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## **Assetization**

### **Turning Things into Assets in Technoscientific Capitalism**

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# 11 Recidivists, Rough Sleepers, and the Unemployed as Financial Assets: Social Impact Bonds and the Creation of New Markets in Social Services

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## Introduction

One of the enduring ironies of the financial crisis of 2008 is that these events did little to challenge neoliberal rationalities, with markets continuing to be viewed as a response to all manner of social problems (Mirowski 2013). A perfect expression of this valorization of market-based solutions comes from the social services sector and the emergence of a new, investment-based funding model, the social impact bond (SIB).<sup>1</sup> Pioneered in the UK in 2010, a SIB is an investment contract in which private investors provide up-front funding for a preventative program. If the program is successful in meeting predefined performance targets, the government repays the investment and provides a return based on the cost savings realized from reduced future demand on public services. The result is a win-win-win scenario. Nonprofits receive multiyear, more flexible funding. Governments are able to deliver preventative services while only paying for success. And investors receive a financial return while also doing good. These benefits have helped fuel the global expansion of the model, which has been exported to the US, Australia, Canada, and parts of Europe, and applied to a range of issues, including reoffending, homelessness, child welfare, education, and employment (Carter et al. 2018).<sup>2</sup>

As the SIB market has grown, so too has the number of critics. Commentators in policy and academic circles have cited concerns ranging from the failure to deliver on promised cost savings, to perverse incentives, to the erosion of agency autonomy and mission (Cooper et al. 2016; Edmiston and Nicholls 2018; Fraser et al. 2018a; McHugh et al. 2013; Neyland 2018; Warner 2013). A key theme running through many critical accounts is that SIBs are indicative of the marketization (Joy and Shields 2013; Sinclair et al.

2014) or, more specifically, the financialization of the nonprofit and public services sector (Cooper et al. 2016; Lake 2016; Warner 2013), a migration of financial actors, tools, and logics into the nonprofit space and the transformation of human services and their clients into commodities (Cooper et al. 2016) and financial assets (Dowling 2017; Dowling and Harvie 2014). And yet, while SIBs are clearly informed by a financial logic and are enlivened by the interests of prospective investors, the notion that this model is yet another example of the expanding remit of finance overlooks the unique features of this space and the hard work required to reconfigure social services as investment propositions. Far from a smooth process of financialization, SIB development has encountered a series of roadblocks with practitioners at times struggling to engage investors and the market growing much more slowly than expected. All of this leads to a slightly different question. Rather than “What is wrong with SIBs?” or “Are SIBs good or bad?” we might ask, “Why have SIBs struggled to take hold?”

Informed by the results of a larger three-year study of SIBs and the funding of nonprofit social services in Canada, the US, and the UK, this chapter provides a tentative answer to this question by framing SIB development not in terms of a process of financialization but rather assetization. Drawing from the core themes of this collection, what is most noteworthy about SIBs is not simply the transformation of social problems into investment propositions but rather a distinct form and practice of valuation through which the work of nonprofits is reconfigured as a type of asset yielding savings to government and returns to investors. In undertaking this work, SIB specialists have faced a variety of challenges struggling with how to value these transactions and to build a value proposition sufficient to engage investors, government, and providers both in individual deals and in a longer-term commitment to the market. The central argument of the chapter is that it is these valuation challenges which help to account for the struggles of the SIB market to grow and gain traction, with assetization thus providing an invaluable lens through which to explore the contingencies and limits of the SIB phenomenon. The first part of the chapter lays the groundwork for this analysis, providing an overview of the SIB model and the valuation practices that have been critical to turning social services into assets. The second part then turns to the struggles underlying this process of assetization, examining three distinct valuation challenges that have impacted SIB development. Given these challenges, and in light of the recent evolution

of the SIB market, the chapter concludes with the suggestion that what may be most significant about SIBs moving forward is the creation not of a *private asset* but rather a new type of *public asset*, one that is likely to have critical implications for the relationship between the state and the social sector (see Milyaeva and Neyland, this volume).

### Financing Social Services: SIBs as a New Funding Tool

In September 2010, the UK government introduced with great fanfare the pilot of a new model for funding social services. Termed a “social impact bond,” the concept was to use private capital to fund an initiative designed to reduce reoffending among short-term prisoners released from Peterborough prison. If the program was successful and met predetermined performance targets (defined in terms of reductions of recidivism rates relative to a matched comparison group), investors would receive a financial return of up to 13 percent (Disley et al. 2011). This return would be paid by the government based on the cost savings realized from reduced future demand on the criminal justice system. However, if the program failed to meet these targets, investors would lose their principal along with any potential returns. This transaction was designed by an intermediary organization, Social Finance UK, established with the express purpose of building the SIB market, and the outcomes were measured and validated by an independent evaluator.

Often described as a game changer in the funding of social services, this model is seen to provide several benefits. For nonprofits, it offers a source of flexible, longer-term funding that is superior to standard government contracts. For government, it provides a way to deliver more innovative and preventative programs while shifting the up-front costs and, more importantly, the risk onto private investors. And, for investors, SIBs offer the promise of both a financial and a social return, exactly the type of blended value proposition heralded within the emerging fields of “social finance” and “impact investing.” The ultimate vision is that SIBs will help unlock new sources of investment capital for the purpose of social good. Based on the appeal of this win-win-win scenario, the model has quickly expanded to the US, Canada, Australia, and parts of Europe, with the SIB market surpassing one hundred operational projects worldwide as of the midpoint of 2018 (Carter et al. 2018).

As the slate of projects has grown, so too has the chorus of critics, with SIB detractors citing a host of flaws and concerns ranging from perverse

incentives to the challenge of evaluating social programs, to high transaction costs, to threats to the autonomy, mission, and moral mandate of providers (Cooper et al. 2016; Fox and Albertson 2011; Joy and Shields 2013; McHugh et al. 2013; Neyland 2018; Warner 2013). A key thematic current underlying many of these critical accounts is the notion that SIBs are indicative of the financialization of social and public services (Dowling 2017; Lake 2016; Warner 2013), a migration of financial actors, interests, and logics into the nonprofit space with social services thus transformed from public goods into a “new asset class” and form of capital accumulation (Dowling 2016, 6; Dowling and Harvie 2014; Lake 2016).

