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Social Impact Bonds: A Critical Analysis of the Concept and its Application

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Abstract

Since their launch in 2010, Social Impact Bonds (SIBs) have been increasingly implemented, spanning several advanced countries, representing a substantial monetary value. Often heralded as an efficient way to reduce crisis-based public services by delivering early intervention programmes. Proponents claim SIBs can unlock a range of benefits for government by generating better incentive structures in the delivery of social services, more efficiently allocating welfare expenditure and promoting innovative social service programmes, whilst shifting the financial risk to the private sector. This view has led to SIBs being widely endorsed by both governments and institutions involved in impact investing.

This research challenges the notion that SIBs are an efficient instrument for public social policy delivery. SIBs are first considered from the perspective of political economy drawing upon the theoretical framework of financialisation. It is shown that that SIBs are primarily a financial instrument with underlying structural similarities to a derivative. They entail considerable involvement of financial agents seeking new avenues of profitability in the realm of public policy and in fields hitherto funded and delivered by the state. In doing so, SIBs commodify previously public provision, such as child and family welfare or housing and homelessness, and partially transfer the financial responsibility of welfare provision onto private investors.

SIBs are subsequently considered analytically from the perspective of agency theory. Conclusions are drawn about the impact on the principal-agent relationship by the differing goals, motivations, and attitude to risk between the state (the principal) and the different constituent elements of the SIB framework. It is shown that SIBs result in complexity and conflicting interests that forestall efficiency. In this light, SIBs are not an efficient instrument for public social policy delivery.

Empirical support for the analysis is given through a comparative study of three SIBs in the United States, United Kingdom, and Australia, covering policy areas of child and family welfare, and criminal justice.

SIBs have questionable efficacy and analytical coherence. They are a financial instrument deployed to solve some of society's most enduring problems, and in this respect reflect the financialisation of contemporary capitalism. Their social outcomes are complex and contradictory, and their efficacy as a public social policy instrument is questionable.

Table of contents

Declaration	2
Abstract	3
Table of contents	4
List of figures and tables	12
Abbreviations	13
Chapter One: introduction and research outline	14
1.1 Research Background	14
1.2 Motivation	16
1.3 Chapter Overview	17
Chapter Two: the emergence and evolution of social impact bonds: a	a detailed
analysis	20
2.1 Introduction	20
2.2 Social impact bonds: an overview	20
i. What are social impact bonds?	20
ii. The definition of social impact bonds as deployed in this research	22
iii. Historical origin and evolution of social impact bonds	23
iv. Broader significance of social impact bonds and their analytical impo	ortance 27
2.3 The social impact bonds landscape in advanced countries	33
i. Chronological development	35
ii. Size and scope of the market	38
iii. Public social policy areas where social impact bonds are active	43
2.4 Concluding remarks	47

Chapter Three: the financial ecosystem of a social impact bond and	
operational model	48
3.1 Introduction	48
3.2 The financial ecosystem of a social impact bond	48
i. The Outcomes Payer	49
ii. The Service Providers	50
iii. The Investors	51
iv. The Specialists	62
v. The Intermediary	63
vi. The Market Builders	64
3.3. The operational model of a social impact bond	64
i. Coordination	66
ii. Financing	66
iii. Market Building	67
iv. Service Delivery	67
v. Evaluation	67
vi. Funding	67
3.4. Concluding remarks	68
Chapter Four: a theoretical framework for social impact bonds: the interpla	w of
financialisation, financial systems and welfare systems	•
4.1 Introduction	
4.2 Financialisation	71
i. Definitions and background	71
ii. Social impact bonds and the rise of financial market mediation	75
iii. Links between social impact bonds and the financialisation of households	78
iv. The role of the state	79
4.3 Financial systems and welfare systems	79

i. Financial systems	80
ii. Welfare systems	83
4.4 Concluding remarks	93
Chapter Five: social impact bonds: efficiency arguments and	empirical
contestations	-
5.1 Introduction	95
5.2 Efficiency arguments in favour of social impact bonds	95
5.3 Theoretical underpinnings	
i. Social services: merit goods and market failure	
ii. Social impact bonds from the perspective of agency theory	
iii. Contract optimisation	
5.4 Empirical contestations	
i. Agency costs	113
ii. Informational asymmetries	115
iii. Lack of risk sharing	
iv. Goal divergence	119
5.5 Concluding remarks	120
Chapter Six: theoretical development of social impact bonds	122
6.1 Introduction	122
6.2 Social impact bonds as derivatives: a new activity for financial institut	tions?. 122
i. The origins of SIBs as a financial instrument	122
ii. Social impact bonds and forward contracts: structural similarities	127
iii. Social impact bonds as hedging forward-like contracts	129
iv. Social impact bonds as speculating forward-like contracts	132
6.3 How social impact bonds make financial profit from the provision services.	

i. Social impact bonds and financial profit	. 134
ii. The recipients of the financial profit	. 135
iii. The process of generating the financial profit	. 137
iv. The ultimate source of the financial profit	. 138
6.4 How risk transfer and agency relationships affect the efficiency social im-	pact
bonds	. 139
i. The role of social outcomes in risk transfer	. 139
ii. Setting social outcomes	. 141
iii. Pricing social outcomes	. 142
iv. Monitoring and evaluating social outcome metrics	. 146
6.5 Concluding remarks	. 149
Ob antian Course and initial research months delegan	454
Chapter Seven: empirical research methodology	
7.1 Introduction	. 151
7.2 Phase one: scoping social impact bonds markets in advanced countries	. 151
i. Population of interest	. 151
ii. Quantitative data sources	. 152
iii. Currency conversion rates	. 153
7.3 Phase two: analysing social impact bond case studies	. 154
i. Areas for case study exploration	. 154
ii. Case study research methodology	. 156
iii. Cases selected for analysis	. 161
7.4 Concluding remarks	. 165
Chapter Eight: United States case study	. 166
8.1 Introduction	. 166
8.2 The interests of the state: hedging risk when buying social outcomes	. 167
i. Welfare systems and state infrastructure	. 168

ii. State hedging its risk of paying for low-quality social outcomes through a forward-like contract: Massachusetts Juvenile Justice SIB
8.3 The interests of financial institutions: speculating on the value of social outcomes for financial profit
i. Financial systems and financial institutions174
ii. Speculating on the value of social outcomes through a forward-like contract Massachusetts Juvenile Justice SIB
iii. Financial profits earned through the speculating forward-like contract Massachusetts Juvenile Justice SIB179
iv. Banks and social impact bond markets180
8.4 The principal-agent problem and the complexity of transferring risk: setting pricing and evaluating social outcomes: Massachusetts Juvenile Justice SIB 185
i. Agents involved in the pricing, transfer and evaluation of risk
ii. Setting social outcomes189
iii. Pricing social outcomes190
iv. Evaluating social outcomes192
8.5 Potential agency costs stemming from the inefficiencies of delivering welfare services through this type of arrangement: Massachusetts Juvenile Justice SIB 193
i. Lack of Innovation in social service programme193
ii. Incentive for opportunistic behaviour by the service provider194
iii. Metric setting too financially sophisticated for the state
8.6 Concluding remarks195
Chapter Nine: United Kingdom case study197
9.1 Introduction
9.2 The interests of the state: hedging risk when buying social outcomes 197
i. Welfare systems and state infrastructure198
ii. State hedging its risk of paying for low-quality social outcomes through a forward-like contract: Essex Edge of Care SIB

9.3 The interests of financial institutions: speculating on the value of social outcomes
for financial profit
i. Financial systems and financial institutions205
ii. Speculating on the value of social outcomes through a forward-like contract. Essex Edge of Care SIB
iii. Financial profits earned through the speculating forward-like contract: Essex Edge of Care SIB210
iv. Specialist fund managers and social impact bond markets212
9.4 The principal-agent problem and the complexity of transferring risk: setting, pricing and evaluating social outcomes: Essex Edge of Care SIB
i. Agents involved in the pricing, transfer and evaluation of risk216
ii. Setting social outcomes220
iii. Pricing social outcomes222
iv. Evaluating social outcomes225
9.5 Potential agency costs stemming from the inefficiencies of delivering welfare services through this type of arrangement: Essex Edge of Care SIB
i. Lack of innovation in social service programme228
ii. Calculative asymmetry due to differing levels of financial experience 228
iii. Referral issues due to differing motivations between outcomes payer and investors
9.6 Concluding remarks
Chapter Ten: Australia case study232
10.1 Introduction
10.2 The interests of the state: hedging risk when buying social outcomes 232
i. Welfare systems and state infrastructure232
ii. State hedging its risk of paying for low-quality social outcomes through a forward-like contract: Benevolent Society SIB234

