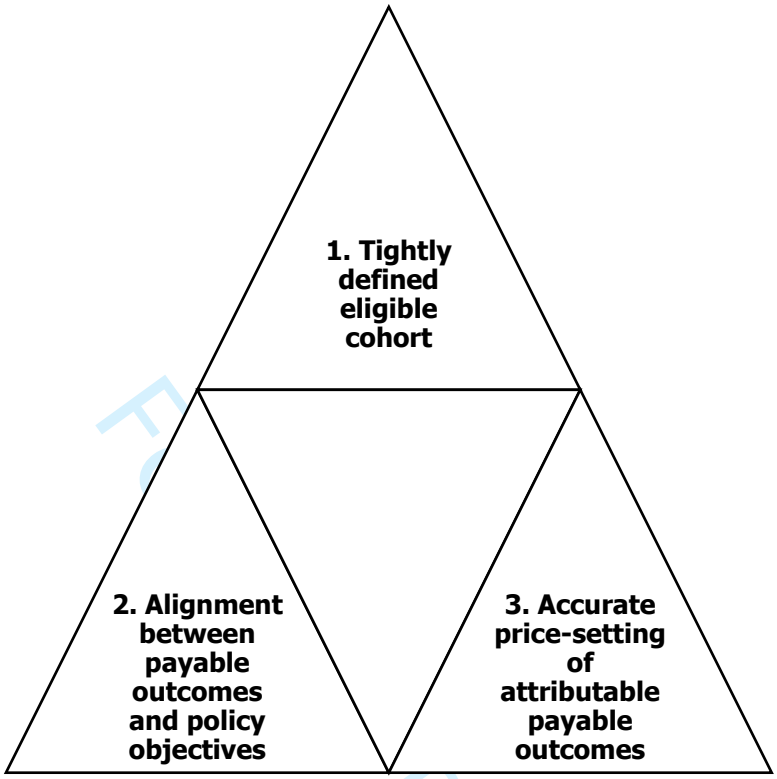
Figure 1. Outcomes Specification Assessment Framework



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