There is without question merit to these critiques. It is undeniable that SIBs are enlivened by, and have their roots in, the logics of finance. By their very design, they provide a mechanism through which investors are able to profit from social problems and, with projected returns in the 3 percent to 15 percent range, the potential for profit is very real. And yet, the reality of SIBs as they have evolved in the UK, US, and Canada bears only a limited resemblance to the financialization narrative. The anticipated influx of investors has largely failed to materialize, with more return-motivated investors remaining quite cool to the model (Fraser et al. 2018b). Instead, SIB markets have relied heavily on state and philanthropic support and subsidy (Floyd 2017; Warner 2013). In the UK, the central government has been a key backer of SIBs supplying investment capital through the social investment wholesaler Big Society Capital. In the US, philanthropy has played an essential supporting role, with major foundations providing direct investments, loan guarantees,<sup>3</sup> and first loss capital.<sup>4</sup> In addition to the struggle to engage more commercial capital, there are other signs of weakness in the SIB market. While the number of transactions continues to grow, the pace of growth has been slower than expected (Maier and Meyer 2017; Arena et al. 2016) and the market as a whole remains tiny, especially when compared to the scale of government spending (Dey and Gibbon 2018; Giacomantonio 2017). Many projects have also failed to launch, foundering between feasibility and execution (Fraser et al. 2018b; Heinrich and Kabourek 2018), and several advisory firms have struggled with lower than expected revenues and uncertainty around the sustainability of their business models.<sup>5</sup>

The fact that SIBs have struggled to live up to expectations, showing few signs of the kind of capital inflows and market growth imagined by advocates and feared by critics, suggests that perhaps what needs to be

explained is not the existence of SIBs as a vehicle for the financialization of social services, but rather the challenges, barriers, and limits associated with the attempt to bring an investment model and mindset to bear on the nonprofit sector. While often overlooked in the academic literature, the trials and tribulations of SIB development and execution are key themes in practitioner reports (e.g., Dear et al. 2016). Beyond common complaints about a lack of capacity and expertise on the part of government and providers as well as difficulties around data access, central to many of these accounts is the notion that SIBs are a great deal of work and that much of this work involves the effort to capture and quantify the economic and financial value of nonprofits, thus allowing for program outcomes to be monetized and capitalized as savings for government and returns for investors. This suggests that what lies at heart of SIBs is a distinct challenge of valuation, or value creation, with SIB specialists employing a range of different tools and forms of expertise (e.g., accounting, cost-benefit analysis, program evaluation, data analytics, and performance management), few of which are strictly financial in nature. The centrality of valuation to the SIB enterprise, and the nature of SIBs as a claim on the projected future value of nonprofit work, suggest that SIBs may be more usefully examined through the lens of assetization rather than financialization.

As described by Birch and Muniesa (this volume), the process of turning things into assets depends on particular practices of valuation. This follows the core insight of valuation scholars that economic value is not intrinsic to objects or practices, but rather is the outcome of a value-adding process itself mediated by various tools and technologies (Doganova and Muniesa 2015; Muniesa 2012, 2014; Ortiz 2013). Economic value is produced and performed through calculative devices such as business models (Doganova and Muniesa 2015; Doganova and Eyquem-Renault 2009) and research methods (Campbell et al. 2017; Helgesson et al. 2016) as well as the recruitment of advisors and consultants whose expertise and labor are critical to the enactment of new regimes of value (Bessy and Chauvin 2013; Birch and Tyfield 2013; Lohmann 2005; Pollard et al. 2008; Pike and Pollard 2010; Randalls 2010). It is these practices and devices, and the work of what Barman (2016) refers to as “value entrepreneurs,” which underlies the process of assetization as the creation of a form of value which can be monetized, capitalized, and translated into “property that yields an income stream” (Birch 2017, 468).

Informed by this scholarship, the remainder of this chapter examines the extent to which SIBs may indeed be viewed as a type of asset and product of a distinct process of assetization. In light of the valuation challenges noted above, the focus is not simply on SIBs as further evidence that “almost anything can be turned into an asset” (Birch and Muniesa, this volume), but also on the barriers to this process and thus the limits to the assetization of social services. This analysis is informed by the results of a three-year study of SIBs and the funding of social services in Canada, the US, and the UK. The research consisted of documentary research and 195 semi-structured interviews with the various actors populating the SIB economy, including investors, government officials, service providers, and SIB intermediaries and advisors (hereafter referred to as SIB specialists). The interviews were conducted between May 2016 and July 2018 primarily in the cities of Toronto, Boston, and London, the epicenters of the Canadian, US, and UK SIB markets. These confidential interviews were then transcribed and analyzed using a coding system developed and refined during the course of the study.

### **Turning Social Problems into Assets: SIBs and the Valuation of Nonprofit Work**

Before we can broach the question of the forms of valuation that underlie SIBs, we first need to ask a seemingly basic but surprisingly nuanced question: What is a SIB? The very term *social impact bond* is a misnomer.<sup>6</sup> Rather than a fixed return with no (or limited) risk, a SIB is essentially a working capital loan with a variable interest rate thus combining both debt and equity-like features. These loans have been structured in a variety of different ways. One of the more common options includes a special purpose vehicle (SPV) which holds and manages the contract. Investors thus either make an equity investment or a loan to the SPV, and the managers of the SPV (usually an intermediary or fund manager) then contract with the provider and government payor while providing governance and oversight through the life of the project. Other structures include direct loans between investors and providers, with the latter assuming a much greater share of the risk.

Beyond the selection of the contracting structure, the essential element of any SIB is the ability to translate the social impact produced by a provider or program into an economic value which can then be monetized and capitalized. As explained by one prominent figure in the field, this hinges

on the creation of cash flow from services that do not in and of themselves generate any revenue;

[The SIB model] says that... not only does social impact have economic value, it can be monetized. You can monetize that economic value and create a cash flow from it. I know from my days in investment banking, you give me a cash flow that I can identify, lock up, and secure, I can finance anything. And that's why there's so much excitement about things like SIBs. (Pinakiewicz 2014)

Given that the state is the source of this cash flow, the starting point for most projects is identifying public services that have high costs and where existing approaches have had little success. SIB designers are thus interested in “monetizable social ills... areas where there is still a very significant, often more significant kind of acute care cost” (Canadian SIB specialist #4). For example, corrections is “an inviting investment opportunity because of large budgets, the pressing demand to reduce spiraling costs, and high recidivism rates ripe for reduction” (Cullen 2013, 355). The same is true of homelessness, child welfare, and unemployment. Within these issue areas, the objective is to identify specific subpopulations that are deemed to be especially costly. These are the “high utilizers,” those at high risk of reoffending (Third Sector 2013), or the chronically homeless who have frequent contact with emergency health and criminal justice systems (Segal et al. 2018).