10.3 The interests of financial institutions: speculating on the value of social outcomes for financial profit
i. Financial systems and financial institutions23
ii. Speculating on the value of social outcomes through a forward-like contract Benevolent Society SIB
iii. Financial profits earned through the speculating forward-like contract Benevolent Society SIB242
iv. Pension funds, insurance companies and social impact bond markets 24-
10.4 The principal-agent problem and the complexity of transferring risk: setting pricing and evaluating social outcomes: Benevolent Society SIB
i. Agents involved in the pricing, transfer and evaluation of risk248
ii. Setting social outcomes25
iii. Pricing social outcomes252
iv. Evaluating social outcomes254
10.5 Potential agency costs stemming from the inefficiencies of delivering welfare services through this type of arrangement: Benevolent Society SIB
i. Differing motivations between financial institutions and non-profit firms 250
ii. Determining social outcomes and measuring savings250
iii. Potential for moral hazard25
10.6 Concluding remarks258
Chapter Eleven: conclusion259
11.1 Introduction
11.2 Historical arc and legacy260
i. SIBs: current context260
ii. SIBs: what the future holds?26
iii. SIBs: a brief introspection into their legacy264
11.3 Avenues for Future Research
i. The role of the state

Contents

ii. The role of the financial sector	266
11.4 Policy Recommendations	266
Bibliography	269
Appendix	293

List of figures and tables

Figure 2.1 - Timeline of first social impact bond implementation, all countries 35
Figure 2.2 - Timeline of social impact bond implementation, per year, all countries 37
Figure 2.3 - Market share, volume, all countries39
Figure 2.4 - Average monthly increase, per country, all countries40
Figure 2.5 - Market share, total value (GBP), all countries41
Figure 2.6 - Mean value (GBP), all countries42
Figure 2.7 - Total volume, all categories, all countries
Figure 2.8 - Total value (GBP), all categories, all countries44
Figure 2.9 - Average value (GBP), all categories, all countries44
Figure 2.10 - Timeline of first social impact bond implementation, per policy area, all countries46
Figure 3.1 - Social impact bond financial ecosystem49
Figure 3.2 - Social impact bond investor typology55
Figure 3.3 - Social impact bond operational model65
Figure 6.1 - Investor preference for financial and social value145
Figure 8.1 - Social impact bond financial ecosystem: Massachusetts Juvenile Justice SIB187
Figure 8.2 - Investor value preferences for Massachusetts Juvenile Justice SIB 190
Figure 9.1 - Social impact bond financial ecosystem: Essex Edge of Care SIB 217
Figure 9.2 - Investor value preferences for Essex Edge of Care SIB224
Figure 10.1 - Social impact bond financial ecosystem: Benevolent Society SIB 249
Figure 10.2 - Investor value preferences for Benevolent Society SIB253
Table 2a - Social impact bonds by country and year of implementation
Table 2b - Social impact bonds by category and year of implementation 45

Abbreviations

CIF Communities Investment Fund

DIB Development Impact Bond

DOE Department of Education

DOH Department of Health

DWP Department of Work and Pensions

ICNPO International Classification of Non-profit Organizations

INDIGO International Network for Data on Impact and Government Outcomes

ISO International Organisation for Standardisation

MST Multi-Systemic Therapy

NEET Not in Education, Employment or Training

OECD Organisation for Economic Co-operation and Development

PFI Private Finance Initiative

PPP Public Private Partnership

SIB Social Impact Bond

SIB Lab Social Impact Bond Technical Assistance Lab

The International Organisation for Standardisation (ISO) defines three-letter codes for the names of countries, dependent territories, and special areas of geographical interest. For the geographical and tabular display of some figures and information within this research, the following ISO codes are used:

Country	ISO	Country	ISO	Country	ISO
Australia	AUS	Germany	DEU	Portugal	PRT
Austria	AUT	Israel	ISR	Sweden	SWE
Belgium	BEL	Japan	JPN	Switzerland	CHE
Canada	CAN	Korea	KOR	United Kingdom	GBR
Finland	FIN	Netherlands	NLD	United States	USA
France	FRA	New Zealand	NZL		

Chapter One: introduction and research outline

1.1 Research Background

Since their launch in 2010, Social Impact Bonds (SIBs) have witnessed an increasing trajectory of implementation with a total of 142 SIBs being launched across 17 advanced countries in their first decade, representing a total value exceeding GBP 268 million (authors own data, 2022).

The success of SIBs is reflected in the way they are often heralded by both governments and institutions involved in impact investing as an efficient mechanism to reduce the need for crisis-based public services through early intervention programmes (Callanan et al., 2012; Joy and Shields, 2018; Mulgan et al., 2011). SIBs cover a wide variety of policy areas ranging from child and family welfare to criminal justice, education and workforce development. Proponents claim that SIBs hold the potential to unlock a range of benefits for both government and non-profit firms by generating better incentive structures in the delivery of social services, more efficiently allocating government welfare expenditure and promoting innovative social service programmes, whilst shifting the financial risk to the private sector (Callanan et al., 2012; Fox and Albertson, 2011; Mulgan et al., 2011).

Enthusiastic endorsements of SIBs have not been limited from policy makers or domestic impact investors but also increasingly from a multitude of international agents such as G8's Social Impact Investment Taskforce (2014a, 2014b), the World Economic Forum (2015, 2013), and the Organisation for Economic Co-operation and Development (2015, 2016a), amongst others. The global SIB market has also garnered broad support from institutions such as Deloitte, Goldman Sachs, Brookings Institution, and Stanford Business School, to name a few (Boggild-Jones, 2018; Boggild-Jones and Gustafsson-Wright, 2019; Buckland et al., 2013; Deloitte, 2014, n.d.; Goldman Sachs, 2014).

In terms of historical development, the emergence and spread of SIBs has coincided with the accelerating pace and development of financialisation, emblematic of the transformation of mature capitalism that has occurred during the past four decades. According to scholars such as Lapavitsas (2013, 2011, 2009) financial liberalisation

and financial market reforms have initiated a structural change under which finance has grown enormously in terms of activities, markets, institutions and profits. In this rapidly changing financial environment, new investment approaches have emerged as the traditional boundaries between 'economic' and 'social' purpose activities continue to become increasingly blurred (Nicholls, 2010).

Although SIBs have developed rapidly as a favoured policy tool for social service delivery, being a fairly recent phenomenon means the SIB literature remains at a nascent stage of development. This coupled with the commercial sensitivity associated with SIB contracts makes SIBs a relative under-studied area. The unavailability of data also makes empirical analysis difficult. This study aims to address this current lack of theoretical scholarship on SIBs by contributing to the existing body of SIB literature in a number of distinct ways which to the best of my knowledge has not hitherto been attempted before.

This research addresses two contentions. The first, and core, contention is that SIBs represent a particularly problematic aspect of financialisation, whereby the state supports financial markets for SIB investments to be developed in the public social policy sphere, thereby partially transferring the financial responsibility of welfare provision to private investors. Second, linked to the concept of 'risk' which is fundamental to the SIB narrative, is that the very structure of a SIB is prone to inefficiency issues, such as moral hazard and information asymmetry, stemming from the principal-agent problem.

In order to address these contentions, SIBs are first considered from the perspective of political economy, drawing upon the theoretical framework of financialisation. The study questions the legitimacy, the efficacy, and the potential for SIBs to solve some of society's most enduring issues, challenges and problems where financial agents seek new avenues of profitability, in the realm of public policy and in fields that hitherto had been funded and delivered by the state. It does so by commodifying previously de-commodified provisions, such as child and family welfare or education and early years learning, and partially transfers the financial responsibility of welfare provision to private investors in areas of public social policy. More specifically, drawing upon the theoretical framework of financialisation as developed by Lapavitsas (2013, 2011,

2009) this study examines how the SIB represents a shift in logic towards financialised concepts of social value through an in-depth analysis of three case study SIBs. With reference to the linkages between financial profits and financial institutions, and the role of the state in the development of SIB markets.

Second, drawing upon the 'rich literature of agency theory' (Eisenhardt, 1989a, p. 71), and within the same three case study SIBs, this research challenges the notion that SIBs are an efficient instrument for public social policy delivery. This is done by analysing SIBs through the framework of agency theory and exploring in depth how the principal-agent relationships within a SIB is affected by the differing goals, motivations, and attitude to risk between the state as principal and agents, including the different constituent elements within a SIB ecosystem.

1.2 Motivation

The personal historical contextualisation for this research is as follows. I have more than a decade's experience working in several areas which connect to SIBs. I have a keen interest in social investment, with experience working in the provision of debt finance for social enterprises and charities. I started my career in mainstream financial services, in insurance, giving me an understanding of the pricing of risk, and the contracting of this. I have also worked on outcomes contingent contracts for a non-profit service provider, for the provision of social services contracted by government and philanthropists.

My interest in SIBs was first kindled by my experience working for a non-profit investment fund, the Communities Investment Fund (CIF). Through the provision of loan finance this fund supported social businesses in Wales to expand, grow income generating capabilities and purchase assets. As part of my professional life I kept abreast of developments in social investment across the United Kingdom. It was whilst working at CIF that SIBs first launched and came to my attention. They were unlike any social investment instrument I had seen before.

I do believe that financial investment is required to enable social organisations to fulfil their social mission. From my time at CIF I understand the difficulties they face accessing this investment. Without this particular form of finance the non-profit sector

would struggle to survive. It needs specific attention, specific understanding, the nuances are not the similar instinct that operates in the private sector so this specialised form of finance is essential.

However as I continued to monitor the development of SIBs and over time as new SIBs were introduced, and financial institutions began investing, their model made me think more about the dimensions which were involved. What kindled my intellectual curiosity was why these private agents were involved, how they were making their profit, and whether the state was dealing with these social issues in the best possible way. Thus it made me start questioning the logic, the rationale, and the desirability of SIBs.