Having defined these populations and determined the costs of existing services, SIB developers then seek to identify interventions shown to produce improvements in the outcomes for these groups. These improvements must be of sufficient size and scale to warrant government interest and to produce the requisite financial returns. The very notion of outcomes signals a fundamental shift in the way that nonprofits are evaluated. Historically, agencies have been compensated on the basis of outputs, transaction-based indicators of agency activity and contact with client groups—for example, the number of people housed in a homeless shelter. More recently, the emphasis has shifted toward payment on outcomes, understood as discernible changes or improvements in an underlying social condition. Whereas outputs are retrospective, outcomes are future-oriented and grounded in a preventative logic. In the case of homelessness, the transition to more permanent housing. For an employment program, not simply completing job training but securing full-time employment. Thus SIBs are rooted in a “shift away from a revenue model that funds *outputs*... to revenue for organizations on the basis of the *positive value of the outcomes* they achieve” (Boggild 2013). In this respect,



the very notion of an outcome already reflects a form of valuation work and is central to both the construction of social value as a product of nonprofit effort and the monetization of that value in the form of prospective cost savings—that is, calculations of what these outcomes are worth.

The final element of a SIB is determining investor risks and returns and thus pricing the transaction which involves the construction of a financial model. As noted by Doganova and Muniesa (2015, 120), models are central to the practices of valuation and capitalization that underlie the “asset-becoming process.” In the case of SIBs, these financial models input variables such as outcomes (as well as indicators of outcomes such as referrals and enrollments), costs, and returns, and then allow investors to test different scenarios including, for example, how variations in referral rates are likely to impact outcomes and returns, “so that you can actually say, okay, well, let’s do a sensitivity around what would our returns be at different levels of performance” (Canadian SIB specialist #4). As explained by a US respondent, “We generally will develop a financial model that the lenders can use and play around with and make their own determination of the risks they are taking on and what their scenario analysis can be” (US SIB specialist #9). “Playing around” with the model allows investors to get comfortable with the SIB while subjecting social programming to the rigors of financial analysis, what Cooper et al. (2016, 73) describe in the context of the London rough-sleeping SIBs as a “layering of a grid of economic analysis (discounted cash flows, interest rates, cost allocation methods, risk assessments) onto a social field.” The result of this financial modeling is the creation of a distinct “calculative space” (Callon and Muniesa 2005, 171), one which contains different hypothetical worlds and allows for different translations between social (outcomes), economic (cost savings), and financial (returns) value.

However, the significance of these models does not end with the execution of the deal. They also play a central role in what respondents suggested was the most critical aspect of any SIB: post-execution performance management. A key responsibility of SIB specialists is to assess indicators and outcomes in as close to real time as possible, making course corrections where performance falls below expectations. As explained by one investor in the context of homelessness SIBs, “in the first year if you don’t get a certain number of your cohort usually into the first stage of temporary accommodation, you’re never going to reach the remaining outcomes. And therefore

in the first year ... you really have to focus on those outcomes because if you don't get those, *nothing else matters*" (UK SIB investor #6, emphasis added). Indeed, it is widely acknowledged that programs will struggle in the early going and that many of the key assumptions will turn out to be wrong (Fraser et al. 2018b), "whatever you launch never works or some aspects of it never work as well as you hope so you always have to change some stuff" (UK SIB specialist #5). The "stuff" that needs to be changed is often dictated by the financial model itself as "investors are always constantly recalculating their returns and asking for little bits of extra work to be done" (UK provider #4). Additional resources may be required, or there may be staff changes. For SIBs, performance management is thus "where the magic happens" (UK SIB specialist #10), the point where reality is brought back in line with the model.

Following this discussion, it would appear that SIBs are indeed indicative of the transformation of social services into assets. Fundamentally, they allow for the conversion of improvements in human capital into future cash flows and thus investor returns (Cooper et al. 2016), a way to extract economic and financial value from the social value produced by nonprofits. Through this process, they share many of the defining features of assets (Birch and Muniesa, this volume). SIBs are legal contracts. They provide a monopoly over a defined service, locking-in specific programs and providers (Neyland 2018), and they allow for the extraction of rents based on exclusive rights to the value (and cost savings) produced by a larger service ecosystem with SIB providers receiving compensation despite having to rely on the services and supports of other organizations.<sup>7</sup> And the value of SIB investments is constantly monitored and managed through the work of performance management with the element of control often critical to the ability of SIB specialists to raise capital: "It's easier ... to pull the fundraise if they can also convince the funders that they have the contracting authority and project management authority and ability to kind of change the deal if it's not looking as though it's successful" (US SIB Specialist #17). SIBs are thus perfect expressions of "both structural and sociotechnical power" (Birch and Muniesa, this volume), the former reflected in the very contracting of the SIB as an expression of state authority, and the latter in the use of data, evaluation, cost accounting, management systems, and financial models to render nonprofit work visible as a form of social, economic, and financial value.

And yet, SIBs also diverge from most other assets in several key respects. Much to the chagrin of early advocates, there is no secondary market. As a result, SIBs lack one of the essential attributes of assets: liquidity. The fact that they cannot be traded also means there is no opportunity to create value through the “relay process” (Birch 2017, 473) where “financial actors seek to add value to their financial investments before passing it onto someone else.” And, with a predetermined lifespan, they cannot be held as property and accrue value over time. In this respect, the management process described above is more indicative of safeguarding rather than adding value. Thus, SIBs may be assets, but they are rather strange assets mirroring conventional investment propositions in some respects but departing quite significantly in others. This slippage and ambiguity may be one reason why SIB markets have struggled to engage more return-motivated investors. However, my conversations with SIB specialists revealed a series of additional challenges that emerge from the very practices of valuation and assetization described above and which speak to competing notions and interpretations of “value.” With the design process ultimately much more fraught than commonly recognized, these valuation struggles may be the difference between turning social services into assets and creating a viable and sustainable market for those assets.

### **Valuation Struggles and Controversies**

Despite public expressions of optimism, those working on the frontlines of the SIB market in the UK, US, and Canada expressed frustration with the slow growth of the market and a sense of uncertainty and in some cases downright skepticism as to the future of SIBs: “When I first started in social investment early in 2011, I wouldn’t have quite put it as boldly as this, but I could see a social impact bond on every street corner. ... But actually now I don’t think it’ll happen. And I think that the bubble has burst already. And I think this will fizzle out” (UK provider #2). In the words of another respondent, “The external view is it’s swans on water. But there’s some desperate paddling going on. And there are so few of these SIBs still in this country” (UK provider #10). One senior member of the US PFS space suggested that the PFS pipeline has “dried up significantly” and predicted that the US market would either collapse or become a “boutique” market (US SIB specialist #12). And yet, what is most interesting is the reasons cited for

these struggles. Although technical barriers and deficits in government and provider capacity and expertise figured prominently in the list of headaches, respondents also pointed to the challenge of valuing these transactions and aligning the different players around a common value proposition. Three key valuation challenges emerged as being especially significant.

### **Outcomes versus Impact**

The first of these challenges involves the question of how program effects are to be defined and evaluated. The idea in the original model was that the outcomes of SIB groups would be compared to a matched sample with the government paying on the basis of the relative improvement in the outcomes of the former relative to the latter. Thus, payment was to be contingent on a measure of *net benefit*. In the case of the Peterborough SIB, this meant that reductions in recidivism were defined relative to a comparison group of national offenders possessing similar characteristics, a quasi-experimental methodology rooted in propensity score matching. From a government perspective, this approach is valuable in controlling for deadweight—the risk of paying for outcomes that would have happened anyway.

Informed by the larger movement around evidence-based policymaking, many of the early projects in the US adopted an even more “rigorous” standard of evaluation basing program outcomes and investor payments on the results of randomized controlled trials (RCTs). For many in the evaluation community, RCTs are the gold standard of program evaluation. They are deemed uniquely capable of not only controlling for deadweight but also addressing the problem of attribution and causality—that is, the extent to which programs are singularly responsible for observed changes in outcomes. Here it is the element of randomization that is key as the random assignment of individuals to intervention and control groups is believed to allow for the control of extraneous and confounding variables thus distinguishing between genuinely causal and merely correlational effects. It is this epistemic virtue of causality that is central to the exalted status of the RCT as an arbiter of effective and proven programs. With many of those working in the US PFS space well-schooled in the merits of RCTs, including the Arnold Foundation and advisors such as the Urban Institute and Harvard’s Government Performance Lab, this method was quickly adopted as the standard for PFS deals and the basis for determining program outcomes and investor returns (Milner and Walsh 2016). Thus, the economic value

of the SIB is tied to the epistemic virtues of the RCT as a particular type of “counterfactual display” (Ehrenstein and Muniesa 2013, 162).

Not surprisingly, this use of RCTs (and even quasi-experiments) in the SIB context has received extensive criticism and is the subject of an increasingly heated debate (Savell and Heady 2016). Among the concerns cited by intermediaries and investors is that RCTs are costly and can be logistically challenging adding to the complexity and timelines for SIB deals. This includes the need to generate sufficient referrals to populate program and control groups, and the requirement that programs are large enough (100 to 200 is often used as a benchmark) to yield statistically valid results (Bolton and Savell 2010; Fox and Albertson 2011; MaRS 2013). From an investor perspective, RCTs also introduce a new form of risk—evaluation risk. “[The RCT] adds a ... risk that in the early days we didn’t think of, which is evaluation risk, which basically is the risk the structure and process of the evaluation will actually impact the results that are observed” (US investor #1). This includes the fact that investor returns are subject to the vagaries of statistical technique and are dependent on producing not only positive but statistically significant results. “So you have government saying ... you can’t pay unless you have a statistically significant result, so you need 95 percent” (US SIB specialist #7). This evaluation risk is especially challenging given that it is “divorced from any actuarial basis” (US government official #1) thus introducing uncertainty rather than simply risk into the transaction. As noted by a UK-based investor, “paying against outcomes linked to an RCT or an experimental or quasi-experimental evaluation ... takes what is already quite a risky proposition with a lot of factors that you can’t really control and it squares them” (UK SIB specialist #10).

For intermediaries and fund managers, RCTs (and quasi-experiments) come with another significant downside. In the absence of regular data on the control or comparison group, it is difficult to manage toward specific payment outcomes thus impeding the forms of performance management that are so central to SIBs. “It’s quite difficult to deliver when you don’t know how well you’re doing. We didn’t know how well we were doing until retrospectively we were measured” (UK SIB specialist #4). In reiterating the importance of performance management, one respondent likened RCTs to a “black box.” “It’s really about performance management and so getting that real-time feedback is really important. And the RCT doesn’t lend itself to that. It’s like a black box that you open up one day” (US investor

#1). This performance management challenge was actually cited by several respondents as a key factor in the movement of the UK market away from quasi-experiments and live counterfactuals (Carter et al. 2018; Fraser et al. 2018b). In fact, out of the forty-plus SIBs launched in the UK between 2010 and 2018, only the first two (Peterborough and Essex) draw from a live comparison group. The vast majority are instead based on a rate card in which government develops a menu of pre-priced outcomes and providers are compensated for each individual outcome they achieve. More recently, the US has also moved toward this rate card model and away from RCTs, much to the chagrin of the following respondent who saw this as a response to weaker than expected results from the early slate of RCT-based deals,

Some of the earlier deals were coming online and there was sort of hushed awareness that the results from some of these deals were not as positive as had been hoped. So, instead of having a collective discussion about why and what that meant for iteration, some of the senior folks from all of the intermediaries determined that the best way to go was...to water down the evaluation design. That there was too much risk involved in these deals. So they started going away collectively from RCTs. And I think there's issues with RCTs in certain settings. But going away from RCTs and even quasi-experimental designs, going actually back to some pre/post measures and discussions of parachute clauses you could put into contracts such that you could break contracts fairly easily if it's not getting results or inflows of participants. That was very concerning to me. (US SIB specialist #17)

The issue here is not whether RCTs are good or bad. There is an extensive literature that has rightly questioned the merits of RCTs as an aspect of program evaluation (Donovan 2018) as well as the ability to attribute changes in complex social conditions to a single program or provider (Lowe 2013; Lowe and Wilson 2017). The point is that these competing arguments around the merits of RCTs as a feature of SIB design are rooted in different interpretations of the "value" of these investments and the rules of counterfactual display. From the perspective of government, "value" depends on net benefit and the confidence that they are paying investors for true program effects validated using the most rigorous measures possible. For investors and SIB specialists, RCTs are a source of uncertainty and a barrier to performance management. In advocating for the move away from RCTs, practitioners have invoked alternative notions of value suggesting that payment based on outcomes is itself a significant improvement over existing government practice which remains focused on activity-based indicators. Some outcomes, such as moving the homeless into accommodation, are

also deemed to be inherently good rendering comparisons unnecessary: “Because *it is a good*... if you’re chronically homeless and we have you in housing for six months, we don’t need to compare that to anything because we know that by definition treatment as usual was not solving that problem, that’s why you’re chronically homeless” (US SIB specialist #7). These contrasting views continue to represent a key point of tension in the field with investors and government often working at cross-purposes.