1.3 Chapter Overview

The following paragraphs provides an outline summary of the way the remainder of this research is organised.

Chapter two provides a broad outline of SIB markets and charts their development since their inception. This is done through an examination of the origins and evolution of SIB markets, tracing their roots to earlier financial instruments and public social policy decisions. As such it lays out why the subject area of this research is significant and merits further analysis. The SIB market is mapped out through a chronology of SIB development, before presenting evidence of the volume and value of SIBs across the advanced countries which have implemented them, as well as the speed at which those markets are expanding, and finally reviews the areas of public social policy area which is covered by SIBs.

Chapter three examines SIBs more closely in two following distinctly different ways. First, it closely examines the principal and the key financial agents involved in SIBs with the aim to establish their motivations and appetite for risk, as well as the capital flows through the SIB mechanism. The principal-agent relationship in a SIB involves the principal and multiple agents who are contracted and compensated to participate in the process of designing, financing and delivering the SIB (Burand, 2012; Fraser et al., 2018a; Gustafsson-Wright et al., 2015; OECD, 2016a). This is shown in *figure 3.1*, which sums up the fundamental financial 'ecosystem' that the study propose for a SIB.

Due to the multi-agent nature of a SIB, there are no direct relationships, as the ecosystem indicates.

Second, this chapter also examines the operational model, or structure of a SIB to demonstrate the working relationships between the principal and the key agents and their roles in delivering the SIB. It is through this structure that the risk of underperformance is transferred from the outcomes payer to the investors in return for financial compensation. Analysed in details is the level of complexity this brings is a defining feature of SIBs, primarily due to the existence of multiple agents with differing attitudes and perception to risk, expectations on interests, and goals (Alijani and Karyotis, 2018; Del Giudice and Migliavacca, 2019; Hajer, 2018).

Chapter four undertakes an in-depth review of the SIB literature from a political economy perspective, with the aim of understanding how financialisation and welfare regimes may affect the dissemination of SIBs. This chapter also outlines the theoretical framework using which this research seeks to explore the existing heterogeneity in SIB markets across advanced countries discussed in chapter two. SIBs are both a public social policy tool and a financial instrument. Therefore, their indepth analysis requires situating their development within the context of financialisation to understand their emergence as a financial instrument. The theoretical framework is supplemented with theoretical contributions from the comparative political economy literature to explore how variegation in financial systems and welfare systems affect the development of SIBs across different countries. In sum, this section develops a fresh theoretical framework that draws upon the existing scholarship on financialisation, financial systems, comparative political economy and welfare systems, to analyse the interrelationships among SIBs, financial markets and the welfare state.

Chapter five sets out the essential components necessary to the understanding of SIBs from a contracting perspective. The aim is to examine the central tenets of the principal-agent problem with specific regard to SIBs. The objective is to demonstrate the structural inefficiencies of SIBs by analysing the impact on the principal-agent relationship by the differing goals, motivations, and attitude to risk between the state (the principal) and the different constituent elements of the SIB framework.

Chapter six sets out further theoretical elaboration of how SIBs work, by analysing SIBs from the perspective of political economy drawing upon the theoretical framework of financialisation. It does so by first examining SIBs as a new type of activity for financial institutions. More specifically it establishes SIBs as a financial instrument with structural similarities to that of a derivative, and proceeds to explain a SIB as both a hedging forward-like contract, and a speculating forward-like contract, through which risk is transferred from the state to private investors. The chapter argues that a vital component of this is the setting, pricing and evaluation of social outcomes which are used to ascertain the quality of the social outcomes. As without these mechanisms the risk cannot be quantified, monetized, and evaluated, which would make it impossible to partially transfer the financial risk of welfare delivery to the investors.

Chapter seven presents the research methodology deployed in the two subsequent chapters. First it provides an overview of the data collection procedure, descriptive statistics and the methodology used to carry out the analysis. Next it details the rationale for the case study selection, which includes the SIB markets of the United States, United Kingdom and Australia. Each case study also analyses a specific SIB from each market. These are the Massachusetts Juvenile Justice SIB, Essex Edge of Care SIB, and Benevolent Society SIB, respectively.

Chapters eight, nine and ten provide an in-depth empirical comparative analysis of the three SIB markets selected and corresponding SIB. Each case study aims to understand how financialisation and welfare regimes may affect the dissemination of SIBs in that country, whilst also exploring the notion that SIBs are an efficient instrument for public social policy delivery. The analysis is theoretically informed by the existing literature on financialisation, comparative political economy, and agency theory as discussed in chapters four and five. Incorporating the theoretical elaboration of SIBs as derivative instruments and the principal-agent problems associated with the setting, pricing and transfer of risk, proposed in chapter six.

Chapter eleven concludes the study, and suggests avenues for further research and policy recommendations.

<u>Chapter Two: the emergence and evolution of social impact bonds: a detailed analysis</u>

2.1 Introduction

This chapter provides a broad outline of SIB markets and charts their development since their inception. Section two examines the origins and evolution of SIB markets, tracing their roots to earlier financial instruments and public social policy decisions. As such it lays out why this topic is significant and merits further analysis. In section three the SIB market is mapped out. It starts with the chronology of SIB development, it then presents evidence on the volume and value of SIBs across the countries that have implemented them, as well as the speed of the average monthly increase of those markets, and finally reviews the public social policy areas covered by SIBs. Section four sums up the preceding discussion and identifies the relevant questions and issues that this research attempts to address.

2.2 Social impact bonds: an overview

This section provides an overview of social impact bonds, including the definition used in this research, their historical origin and evolution, as well as their broader significance and analytical importance.

i. What are social impact bonds?

SIBs are a relatively new public social policy tool and financial instrument, first implemented in the United Kingdom in 2010. Through this instrument private investors commit capital upfront for the provision of a social service, which is delivered over a number of years, with pre-defined social outcome targets for the delivery agency to meet. If the programme achieves or exceeds its pre-defined social outcomes the government reimburses the principal of the investors and provides a rate of return on their capital.

SIB interventions predominantly focus on behavioural change and target the behaviour of particular population groups in order to prevent these groups from using what are understood to be crisis-based public services (Joy and Shields, 2018). These preventative and early intervention services might include working with families who

have children at risk of entering the care system to create more stable and supportive home environments; aiding children from low-income families to improve their school readiness and academic performance; facilitating access to housing, medical and mental health services, substance abuse treatment, and vocational training for chronically homeless individuals; assisting young people who are not in education, employment or training (NEET) or are at risk of becoming NEET to participate and succeed in education or training; or providing individuals who are at-risk of incarceration with services such as substance abuse and mental health treatment, education, workforce readiness training and family reunification.

SIBs are projected to unlock a range of benefits for both the government and the non-profit sector delivery agency by responding to the issues facing traditional social service delivery. The non-profit sector is an umbrella term that covers a range of different organisations with different structures and purposes, belonging neither to the public sector (the state) nor to the private sector (profit-making private enterprises). Broadly speaking, the non-profit sector includes charities, social enterprises, community and voluntary groups, and co-operatives. ¹ SIBs are designed to be cost effective as the delivery of these preventative-style social services is anticipated to save future costs to government through a reduction in the need for crisis interventions (Callanan et al., 2012; Mulgan et al., 2011). They are also said to transfer part, or all, of the financial risk of non-delivery away from government and service providers to the investors, who bear the cost of unsuccessful interventions (Callanan et al., 2012; Mulgan et al., 2011).

This transfer of financial risk is said to foster innovation as it enables scope for service experimentation rather than relying on established models of delivery, and market incentives and 'market discipline' are also said to drive greater innovation (HM Government, 2011a, 2013; Liebman, 2011; Mulgan et al., 2011; Rizzello and Carè, 2016). Finally, SIBs are said to attract private finance to areas where public investment is lacking, thereby reducing the public sector's own capital requirements (Mulgan et

¹ There is no agreed definition of the 'non-profit sector', and it is also referred to as the charity or voluntary sector, third sector, or civil society, for example. Definitions and terminology also vary by country. See Corry (2010) for a comprehensive discussion.

al., 2011; Rizzello and Carè, 2016).

ii. The definition of social impact bonds as deployed in this research

There is relative uncertainty regarding the provenance of SIBs as a financial instrument, which will be discussed in more detail in chapter six, and it is not surprising that the exact definition of a SIB is a contested area. Following an analysis of more than a dozen different definitions across the literature, Hajer (2018) has summarised the defining elements of SIBs as follows:

SIBs are procurement contracts, generally issued by government, that enable the delivery of some social service intervention, bundling together design, delivery and project finance. The contract payment structure is based on the contractor's achieved outcomes, as opposed to the undertaking of some specific programming or service output, requiring a mutually agreed upon evaluation methodology, which may involve an independent external evaluator and/or a control group to help isolate the impact of the intervention. Private investment is used to finance the project, with investors facing at least some repayment and return risk contingent on the outcomes achieved. SIBs deliver preventative social services such that the intervention prevents some negative social outcome from occurring.