### **Cashable Savings versus Value for Money**

A second valuation challenge underlying SIBs concerns the ability of the government to generate and realize the cost savings from these transactions. Another promise of the original SIB model was that investments in preventative programs would yield not only savings to government, but savings that were cashable (i.e., manifested as savings in specific budget lines) and could thus be used to pay investor returns. The notion that SIBs yield cash flow for government in this way is central to the monetization of program outcomes as well as the government value proposition as this allows not only investors but government to effectively cash out of these deals. However, in developing the first wave of projects, SIB specialists quickly realized that there were significant barriers to this view of the liquidity of public capital (Disley et al. 2011; Fraser et al. 2018b; McKay 2013).

Beyond the more general challenge of how to allocate cost savings to individual government payors, particularly in cases where savings may accrue to multiple agencies as well as levels of government, one key barrier to the cashability of cost savings is the nature of public sector costs, which tend to be fixed rather than variable. In order to produce meaningful cost savings in the context of a SIB, the improvement in outcomes would need to be of sufficient size, scale, and duration to allow for reductions in these fixed costs. This is easier said than done. A perfect example of this challenge is reoffending programs which were identified early on as promising candidates for SIBs given the high costs of police, courts, and corrections. The difficulty is that most of these costs involve buildings and staff. Even a significant reduction (e.g., 20 percent) in “bed days”—the measure typically used in these transactions—would not be enough to close the wing of a prison, the point where real savings would start to accumulate (McKay 2013). Closing prisons and laying off staff may also create additional political liabilities. “You’ve then got to lay off large numbers of statutory workers

which is very expensive and the unions get very involved and it becomes difficult" (UK provider #9). As with public services more generally, there is also the challenge that any additional capacity will simply be backfilled with latent demand. "How often are the cashable savings realized? We try not to talk about them. Because you can guarantee that within public services there is latent demand" (UK SIB specialist #10).

Given these difficulties, many in the SIB space have moved away from a strict cashable savings approach: "If you dig deep, cost savings is the rhetoric. Even if you reduce recidivism, you don't really save much money. It's just a way to talk about it. At the end of the day it's about getting value for the money that is being spent" (US SIB specialist #15). One way of getting greater value for money is to focus not on new spending streams (based on the rationale that they will enable the prevention of future costs), but rather on reducing costs and achieving greater efficiencies in existing spending. "We think there is also a substantial opportunity in improving existing services, i.e., in helping commissioners achieve better value in situations where they already have a targeted spend (either by achieving better outcomes for the same spend, the same outcomes for less spend, or more outcomes for more spend but at a lower cost per outcome)" (Bridges Ventures 2016, 8). A US-based respondent provided the following rationale for this shift in approach: "It's an efficiency claim for savings rather than a cashable saving. ... So if you can enable the current, the existing spending streams to be PFS enabled and therefore get more efficiency out of them, then you don't have to make that same savings argument that we are saving money in the long-run" (US SIB specialist #7). There have also been attempts to incorporate broader notions of "public value" (Kohli et al. 2015). In the case of criminal justice, savings could accrue not only from marginal cost savings but also reduced costs to victims, including medical costs, lost earnings, and psychological pain and suffering (Fogel et al. 2017). Indeed, victim impact was included in the projected savings for the Peterborough (Disley et al. 2011) and the New York State (GAO 2015) SIBs.

From the perspective of government, these types of savings may be even more challenging to calculate and may rely on potentially tenuous connections between near-term program outcomes and longer-term impacts (Heinrich and Kabourek 2018, 8–9). As Fraser et al. (2018a, 16) conclude from their review of the available SIB literature, "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." This is indicative of what Neyland (2018) describes as a form of "calculative asymmetry" between government and investors with the former less able to project and model future outcomes and savings. The larger point here is that there is a disconnect not only in calculative competency and capacity but also the type of value that is created and imagined in these deals. For investors, value is well defined with specific outcomes equated with set returns. For government, savings and notions of value remain much more hypothetical and promissory (Martin 2015) with the outcomes on which they are required to pay often lacking any direct connection to the savings and forms of value associated with these deals thus further eroding the government value proposition.

### **Risk versus Return**

While benefiting from greater sophistication in financial modeling and certainty in terms of the payoff if program outcomes are realized, SIBs are still challenging for investors. As noted earlier, they are unconventional assets. Absent a secondary market, they have virtually no liquidity, and with returns capped, there is little speculative upside. SIBs also have distinct attributes that make them especially risky. The mere fact that they are not rooted in a traditional type of physical asset, principally real estate, is a source of concern particularly for those in the community development space such as Community Development Financial Institutions (CDFIs) and Community Reinvestment Act (CRA) banks.<sup>8</sup> These organizations, which are used to dealing with both financial and social returns, were initially viewed as perfect candidates for SIBs and a bridge to more commercial investors (Godeke and Resner 2012). However, they have tended to view SIBs as overly risky given their departures from these traditional asset classes. "When you dig into the community development industry in the USA, be it through the CDFIs or the CRA banks, most of it is funding real assets and hard assets which they can get their heads around. And this was like kind of a challenge for them to figure out. What's the risk/return profile of this structure?" (US advisor #3).

SIBs are also challenging given that they are rooted in the world of social programming and are dependent on projected changes in human behavior. Even for the most sophisticated investors, they can thus be difficult to diligence.

What does it mean to diligence a social service outcome? That's very different than what their internal investment committee are used to reviewing. It's very different if they have an investment manager, what they are used to doing. It can be very different if they are a regulated entity to make sense to their internal compliance folks. What does it mean that your payment is contingent on human behavior? (US SIB specialist #9)

Invariably it means that investors will have to engage with a social science evidence base and confront a series of new and distinct forms of risk (GAO 2015; Godeke and Resner 2012; Social Finance 2012). In addition to the aforementioned evaluation risk, there is policy risk, "the risk that a government initiates a policy change that prevents a PFS project from operating as initially intended. A policy change could disrupt a service provider's program delivery, putting the achievement of outcomes—and investors' investment—at risk" (GAO 2015, 35). This begs the question of who should "own" this risk, a point the following respondent illustrated in reference to a criminal justice program:

Who should own the fact that either government could change the rules and not send people to jail as much, or that something could change in the real world, the opioid epidemic, or an increase in gun violence, or an economic drop or an economic improvement? I'm not sure who should own the risk for that when you're doing a five, six, seven year study. (US SIB specialist #7)

There is also appropriation risk, the risk of entering into a long-term contract with government and the possibility that these commitments might not be honored by future administrations.

From an investor perspective, SIBs thus possess a number of unattractive properties. They have the risk profile of equity investments but the structure and returns of debt. They require a form of expertise and type of valuation work that is foreign to most investors, with the small size of individual deals and limited deal flow providing few incentives to develop these capabilities. They are rooted in new forms of risk that are challenging to define and price. And these transactions are often bespoke and resistant to standardization with the distinctly local nature of social problems requiring that the valuation process be undertaken anew with each deal. While the UK market has been sheltered to a large extent by a steady supply of investment capital through Big Society Capital, these features help to explain the struggles reported by US respondents in engaging investors. "You have funders saying look at the high risk. ... There's not one project in the USA

or around the world that is not extremely high risk” (US SIB specialist #4). Reflecting this risk, one respondent reported that a major US intermediary actually “had to shut down a handful of very large deals because they couldn’t do the fundraise for the deal” (US SIB specialist #17), with another respondent commenting that, “I don’t think there’s as much money out there that is as interested in taking on the risk as people thought there was” (US SIB specialist #7). Moreover, efforts to make these investments more attractive to investors—for example, by providing earlier repayments based on outputs (e.g., enrollment) rather than outcomes—further erode the government value proposition. One respondent described how a proposal for early payment based on enrollments rather than outcomes was a key sticking point in negotiations with government who “[held] hard and fast to ‘This is called PFS. Success is showing somebody that they did something and so I’m not going to pay you for an enrollment payment’” (US provider #8)—although they did capitulate under the pressure to get the deal done. This further illustrates not only the valuation challenges that underlie SIBs but also the fundamental misalignment of government and investor interests.

## Conclusion

Viewed from a distance, SIBs would appear to confirm fears about the spread of finance into more and more aspects of social life. The fact that marginalized populations—offenders released from prison, the chronically homeless, the unemployed—are being transformed into investment propositions is thoroughly in line with the dystopian vision of finance. And yet, while this view may be faithful to the logic of SIBs and the aspirations of proponents, a closer look reveals a market that has struggled to take hold and to translate this vision into reality. The return-motivated investors prized by advocates and feared by critics have largely failed to materialize, and the main drivers of the market are not financiers but a small group of advisors and consultants backed by government and philanthropy. Far from a “robust growth sector” (Lake 2016, 14), the market has experienced slower growth than expected and may be more accurately viewed as a small, niche market (Williams 2019).

Informed by the results of an extended analysis of SIBs in the UK, US, and Canada, this chapter has argued that these realities of the SIB market

are difficult to square with the financialization narrative featured in many critical accounts and that thinking about SIBs in terms of an asset (and process of assetization) helps to capture both their attributes and limitations as a type of investment proposition. The analytic of assetization focuses attention on the essential question of how SIBs are valued and the specific practices, sociotechnical knowledges, and forms of valuation work through which social programs are reconfigured as outcomes and translated into claims to economic (savings) and financial (returns) value. This involves the monetization not necessarily of programs themselves, but of the knowledge of these programs constituted through devices such as RCTs, cost-benefit analyses, and financial modeling. In addition to this reconfiguration of knowledges, practices, and relations, SIBs share several other features of assets as outlined in this volume. They are the product of state fiat, as are all legal contracts, and they represent a form of monopoly in which exclusive rights are granted to the value and rents produced by a larger ecosystem of providers. Their value is also subject to ongoing management even after deals have been signed, part of a “contractual [regime] of governance” (Birch and Muniesa, this volume).

At the same time, SIBs are not like most other assets. There is no secondary market, their revenues are time limited, and their upside is capped by the terms of the contract (see Nadai and Cointe, this volume). More importantly, the valuation practices at the heart of SIBs are invariably somewhat fraught. Reflected in each of the distinct challenges examined in this chapter, including the nature and terms of counterfactual display, the ability of the government to realize the savings and capture the value from these transactions, and the disconnect between risk and return and investor uncertainty around how to assess and price these deals, the effort to value SIBs has been undercut by competing interests and conflicting interpretations of how to value nonprofit work. There are also inherent tensions between the complex and messy realities of social services and the valuation frames and repertoires used by both government and investors. The notion of outcomes-based savings is not easily aligned with government budgets or the rules of public finance, while investors struggle with the uncertainty and unpredictability that comes with investing in putative changes in human behavior. Ultimately, it is these valuation challenges and dilemmas which help to account for the struggles to execute these deals and to grow the market. SIB specialists may have been successful in turning

social services into an asset, but it is a strange asset with features that are less than appealing to government and investors alike. Viewing SIBs through the lens of assetization thus provides a very different perspective, one that is more consistent with the realities of the market but which has been largely overlooked in the literature to date.

There are two further implications that follow from this analysis. First, the case of SIBs reinforces the importance of focusing not only on the process of turning things into assets but also the challenges and limits encountered as part of this work. As noted by Birch and Muniesa (this volume), “Examining how things are turned into assets means understanding how assets are then maintained or challenged as such.” These challenges include the micropolitics that often underlie forms of assetization and the fact that devices such as business and financial models are not only sources of alignment and coordination (Doganova and Muniesa 2015; Doganova and Eyquem-Renault 2009; MacKenzie and Spears 2014), but also points of conflict and division. The case of SIBs also suggests that there is a subtle distinction to be made between turning things into assets and developing a viable and sustainable market for those assets, the latter hinging on the ability to engage key parties over the longer term and as part of a shared future vision for the market.

Second, SIBs provide an opportunity to examine processes of assetization as they relate to the world of public versus simply private finance. As noted by Birch and Muniesa (this volume), while the analysis of assetization usually involves a focus on the appropriation of value by private investors and thus the “expansion of private ownership claims over more and more aspects of our lives,” what may be most noteworthy about SIBs is their role in reconfiguring nonprofit work as a type of *public* asset (see Milyaeva and Neyland, this volume). This follows from the recent evolution of the SIB market, particularly in the US, where several advisory firms have shifted their focus away from the private capital aspect of SIBs and are seeking to work directly with governments to improve the way they contract with the nonprofit sector. Utilizing the tools and lessons gleaned from their SIB work, the emphasis is on reengineering existing spending streams using data analysis to identify inefficiencies in services, and performance management to exhort providers to address these inefficiencies and improve outcomes. This approach gets around some of the valuation challenges associated with having to engage investors, while still requiring

nonprofits to “do the hard work of quantifying their value—defining the outcomes that they influence and estimating the fiscal and social value of those outcomes to key funders” (Segal et al. 2016, 36). In mandating this valuation work and building contracts around the resulting outcomes, it is government that is ultimately taking on the role of investor extracting a type of public rent from the nonprofit sector. By focusing almost exclusively on the financial aspects of SIBs, and the dystopian vision of financialization, commentators have largely overlooked these developments around outcomes-based funding which are likely to have a much more significant and enduring impact on the nonprofit sector. All of this offers a slightly different perspective on the “assetization of public policy” (Birch and Muni-esa, this volume) as well as on the nature of assets themselves.