(Hajer, 2018, p. 17)

The majority of SIBs in advanced countries adhere to the above features and this definition will be used throughout this research. However, it is vital to add to it the following important features for reasons of analytical clarity and to facilitate obtaining some original empirical results. Thus:

- The main outcomes payer is the government. It should be noted that in some instances the government acts as a joint outcomes funder alongside another entity, such as a quasi-governmental organisation or a foundation. For the purposes of this research, these instruments are still considered SIBs,
- The service must be outsourced to a non-profit firm or for-profit firm, not provided by a government department,

Government investing agencies are excluded from the analysis. On occasions
where such investments have actually taken place and the amount of their
investment is known, it is deducted from the total capital raised.

These points help to clarify the key features of the SIB as it was originally designed. These features have been added because the focus of this research is on private investors investing in the delivery of social services by a third party on behalf of the government with the expectation of a financial return. This is, after all, the original intention of the SIB and its analysis should proceed on this basis.

Nevertheless, even working within the above definitional boundaries, SIBs come in many variations and are known by different names in different countries (Arena et al., 2016; Clifford and Jung, 2016). The term 'social impact bond' is used in the United Kingdom, in the United States they are known as a 'pay for success' scheme, in Australia as a 'social benefit bond', and in Europe they are often referred to as a 'social impact partnership'. Yet all of these forms of instrument share certain commonalities as outlined above. The term 'social impact bond' or 'SIB' is used throughout this research.

iii. Historical origin and evolution of social impact bonds

SIBs are widely believed to have developed and spread after the 2008-09 economic crisis, driven by macro-level developments on both the demand and supply side. Austerity measures following reductions in government expenditure, including spending on social and welfare services, are said to have provided opportunities to extend markets even further into the realm of solving social problems through SIBs (Dowling, 2017; Dowling and Harvie, 2014; Joy and Shields, 2018). SIBs are a type of asset or instrument that falls within the scope of social investment. This term is used to describe the deployment of repayable finance to help an organisation achieve a social purpose (Good Finance, 2016). ² Note that social investment has often been

² This term should not be confused with the European Union's definition of 'social investment' which relates to investment in its citizens through policies designed to strengthen their skills and capacities and support them to participate fully in employment and social life (European Commission, 2013).

considered by heterodox economists and others as part of a strategy to respond to the over-accumulation of capital by opening new investment opportunities for surplus capital (Dowling and Harvie, 2014; Harvie, 2019; Harvie and Ogman, 2019). The underlying theories of these claims are explored more fully in chapter four. However, the concept of SIBs as a financial instrument can be traced as far back as the 1980s, and SIBs as a government cost-controlling apparatus can be found in the late 1990s.

The SIB has roots as a non-tradeable version of a social policy bond, first conceived by New Zealand economist Ronnie Horesh, in 1988. Horesh (1988) argued that market incentives and efficiencies should be injected into the welfare state to achieve better social outcomes. In this light, bonds relating to public social policy, for instance crime, health, or literacy, would be issued on the open market with the market determining the price. Investors were anticipated to include philanthropists, and public or private-sector groups. The bonds would not bear interest and would be redeemable for a fixed sum only when a targeted social objective had been achieved and sustained. Therefore, the bond holders would have the incentive to ensure that the targeted goal would be achieved as quickly as possible.

A decade later, in 1997 in the United Kingdom, the New Labour government set up the Council on Social Action as an independent advisory group tasked with finding new ways to control the cost to government of social services (Strickland, 2010). Areas such as criminal justice, education, homelessness, foster care, health, and mental health care were identified as costly services that would benefit from preventative interventions (Chamaki et al., 2018).

Even earlier in that decade, in 1992 under the Conservative government, the United Kingdom introduced the private finance initiative (PFI), which was the first systematic programme aimed at encouraging public private partnerships (PPP). Similarly to a SIB, a PFI contract facilitates private financing for the provision of public infrastructure and services. Typically, under these contracts, a consortium of private sector organisations is responsible for designing, building, financing, and operating buildings and facilities and associated services that are then used by a public sector organisation.

Unlike SIBs, however, these contracts are not based on the delivery of specific social

outcomes, and both equity and debt investors receive monthly payments from the public sector organisation for the use of these services for the period of the contract, which is normally 25 to 30 years. PFI contracts have included new schools, hospitals, housing, and prisons (HM Government, 2020), areas of public social policy clearly similar to SIBs. Drawing further parallels with SIBs, PFI is considered an 'off-balance sheet' method of financing the delivery of public infrastructure and services because borrowing for the project is not incurred by the state, but by the private sector vehicle implementing the project (Loxley and Hajer, 2019).

SIBs were developed as a financial instrument by Social Finance, an organisation that was developed by venture capitalist Sir Ronald Cohen and ex-UBS Warburg corporate financier Toby Eccles. Working together to develop ideas for a social investment wholesale bank under the government's Commission on Unclaimed Assets (Social Finance Ltd, 2020; Warrell, 2008). ³ This resulted in the founding of Social Finance in 2007 as a non-profit firm that forms partnerships with government, the social sector and the financial sector to find better ways of tackling social problems (Social Finance, 2017).

The first path-breaking SIB to be established worldwide, designed and coordinated by Social Finance, launched in 2010 when the United Kingdom's Ministry of Justice, supported by the Big Lottery Fund, commissioned an intervention called the 'ONE Service' at HMP Peterborough (GO Lab, 2020).

This service was contracted to provide 'through-the-gate' and post-release support to up to 3,000 adult male short sentence prisoners, across three cohorts. ⁴ The through-the-gate support involved contacting offenders before release to introduce case workers, assess needs, and plan resettlement activities. Following release, the service

⁻

³ This eventually led to the launch of Big Society Capital in 2012, which is not a bank but a financial institution that provides capital on a wholesale basis to social investment finance intermediaries, such as fund managers or specialist banks. Big Society Capital was in-part funded through the Dormant Accounts Scheme, which was set up following the findings of the Commission on Unclaimed Assets, to enable assets from bank and building society accounts that have been untouched for 15 years or more to be donated to charity, Big Society Capital has received GBP 425 million of these assets to date (BSC, 2019; House of Commons, 2007).

⁴ Short sentence prisoners are those with prison sentences of less than 12 months

implemented these plans by working with offenders for up to 12 months. If an offender returned to prison within this period, the support services were to continue back in prison.

The commissioned providers within the One Service included the non-profit sector organisations St Giles Trust, Sova, MIND, and Ormiston Families, in addition to private training provider John Laing Training. St Giles Trust provided the case workers tasked with delivering the through-the-gate service; Sova provided unpaid volunteers to support participants in addition to a landlord liaison caseworker; MIND supported participants with mental health problems; Ormiston Families provided support both to participants and their families in order to strengthen family relationships; and John Laing Training provided courses in construction skills (Disley et al., 2015). ⁵

The total capital raised for the intervention was GBP 5 million which came from a consortium of non-profit institutions including the Barrow Cadbury Trust, Esmée Fairbairn Foundation, Friends Provident Foundation, The Henry Smith Charity, Johansson Family Foundation, LankellyChase Foundation, The Monument Trust, Panaphur Charitable Trust, Paul Hamlyn Foundation, and the Tudor Trust (GO Lab, 2020).

Outcome payments were to be triggered in the event of a reduction in the frequency of reconviction events of at least 10 percent in any of the cohorts, and/or a reduction of 7.5 percent in the combination of those cohorts that do not achieve the 10 percent reduction. An independent assessor was appointed to examine whether a reduction in reoffending was achieved (GO Lab, 2020).

Not only did the United Kingdom design and implement this first SIB, but overall the government has been a leader in the promotion, development and financial support for SIBs, with the government itself acknowledging that substantial public resources have been invested in constructing the SIB market (Cohen, 2013).

⁵ The training courses were later recommissioned through a new non-profit sector initiative, TTG Training CIC

iv. Broader significance of social impact bonds and their analytical importance

In terms of historical development, the emergence and spread of SIBs coincided with the accelerating pace and development of financialisation, emblematic of the transformation of mature capitalism that has occurred during the past four decades. This literature will be reviewed in chapter four. According to scholars such as Lapavitsas (2013, 2011) financial liberalisation and financial market reforms have initiated a structural change under which finance has grown enormously in terms of activities, markets, institutions and profits. These changes have seen banks adopting investment banking practices and extending credit to households as they sought to explore alternative avenues to traditional business lending to sustain their profitability. This was coupled with institutional investors, such as investment fund managers, pension funds and insurance companies, becoming large collectors of savings and suppliers of funds to financial markets.

In this rapidly changing financial environment, new investment approaches emerged as the traditional boundaries between 'economic' and 'social' purpose activities became increasingly blurred (Nicholls, 2010). As evidenced by the PFI experience, from a public policy perspective, private finance has been encouraged to play a much more active role in delivering public goods and services.

These blurred boundaries have also led to the emergence of a new breed of investor, seeking social impact alongside a financial return (Bugg-Levine and Emerson, 2011; O'Donohoe et al., 2010). While financial initiatives in favour of investments for 'social good' emerged in the 1980's, alongside the arrival of PFIs, as alluded to above, the practice of impact investing gathered momentum in the early 2000s not as a standalone asset class, but rather as an investment approach across a range of asset classes with a clear, transparent and distinctive intentionality.