### Notes

1. In the US, this model is referred to as “Pay-for-Success” (PFS) while in Australia “Social Benefit Bonds” is the preferred term. For the sake of clarity, “social impact bond” will be used throughout this chapter except where specific reference is being made to the US context.
2. The SIB model is also making inroads in the Global South, primarily in a development context, through its close cousin the Development Impact Bond (DIB).
3. For example, Bloomberg Philanthropies, the foundation established by former New York City mayor Michael Bloomberg, provided a guarantee of \$7.2 million for Goldman Sach’s \$9.6 million investment in the Rikers Island SIB, the first deal in the US.
4. Several US SIB deals have drawn from capital stacks in which foundations have served as subordinate investors allowing more return-motivated investors to come in as senior capital receiving higher returns, earlier payouts, and less risk.
5. In fact, two firms (one based in Canada and the other in the UK) were unable to survive and were absorbed by other players in the market.
6. This misleading terminology created immediate challenges in marketing the product particularly in the North American context with US practitioners quickly adopting the alternative moniker of “Pay-for-Success.”
7. The extraction of value through relationships with other service providers is an explicit feature of many of SIB programs which are rooted in “navigator” or “link worker” models where the whole purpose of the intervention is to link clients to other services.

8. Both CDFIs and CRA banks provide credit and financial services to underserved communities in the USA and are often involved in financing economic and community development initiatives.

## References

- Arena, M., Bengo, I., Calderini, M., and Chiodo, V. 2016. Social Impact Bonds: Blockbuster or Flash in a Pan? *International Journal of Public Administration* 39 (12): 927–939.
- Barman, E. 2016. *Caring Capitalism: The Meaning and Measure of Social Value*. Cambridge: Cambridge University Press.
- Bessy, C., and Chauvin, P. 2013. The Power of Market Intermediaries: From Information to Valuation Processes. *Valuation Studies* 1 (1): 83–117.
- Birch, K. 2017. Rethinking Value in the Bio-Economy: Finance, Assetization, and the Management of Value. *Science, Technology, and Human Values* 42 (3): 460–490.
- Birch, K., and Tyfield, D. 2013. Theorizing the Bioeconomy: Biovalue, Biocapital, Bioeconomics or ... What? *Science, Technology, and Human Values* 38 (3): 299–327.
- Boggild, L. 2013. Outcome Finance Webinar for the J. W. McConnell Foundation's Innoweave Program. December.
- Bolton, E., and Savell, L. 2010. *Towards a New Social Economy: Blended Value Creation Through Social Impact Bonds*. London: Social Finance.
- Bridges Ventures 2016. *Better Outcomes, Better Value: The Evolution of Social Impact Bonds in the UK*. March, 2016.
- Callon, M., and Muniesa, F. 2005. Peripheral Vision: Economic Markets as Calculative Collective Devices. *Organization Studies* 26 (8): 1229–1250.
- Campbell, P., Cox, T., and O'Brien, D. 2017. The Social Life of Measurement: How Methods Have Shaped the Idea of Culture in Urban Regeneration. *Journal of Cultural Economy* 10 (1): 49–62.
- Carter, E., FitzGerald, C., Dixon, R., Economy, C., Hameed, T., and Airoidi, M. 2018. *Building the Tools for Public Services to Secure Better Outcomes: Collaboration, Prevention, Innovation*, July 18, 2018. Oxford: Government Outcomes Lab.
- Cooper, C., Graham, C., and Himick, D. 2016. Social Impact Bonds: The Securitization of the Homeless. *Accounting, Organizations, and Society* 55: 63–82.
- Cullen, F. 2013. Rehabilitation: Beyond Nothing Works. *Crime and Justice* 42: 299–376.
- Dear, A., et al. 2016. *Social Impact Bonds: The Early Years*. July. Boston: Social Finance.

Dey, C., and Gibbon, J. 2018. New Development: Private Finance Over Public Good? Questioning the Value of Impact Bonds. *Public Money and Management* July: 375–378.

Disley, E., Rubin, J., Scraggs, E., Burrowes, N., and Culley, D.M. 2011. *Lessons Learned from the Planning and Early Implementation of the Social Impact Bond at HMP Peterborough*. Cambridge: RAND Europe.

Doganova, L., and Eyquem-Renault, M. 2009. What Do Business Models Do? Innovation Devices in Technology Entrepreneurship. *Research Policy* 38 (10): 1559–70.

Doganova, L., and Muniesa, F. 2015. Capitalization Devices: Business Models and the Renewal of Markets. In *Making Things Valuable*, edited by M. Kornberger, L. Justesen, A. Madsen, and J. Mouritsen, 109–125. Oxford: Oxford University Press.

Donovan, K. P. 2018. The Rise of the Randomistas: On the Experimental Turn in International Aid. *Economy and Society* 47 (1): 27–58.

Dowling, E. 2017. In the Wake of Austerity Social Impact Bonds and the Financialisation of the Welfare State in Britain. *New Political Economy* 22 (3): 294–310.

Dowling, E., and Harvie, D. 2014. Harnessing the Social: State, Crisis, and the (Big) Society. *Sociology* 48 (5): 869–886.

Edmiston, D., and Nicholls, A. 2018. Social Impact Bonds: The Role of Private Capital in Outcomes-Based Commissioning. *Journal of Social Policy* 47: 57–76.

Ehrenstein, V., and Muniesa, F. 2013. The Conditional Sink: Counterfactual Display in the Valuation of a Carbon Offsetting Reforestation Project. *Valuation Studies* 1 (2): 161–188.

Floyd, D. 2017. *Social Impact Bonds: An Overview of the Global Market for Commissioners and Policymakers*. April. London: Centre for Public Impact.

Fogel, A., Shumway, J., and Udpa, A. 2017. *Challenging the Status Quo: Philadelphia's Exploration of Pay for Success*. Boston: Social Finance.

Fox, C., and Albertson, K. 2011. Payment by Results and Social Impact Bonds in the Criminal Justice Sector: New Challenges for the Concept of Evidence-Based Policy? *Criminology and Criminal Justice* 11 (5): 395–413.

Fraser, A., Tan, S., Lagarde, M., and Mays, N. 2018a. Narratives of Promise, Narratives of Caution: A Review of the Literature on Social Impact Bonds. *Social Policy and Administration* 52 (1): 4–28.