The term 'social impact investment' came to the fore in 2007 during a convention led by The Rockefeller Foundation (Höchstädter and Scheck, 2015). Subsequently, in the period since the 2007-09 financial crisis there has been a strong impetus to build the social impact investment market, as specialised intermediaries began to appear, mainstream financial agents and governments started to become involved, with well-

known universities starting to include impact investing courses in their curriculum, followed by publication of a plethora of practitioner contributions (Clark et al., 2014; Cohen, 2011; HM Government, 2013, 2011a, 2011b; Liebman, 2011).

This expanding market has resulted in the implementation of new financial instruments designed to target investors interested in socially focussed investments that can yield financial returns in ways that are uncorrelated with other determinants of asset prices such as interest rates, oil prices or commodity cycles (Trelstad, 2016). In this context, SIBs extend the opportunity to diversify the portfolio of investors by expanding into the financing of social programs which address social problems in areas such as education, health and the aging population, whilst earning a financial return (Daggers and Nicholls, 2016; Leventhal, 2012; Loder, 2011; Mulgan et al., 2011; Ragin and Palandjian, 2013).

Despite the flurry of interest and a plethora of manifestations that includes loans, quasi-equity, equity, and specialised products such as Green Bonds and Charity Bonds, there is no uniform definition of impact investing, and a number of alternative terms are used interchangeably in the academic literature and among practitioners. Broadly speaking impact investing can be thought of as an amalgamation of philanthropic objectives infused with standard financial decision making.

While the explicit goal to yield a financial return differentiates impact investing from grant funding and philanthropy, the explicit focus on some level of non-financial impact delimits it from traditional investments (Addis et al., 2013; Trelstad, 2016; Wong, 2012). As such, impact investment stands in the middle of an impact continuum between philanthropic organisations on one side and, on the other, investors committed to taking into account social, environmental and governance factors when allocating capital to businesses (Social Impact Investment Taskforce, 2014b).

It should be stressed that Green Bonds and Charity Bonds, unlike SIBs, are actual bond instruments and are tradable. However, they both represent a similar development to SIBs due to the focus on private investors profiting from areas that hitherto belonged to public policy, involving environmental and social issues. Thus, Green Bonds are debt securities which raise capital for projects that promote climate

and environmental sustainability. The first bond was launched prior to SIBs in 2007, around the same time as the inception of Social Finance. Note that they are considerably larger than SIBs in terms of capital raised. By 2013 the first green bond to be valued at USD 1 billion was sold and a growing number of issuances came from corporates, energy and utility companies and governments and their agencies from around the world in subsequent years (World Bank, 2017).

Charity Bonds are closer to SIBs than Green Bonds in terms of their size and the areas of public policy they cover. However, instead of focussing on specific areas of public social policy, non-profit firms issue Charity Bonds as a form of long-term debt to expand their operations, similar to a regular corporate bond. A specialist social investment intermediary issues a bond in the name of the charity, the bond proceeds are then advanced to the charity in the form of a loan, but on the same terms as the bond. For example, for a bond carrying a 5 percent coupon for 10 years, the loan to the charity would be at 5 percent per annum and would be repayable in 10 years from the issue date (Podd, 2020). Similarly to SIBs, the investment in early Charity Bonds was limited to charitable trusts and wealthy philanthropic investors (Cheng, 2011).

Several examples of charity bonds can be found in the United Kingdom. For example, Investing For Good assisted the charity Scope to become one of the first charities to enter the capital market by piloting a GBP 20 million bond programme operating similarly to a corporate bond and listed on an exchange in Luxemburg (NCVO, 2015). Similarly, Triodos Bank assisted the social enterprise Bristol Together to issue a bond worth GBP 1.6 million (NCVO, 2015). ⁶ Retail Charity Bonds plc has launched nine bonds totalling almost GBP 300 million for a variety of charities ranging from care home operators to housing associations, and includes a charity which itself provides financial support to other charities, all of which are tradeable on the London Stock Exchange (Podd, 2020; RCB, 2020).

⁶ The first GBP 0.6 million was bought by a foundation and the second tranche of GBP 1 million from a wider range of investors, principally trusts and foundations. Less than a quarter of investment came from individual private investors, and several of these were very engaged with the project and even on the Board. The bond was structured to attract Community Investment Tax Relief which can enhance returns for private investors (British Council, 2020)

Comparing SIBs to the earlier experiences of PFI, Loxley and Hajer (2019), Warner (2013) and Whitfield (2015) are amongst those who find the financing model of SIBs to rely on the financialisation of publicly funded services, the quantification of previously socialised risk and the commodification of this risk, whose management and mitigation become a profit-making opportunity for private investors. As SIBs entail considerable involvement of financial agents, who are seeking new avenues of profitability, in the realm of public policy and in fields that hitherto had been funded and delivered by the state.

It is also notable that Social Finance expanded to form the Social Finance Global Network, a collaboration between independent non-profit firms to promote the flow of capital towards solving domestic social problems through the use of innovative financing tools (Social Finance, 2021). The global network comprises the founding organisation from the United Kingdom, plus organisations in the United States, Israel, the Netherlands, and India. Social Finance Inc was launched in the United States in 2011 (Social Finance Inc, 2020); followed by Social Finance Israel in 2013, which remains the only social investment intermediary in Israel (Social Finance Israel, 2020); Social Finance Netherlands was added in 2018, further expanding the Dutch social finance networks (Social Finance NL, 2020); and the same year Social Finance India was founded (Social Finance India, 2020).

The financing of development programmes in low- and middle-income countries, such as India, are made through an iteration of SIBs called a Development Impact Bond or DIBs. ⁷ In general, DIBs follow the same model, with private investors providing capital upfront to the implementer of a social program. However, there is a difference in who pays for the social outcomes. As was already discussed above, in a SIB the outcome payer is the government, whilst in a DIB the outcomes payer may be a government, a multilateral aid agency, or philanthropic funder (GO Lab, 2019). ⁸ In general, publicly held databases and some estimates of the value of the global impact bond market include both SIBs and DIBs, so it is helpful to understand the difference between the

⁷ See the Centre for Global Development for further details on DIBs https://www.cgdev.org/

⁸ Multilateral aid is assistance provided by governments to international organisations like the United. Nations, World Bank, and International Monetary Fund.

types of impact bond.

Finally, in terms of upfront capital commitment, the SIB market remains small compared to other areas of impact investing and PPP/PFI. The first 100 SIBs were valued at USD 359 million (Hajer, 2018) ⁹. Whilst estimates across all impact bonds to the end of 2018 were reported as USD 370 million (Boggild-Jones and Gustafsson-Wright, 2019). This compares to USD 167.6 billion raised by green bonds (Filkova et al., 2019) and an estimated USD 228 billion under management across the impact investment market overall during the same period (GIIN, 2018).

SIB capital commitments are also dwarfed by the PPP/PFI market. In the United Kingdom alone in excess of GBP 56 billion of private sector capital investment was secured during the past three decades (HM Government, 2020). This is several orders of magnitude greater than the total market value of SIBs from March 2010 to March 2020, which I have estimated at GBP 268 million (see calculation below). ¹⁰

As mentioned earlier, the SIB market is still at an early stage of development, however its development merits scholarly analysis, not least due to the significant academic debate it has generated. Critical interest has been strong regarding several of the claims made by proponents. For instance, the superiority of the SIB model is said to rely on the hypothesised efficiencies being realised and being sufficient to offset any incremental costs.

However, it has been found that SIB transactions are very expensive due to the uniqueness of each project and the complexity of the negotiations (Disley et al., 2015; Maier et al., 2018; Neyland, 2018). Additionally some calculations suggest that the value of SIB contracts are not always high enough to cover the fixed overhead costs in the first place, meaning savings might not be realised even if social outcome targets are met (Azemati et al., 2013; FitzGerald et al., 2019; McKay, 2013; Tan et al., 2015).

⁹ Haier (2018) uses a slightly broader definition of a SIB as discussed above.

¹⁰ The data for capital raised is undisclosed for some projects. In these instances, the mean value for that country has been used to replace missing data in order to be able to estimate the size of the market. The countries affected are the United Kingdom (ten SIBs), Australia (two SIBs), Germany (two SIBs), the Netherlands (one SIB), and the United States (one SIB).

Questions have been raised regarding the cost effectiveness of SIBs compared to alternative delivery models.

Another key criticism that some scholars have highlighted is that SIBs tend to principally either replicate or scale-up existing proven interventions, and not deliver the innovative services they promise (Arena et al., 2016; Carter et al., 2018; Edmiston and Nicholls, 2017; Gustafsson-Wright et al., 2015; Heinrich and Kabourek, 2019). Doubts have also been raised regarding the social outcome measures themselves which, if they are inadequate, have been found to create perverse incentives. These include encouraging the service provider to 'cream-skim' beneficiaries with the highest chances of meeting the target whilst 'parking' those who are likely to miss the target (Carter and Whitworth, 2015; Cox, 2011; Fox and Albertson, 2011; Maier and Meyer, 2017; McHugh et al., 2013).

Actions such as these could all trigger outcomes payments when they might not otherwise be realised leading to questions regarding the real level of risk investors are absorbing in exchange for their potential returns (Gardiner and Gustafsson-Wright, 2015). In fact, examining the limited data available on investor repayment, Hajer (2018) finds that contrary to the popular narratives surrounding high investor risk, the public data suggests SIBs have been repaying investors consistently. Whilst Gardiner and Gustafsson-Wright (2015) argue that because the government ultimately pays for successful SIBs, new funding has not materialised as SIBs are actually just solving a liquidity problem for government by providing upfront capital.

Similar criticism has been attributed to the phenomena of PFI, which was briefly alluded to earlier in terms of drawing similarities with SIBs. As early as 1999 for example, critical economists and social scientists argued that, far from being a new source of funding, PFI is a financing mechanism that greatly increases the cost to the taxpayer of National Health System capital development (Gaffney et al., 1999a). It was also found that the putative justification for these higher costs, i.e., the transfer of risk to the private sector, was not borne out by the evidence (Gaffney et al., 1999b). A further criticism was that the ensuing financialisation of public services leads to suboptimal outcomes by distorting planning decisions resulting in a reduction in planned staffing and service levels due to the impact of these higher costs (Pollock et al., 1999).

Nonetheless, policy makers have increasingly recommended the use of SIBs, as observed by the Social Impact Investment Taskforce (2014b). It is probable that their popularity among policymakers as a financial instrument or a commissioning tool to deliver intended social policies will continue, even though the rising influence of SIBs in policy circles has been accredited mostly to the challenging economic climate after the 2008-09 economic crisis (Tan et al., 2019). The enthusiasm has not been limited to policy makers as the global SIB market has garnered broad support from a multitude of agents (Dear et al., 2016). These include the international bodies and leading private financial and other institutions discussed in chapter one.

The core argument that this research attempts to make is that SIBs represent a particularly problematic aspect of financialisation, whereby the state supports financial markets for SIB investments to be developed in the public social policy sphere. They cover areas that were hitherto characterised by de-commodified provisions such as child and family welfare or education and early years learning, and thereby partially transfer the financial responsibility of welfare provision to private investors. The social outcomes of this development are complex and negative, as is demonstrated in the rest of the research.

2.3 The social impact bonds landscape in advanced countries

This section provides a brief overview of the global outlook of the SIB market, by presenting a summary discussion of the 142 SIBs that have been implemented across advanced countries as at March 2020. The sample covers Australia, Austria, Belgium, Canada, Finland, France, Germany, Israel, Japan, Korea, Netherlands, New Zealand, Portugal, Sweden, Switzerland, United Kingdom, and United States.

I propose (and have estimated) a range of metrics through which to discuss the relative size and the characteristics of the SIB market. ¹¹

First, to trace the chronological development of SIB markets, the following are

¹¹ See chapter seven, section two, for full details of the methodology used to ascertain the population of interest and the quantitative data sources used for this scoping exercise.

employed:

- Timeline of implementation, which details when each country entered the market and how the total number of SIBs has grown,
- Growth by geographical area, which shows how various countries have developed their SIB market over time,
- Rate of growth, which makes it possible to compare market development given the staggered launches of SIBs during the past decade,
- Chronological development on a year-by-year basis at the country level,
 which adds further insight into how the market has grown.

Second, the depth and spread of SIBs in these markets and the quantities and values they represent are captured by the following three indicators/metrics:

- Total volume, which provides an indication of market size and geographical spread,
- Total value, which facilitates a comparison of capital raised across countries,
- Average value, which complements the approximation of the value of the market and allows direct comparison of individual project values.

Third, to break down the public social policy areas in which SIBs are active the following are used:

- Total volume by public social policy category,
- Total value by public social policy category,
- Average value by public social policy category,
- Year of implementation and timeline by public social policy category.

All data was collated during phase one of this research. Full details of the methodology for the population of interest, and quantitative data sources of this scoping exercise, can be found in chapter seven, section two.

i. Chronological development

The launching of SIBs has come in two main waves (see *figure 2.1*). The first wave was between 2010 when the United Kingdom started the market. The second wave occurred between 2012 and 2016 when the majority of other countries joined the market.

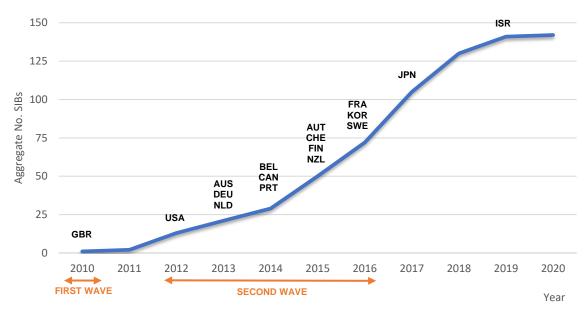


Figure 2.1 - Timeline of first social impact bond implementation, all countries

Source: author calculations from (GO Lab, 2020)

In order of implementation, the countries with SIBs are the United Kingdom, the United States, the Netherlands, Australia, Germany, Belgium, Canada, Portugal, New Zealand, Switzerland, Austria, Finland, Sweden, Korea, France, Japan, and Israel. ¹² These SIBs cover a range of policy areas from criminal justice to welfare, to workforce development.

Of these countries Australia, Belgium, Canada, Finland, France, Israel, Japan, Korea, New Zealand, Portugal, Sweden, Switzerland, the United Kingdom, and the United States have also stated on the self-reporting database held by Social Finance that they have additional SIBs under development (Social Finance, 2020). Development

 $^{^{12}}$ Implementation can mean either a SIB being contracted or launched, depending on the data available. Where possible the contract date is used which is the earliest of the two.

appears to be happening increasingly quickly. France has launched its five SIBs in quick succession and already has a further eight approved by ministers (Le Pendeven, 2019). Japan is said to have more than 20 SIBs currently in development (FT, 2019). Finland is also reported in the press to have a large number at an early stage of development (Sitra, 2020). Several other countries including Denmark, Estonia, Ireland, Italy, Norway, and Spain reportedly have their first SIBs in development (Social Finance, 2020). Although it should be noted that once finalised these contracts a) might not fit the definition of a SIB used in this research, or b) may never reach the implementation stage.

As *figure 2.1* indicates, SIBs have been in a steady and upwards implementation trajectory since around 2012, although the curve has flattened in recent years. As seen in *table 2a* in the United Kingdom and the United States the rate of SIB implementation has been stable since they were first introduced in 2010 and 2012, respectively. With both countries implementing at least one SIB a year, every year to date. Likewise, the Netherlands have only a brief pause in implementation, between their first SIB in 2013 and second SIB in 2015. However, no other countries have been as consistent. ¹³

Investigating the data from *table 2a* graphically at an aggregate level and by year rather than country (see *figure 2.2*) shows that the numbers of SIBs have been steadily increasing on a year-on-basis but not at a steady rate. Post-2017 there has been a downward trajectory, with 2019 reaching a low only slightly greater than 2014 levels and to March 2020 with just a single SIB. This decline could be due to delays in data reporting however there could be other underlying issues affecting the implementation of SIBs which merit further investigation. ¹⁴

¹³ Whilst Israel launched its first SIB under this thesis' definition the most recently in 2019, they tested the concept using non-profit sector or quasi-governmental funds as outcomes payer first, as early as 2015.

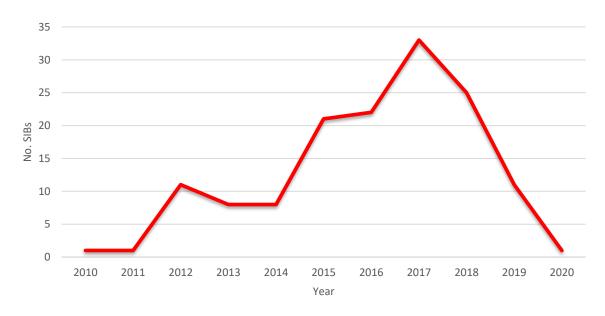
¹⁴ Due to the nature of SIBs as private contracts there can be significant delays between SIBs being contracted and the information being made public.

Table 2a - Social impact bonds by country and year of implementation

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
GBR	1	1	10	2	2	13	3	14	14	5	0	65
USA	0	0	1	2	3	1	8	4	3	0	0	22
NLD	0	0	0	1	0	3	3	1	1	1	0	10
AUS	0	0	0	2	0	0	1	6	0	1	0	10
DEU	0	0	0	1	0	0	0	2	0	0	0	3
BEL	0	0	0	0	1	0	0	0	1	0	1	2
CAN	0	0	0	0	1	0	3	0	0	0	0	4
PRT	0	0	0	0	1	0	0	3	5	0	0	9
NZL	0	0	0	0	0	1	0	1	0	0	0	2
CHE	0	0	0	0	0	1	0	0	0	0	0	1
AUT	0	0	0	0	0	1	0	0	0	0	0	1
FIN	0	0	0	0	0	1	0	0	0	0	0	1
SWE	0	0	0	0	0	0	1	0	0	0	0	1
KOR	0	0	0	0	0	0	1	0	0	0	0	1
FRA	0	0	0	0	0	0	2	0	0	3	0	5
JPN	0	0	0	0	0	0	0	2	1	0	0	3
ISR	0	0	0	0	0	0	0	0	0	1	0	1
Total	1	1	11	8	8	21	22	33	25	11	1	142

Source: author calculations from (GO Lab, 2020)

Figure 2.2 - Timeline of social impact bond implementation, per year, all countries



Source: author calculations from (GO Lab, 2020)

Overall, the chronological development of SIB markets shows that there is great diversity between countries and over time, as markets have developed at differing rates during the past decade. Several of the countries, such as the United Kingdom, United States, and the Netherlands, which were early to adopt SIBs and have also been the most consistent in their implementation, also have market-based financial systems. However, the data does not fully explain the decline in the number of SIBs being implemented since 2017. Whilst this could be attributable to delays in data being made public there could also be alternative explanations regarding their desirability by investors, which requires further analysis to ascertain.

ii. Size and scope of the market

The literature typically refers to the number of SIBs that a country has implemented (Chiapello and Knoll, 2020; Fox and Morris, 2019; Hajer, 2020, 2018; Mitropoulos and Bryan, 2015; Warner, 2013). *Figure 2.3* gives an indication of the market share of each country by volume across all countries. That is, how many SIBs have been implemented in each country between March 2010 and March 2020. There were 142 SIBs implemented across 17 advanced countries during this period. As *figure 2.3* indicates SIB markets have not grown equally across these countries, with markets ranging from 65 SIBs implemented to just a single SIB. Note that several advanced countries, such as Italy and Spain, have no SIBs market at all.