Fraser, A., Tan, S., Kruithof, K., Sim, M., Disley, E., Giacomantonio, C., Lagarde, M., and Mays, N. 2018b. *Evaluation of the Social Impact Bond Trailblazers in Health and Social Care. Final Report*. PIRU Publication 2018–23.



Government Accountability Office. 2015. *PFS: Collaboration Among Federal Agencies Would Be Helpful as Governments Explore New Financing Mechanisms*. Report to the Chairman, Committee on the Budget, US Senate. GAO-15-646.

Giacomantonio, C. 2017. Grant-Maximizing, but Not Money-Making: A Simple Decision-Tree Analysis for Social Impact Bonds. *Journal of Social Entrepreneurship* 8 (1): 47–66.

Godeke, S., and Resner, L. 2012. *Building a Healthy and Sustainable Social Impact Bond Market: The Investor Landscape*. New York: Godeke Consulting.

Heinrich, C., and Kabourek, S. 2018. *Social Impact Bonds (or Something Like That): Are Viable and Sustainable Models Emerging?* Working Paper. September 2, 2018.

Helgesson, C. F., Lee, F., and Linden, L. 2016. Valuations of Experimental Designs in Proteomic Biomarker Experiments and Traditional Randomized Controlled Trials. *Journal of Cultural Economy* 9 (2): 157–172.

Joy, M., and Shields, J. 2013. Social Impact Bonds: The Next Phase of Third Sector Marketization? *Canadian Journal of Nonprofit and Social Economy Research* 4 (2): 39–55.

Kohli, J., Golden, M. Coletti, J., and Bo'sher, L. 2015. *From Cashable Savings to Public Value: Pricing Program Outcomes in Pay for Success*. Washington, DC: Center for American Progress.

Lake, R. 2016. The Subordination of Urban Policy in the Time of Financialization. In *Urban Social Policy in the Time of Obama*, edited by J. DeFillippis, 45–64. Minneapolis: University of Minnesota Press.

Lohmann, L. 2005. Marketing and Making Carbon Dumps: Commodification, Calculation and Counterfactuals in Climate Change Mitigation. *Science as Culture* 14 (3): 203–235.

Lowe, T. 2013. New Development: The Paradox of Outcomes—The More We Measure, the Less We Understand. *Public Money and Management* 33 (3): 213–216.

Lowe, T., and Wilson, R. 2017. Playing the Game of Outcomes-Based Performance Management: Is Gamesmanship Inevitable? Evidence from Theory and Practice. *Social Policy and Administration* 51 (7): 981–1001.

MacKenzie, D., and Spears, T. 2014. A Device for Being Able to Book P&L: The Organizational Embedding of the Gaussian Copula. *Social Studies of Science* 44 (3): 418–40.

Maier, F., and Meyer, M. 2017. Social Impact Bonds and the Perils of Aligned Interests. *Administrative Sciences* 7 (24): 1–10.

MaRS. 2013. *Social Impact Bond Technical Guide for Service Providers*. Toronto: MaRS Centre for Impact Investing.

Martin, P. 2015. Commercialising Neurofutures: Promissory Economies, Value Creation, and the Making of a New Industry. *BioSocieties* 10 (4): 422–443.

McHugh, N., Sinclair, S., Roy, M., Huckfield, L., and Donaldson, C. 2013. Social Impact Bonds: A Wolf in Sheep's Clothing? *Journal of Poverty and Social Justice* 21 (3): 247–57.

McKay, K. 2013. *Evaluating Social Impact Bonds as a New Reentry Financing Mechanism: A Case Study on Reentry Programming in Maryland*. Annapolis, MD: Department of Legislative Service, Office of Policy Analysis.

Milner, J., and Walsh, K. 2016. *Measuring Success in Pay for Success: Randomized Controlled Trials as the Starting Point*. Washington, DC: Urban Institute.

Mirowski, P. 2013. *Never Let a Serious Crisis Go to Waste: How Neoliberalism Survived the Financial Meltdown*. London: Verso Books.

Muniesa, F. 2012. A Flank Movement in the Understanding of Valuation. *Sociological Review* 59 (s1): 24–38.

Muniesa, F. 2014. *The Provoked Economy: Economic Reality and the Performative Turn*. London: Routledge.

Neyland, D. 2018. On the Transformation of Children at-Risk into an Investment Proposition: A Study of Social Impact Bonds as an Anti-Market Device. *Sociological Review* 66 (3): 492–510.

Ortiz, H. 2013. Financial Value: Economic, Moral, Political, Global. *HAU: Journal of Ethnographic Theory* 3: 64–79.

Pike, A., and Pollard, J. 2010. Economic Geographies of Financialization. *Economic Geography* 86 (1): 29–51.

Pinakiewicz, B. 2014. *Foundations for Social Impact Bonds*. March 6. Washington, DC: Aspen Institute Program on Philanthropy and Social Innovation, and Social Finance.

Pollard, J., Oldfield, J., Randalls, S., and Thomas, J. E. 2008. Firm Finances, Weather Derivatives, and Geography. *Geoforum* 39: 616–624.

Randalls, S. 2010. Weather Profits: Weather Derivatives and the Commercialization of Meteorology. *Social Studies of Science* 40 (5): 705–730.

Savell, L., and Heady, L. 2016. *Balancing Evidence and Risk: Evaluating Impact Bonds*. Social Finance and Children's Investment Fund Foundation.

Segal, J., Feng, J., Greenberg, L., and Shumway, J. 2018. *Using Pay for Success to Improve Outcomes for the Persistently Homeless in Sacramento*. Boston: Social Finance.

Segal, J., Shumway, J., and Bianchi, J. 2016. *New Tools to Amplify Impact: A Pay for Success Guide to Building Nonprofit Capacity*. Boston: Social Finance.

Sinclair, S., McHugh, N. Huckfield, L., Roy, M., and Donaldson, C. 2014. Social Impact Bonds: Shifting the Boundaries of Citizenship. In *Social Policy Review 26: Analysis and Debate in Social Policy*, edited by K. Farnsworth, Z. Irving, and M. Fender, 119–136. Bristol: Policy Press.

Social Finance. 2012. *A New Tool for Scaling Impact: How Social Impact Bonds Can Mobilize Private Capital to Advance Social Good*. Boston: Social Finance.

Third Sector. 2013. *Case Study: Preparing for a Pay for Success Opportunity*. Boston: Third Sector Capital Partners.

Warner, M. 2013. Private Finance for Public Goods: Social Impact Bonds. *Journal of Economic Policy Reform* 16 (4): 303–319.

Williams, J. 2019. *From Visions of Promise to Signs of Struggle: Exploring Social Impact Bonds and the Funding of Social Services in Canada, the US, and the UK*. Toronto: York University.