Figure 2.3 indicates that the volume of SIBs in the United Kingdom is significantly higher than in any of the other countries, with 65 SIBs implemented, representing 46 percent of the entire SIB market. The next largest is the United States with 22 SIBs, or 15 percent of the market. Australia and the Netherlands each have 10 SIBs and a seven percent market share, closely followed by Portugal with 9 SIBs and a six percent market share. Of the remaining countries, France has implemented five SIBs and Canada four. Belgium, Germany, and Japan have three. New Zealand has two. Whilst Austria, Finland Israel, Korea, Sweden, and Switzerland have implemented just a single SIB each.

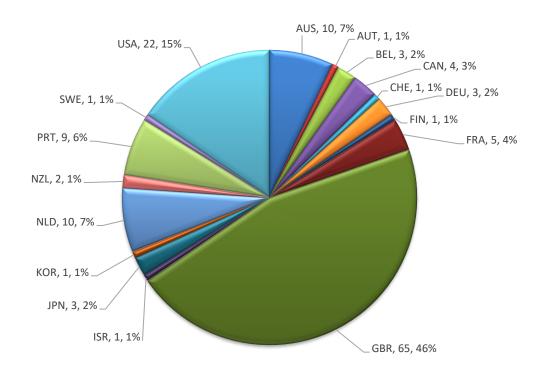


Figure 2.3 - Market share, volume, all countries

Source: author calculations from (GO Lab, 2020)

However, as the chronological development evidenced (see *table 2a*), although SIBs were designed and launched by 2010 the rates at which different countries adopted them are uneven, which could account for some of the different market sizes by volume. Market formation could be delayed due to many reasons. For example, new legislation may be required to ensure governments are both logistically and financially able to repay the principle and any profits to investors should the contracted social outcomes be realised (Eames et al., 2014; Liebman and Sellman, 2013).

Therefore, I propose an alternative indicator to compare inter-country levels of SIBs, using the average number of SIBs that the market is increasing by every month. This rate has been calculated by dividing the total number of SIBs implemented in a country by the number of months its SIB market has been in operation. ¹⁵. *Figure 2.4* shows the average monthly increase for each country, to provide a more accurate

¹⁵ That is, the number of months from when the first SIB was implemented to March 2020.

comparison of their rate of development.

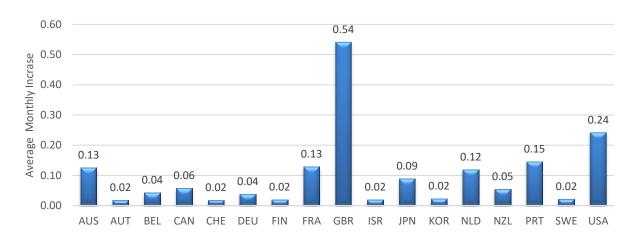


Figure 2.4 - Average monthly increase, per country, all countries

Source: author calculations from (GO Lab, 2020)

The United Kingdom has the highest monthly increase, increasing at a rate of 0.54 SIBs per month, followed by the United States increasing at a rate of 0.24 SIBs per month. France is interesting, as it is much smaller than many other countries in terms of total number of SIBs implemented (see *figure 2.3*), but its average monthly increase is joint fourth fastest at 0.13 SIBs per month, the same rate as Australia which has the joint third largest market by volume with 10 SIBs.

Moving onto the amount of capital raised in these markets, *Figure 2.5* provides the market share by the total value of capital raised across all countries. ¹⁶ As was previously mentioned, the estimated total value of SIBs across the entire market is GBP 268,336,085.

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¹⁶ The amount of capital raised is unavailable for some projects. In these instances, the median value has been used to replace missing data in order to be able to estimate the size of the market. The countries affected are Australia two SIBs, the Netherlands one SIB, the United States one SIB, and the United Kingdom ten SIBs.

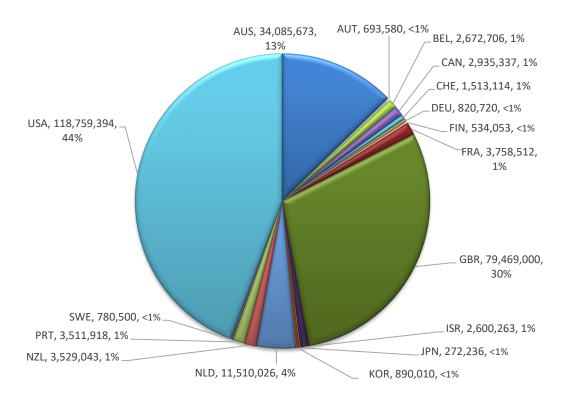


Figure 2.5 - Market share, total value (GBP), all countries

Source: author calculations from (GO Lab, 2020)

Examining SIB markets by total value shows that although the United Kingdom has the largest SIB market by the total number of SIBs implemented, and the United States has the second largest, the roles are reversed by total value of capital raised. The United States has a total market value of GBP 118.8 million, compared to the United Kingdom's GBP 79.5 million. Similarly, the Netherlands and Australia have implemented ten SIBs each, but the difference in total market value is marked: In Australia it is GBP 34.1 million compared to GBP 11.5 million in the Netherlands.

Furthermore, whilst Portugal has implemented only one less SIB than these two countries, its total market value is significantly lower, at GBP 3.5 million. France, which has roughly half the number of SIBs, with five implemented to date, has a similar market value to Portugal at GBP 3.8 million. As the capital raised is the total project cost of the intervention, it is therefore linked to both the cost of a particular intervention per participant and the number of participants in the programme.

Figure 2.6 provides an indication of the mean value of a SIB across all countries.

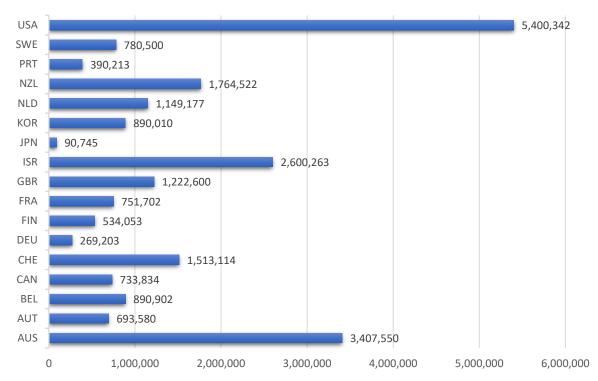


Figure 2.6 - Mean value (GBP), all countries

Source: author calculations from (GO Lab, 2020)

On average the United States has the largest value of capital raised per SIB, at GBP 5.4 million. Australia has the second largest, at GBP 3.4 million, and Israel at GBP 2.6 million. Whilst at the other end of the scale, Japan's average is significantly lower at GBP 0.09 million, whilst Germany and Portugal also trail the other countries at approximately GBP 0.27 million and GBP 0.39 million respectively. The United Kingdom, which is the largest market, has an average capital raised of GBP 0.8 million.

Overall, the data regarding the size and scope of the overall SIB market raises many questions. It shows there is great diversity between countries in terms of the number SIBs implemented, the average value of a SIB, the amount of total capital raised, and the speed at which the market is developing. In terms of overall volume and speed, similar to the chronological development, there are again a few key countries, such as the United Kingdom and the United States that are more advanced when compared to the other SIB markets. However, France presents itself as an interesting case of a market that appears to be developing rapidly. When examining the value of SIBs, there is greater diversity in the levels of capital raised, which suggests there could be other factors, such as the type of welfare system, that has a controlling effect on the value of a SIB.

iii. Public social policy areas where social impact bonds are active

There is a common consensus among the main databases (GO Lab, 2020; Social Finance, 2020) regarding the categorisation of public social policy areas supported by SIBs. The categories used are child & family welfare, criminal justice, education & early years, health, housing & homelessness, and workforce development. These headings have also been used to categorise the data in this research and thus present the order of the data in this section.

As *figure 2.7* shows, by aggregate the majority of SIBs are for workforce development, with the 40 SIBs accounting for 28 percent of the market. Next largest by volume are housing & homelessness with 26 SIBs and child & family welfare at 25 SIBs, each representing 18 percent of the market. Health ranks next with 17 SIBs and 12 percent of the market. Finally, criminal justice has 15 SIBs and an 11 percent share of the market, whilst education & early years has 14, representing 10 percent of the market.

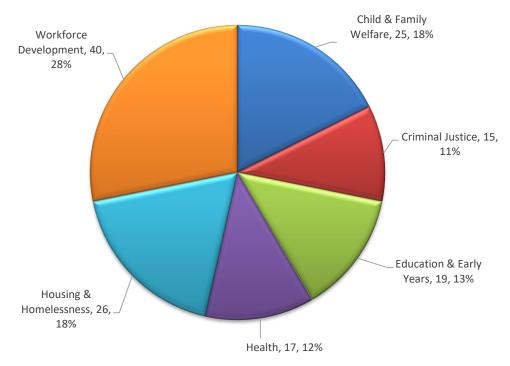


Figure 2.7 - Total volume, all categories, all countries

Source: author calculations from (GO Lab, 2020)

Whilst criminal justice represents the smallest share of the market with regards to volume at just 15 SIBs or an 11 percent market share, it holds the largest share of the

market in terms of total value, being worth 28 percent (see *figure 2.8*). The average value for a criminal justice SIB is GBP 5.1 million, more than double that of the next largest policy area (see *figure 2.9*). Child & family welfare represents the next largest policy area by both total and average value.

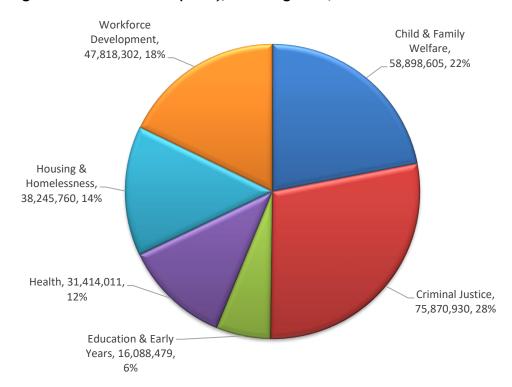


Figure 2.8 - Total value (GBP), all categories, all countries

Source: author calculations from (GO Lab, 2020)

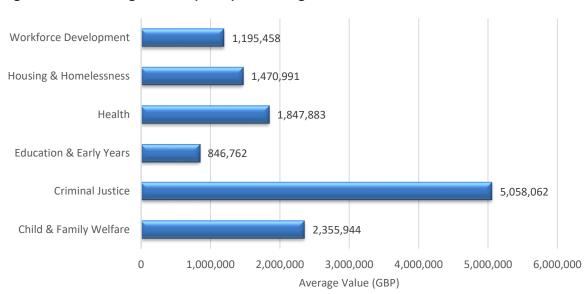


Figure 2.9 - Average value (GBP), all categories, all countries

Source: author calculations from (GO Lab, 2020)

Whilst 28 percent of all SIBs are for workforce development, they account for 18 percent of the total market value, and second lowest average value per project of GBP 1.2 million. So just as capital raised per country varies, so does the policy areas.

To sum up, workforce development is the most popular policy area across all countries, and criminal justice has raised the highest amount of capital as it is the most resource intensive policy area and/or has the highest number of participants. This means the choice of policy area selected by a country could not only affect the total value of its SIB market but also affect the level of investor returns which are contingent upon the value of the capital raised.

Given the earlier analysis shows that market openings have been staggered, *table 2b* details each of the policy areas by year of implementation. The data does not show much consistency across the policy areas selected. In the early stages of the market, in 2010 and 2011, Criminal Justice was the most popular years, including 2012, 2015, 2016, and later in 2019. Housing & homelessness became popular slightly later in 2015 and 2017, as did education & early years in 2016 and 2018.

Table 2b - Social impact bonds by category and year of implementation

	Criminal Justice	Housing & Homelessness	Workforce Development	Child & Family Welfare	Education & Early Years	Health	Total
2010	1	0	0	0	0	0	1
2011	0	1	0	0	0	0	1
2012	1	1	9	0	0	0	11
2013	1	0	2	4	1	0	8
2014	1	1	1	4	1	0	8
2015	1	8	10	0	0	2	21
2016	4	2	6	1	5	4	22
2017	5	11	2	5	4	6	33
2018	1	1	4	8	6	5	25
2019	0	0	6	3	2	0	11
2020	0	1	0	0	0	0	1
Total	15	25	40	25	19	17	142

Source: author calculations from (GO Lab, 2020)

That data from *Table 2b* can be plotted into a timeline to show each policy area by its first implementation (see *Figure 2.10*).

150 **HEALTH** 125 **CHILD & FAMILY** WELFARE SIBs 100 **EDUCATION &** Aggregate No. **EARLY YEARS** 75 WORKFORCE DEVELOPMENT 50 **HOUSING &** HOMELESS 25 CRIMINAL JUSTICE 0 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 **FIRST WAVE SECOND WAVE** Year

Figure 2.10 - Timeline of first social impact bond implementation, per policy area, all countries

Source: author calculations from (GO Lab, 2020)

As the above evidence suggests, SIBs are providing social services of the type normally delivered by the public sector. As well as being the first to implement a SIB, the United Kingdom has also led the way in terms of policy areas. By 2013, early on in the second wave of implementation (*figure 2.10*), the majority of policy areas had been selected and implemented. The United Kingdom's 2010 criminal justice SIB was followed by housing & homelessness in 2011, workforce development in 2012, and child & family welfare in 2013, before the first Health SIB much later in 2015. Whilst the United States championed the first education & early years SIB, also in 2013. This is evidence of the early adopters, particularly the United Kingdom, selecting the areas of public social policy that the rest of the market followed.

Again, the overall data on policy areas where SIBs are active shows great diversity between countries. It suggests that the type of welfare system in a country could affect the amount of capital raised and the number of SIBs implemented in a particular country. Further analysis would be required to explain this fully.

2.4 Concluding remarks

Though the development of SIBs is a relatively recent phenomenon, having been in existence only since 2010, they have generated significant academic debate. The academic literature has also highlighted how finance has grown enormously in terms of activities, markets, institutions and profits within the past four decades bringing about systemic and structural transformation of capitalism in mature industrial economies and how SIBs may be interpreted as one of the constituent element of such structural transformation (Lapavitsas, 2013, 2011). This chapter has situated the phenomena of SIBs alongside similar developments in PPP/PFI, drawn parallels with both mechanisms, highlighted their relative demerits, alongside other impacting investing areas such as Green Bonds and Charity Bonds. At the same time, the chapter also demonstrates empirically that despite such criticisms, SIBs have been widely adopted, with 142 examples in 17 countries worth approximately GBP 268 million.

The Chapter also highlights the exceptional analytical insight SIBs offer into the role of market-driven financial techniques in the realm of public social policy. The academic literature in this field of study has barely begun to analyse this phenomenon. As was already mentioned, the core contention of this research is that SIBs represent a particularly problematic aspect of financialisation, whereby the state supports financial markets, in order for SIB investments to be developed in the public social policy sphere, thereby partially transferring the financial responsibility of welfare provision to private investors. In this light, the descriptive data already points toward the most heavily financialised economies, typically with market-based financial systems, leading the way in SIBs.

<u>Chapter Three: the financial ecosystem of a social impact bond and its operational model</u>

3.1 Introduction

This chapter seeks to explain the key economic agents in a SIB, their roles, and how a SIB functions. To do this, section two presents a financial 'ecosystem' I propose which examines the key economic agents involved in SIBs, their motivations and appetite for risk. Whilst section three examines the structure of a SIB and explains the working relationships between the principal and the key agents and their roles in delivering the SIB. It proposes an alternative model of operations from those in the literature. Before section four presents the concluding remarks.

3.2 The financial ecosystem of a social impact bond

This section seeks to closely examine the principal and the key financial agents involved in a SIB, to establish their motivations and appetite for risk, as well as the capital flows through the SIB mechanism.

The principal-agent relationship in a SIB involves the principal and multiple agents who are contracted and compensated to participate in the process of designing, financing and delivering the SIB (Burand, 2012; Fraser et al., 2018a; Gustafsson-Wright et al., 2015; OECD, 2016a). This is shown in *figure 3.1*, which sums up the fundamental financial 'ecosystem' for a SIB which I propose. Due to the multi-agent nature of a SIB, there are no direct relationships, as the ecosystem indicates.

The beneficiaries, or participants of the SIB, are not included within the ecosystem because they do not have a stake in the design of the model. The role of several agents is not always clear as they can perform several different functions across several categories. Outcome payers, for example, can also act as evaluators by validating administrative data, essentially confirming whether payments have been triggered to investors. Both service providers and intermediaries can also act as investors. Some investors can act as senior investors in one SIB but subordinate investors in another (Gustafsson-Wright et al., 2015).

As *figure 3.1* indicates the flows of money capital into a SIB are related to the outcomes payer, market builders, and investors. The service providers, specialists, and intermediaries receive fees. The investors have the possibility of earning a profit that is paid for by the government out of general taxation.

Investor **Outcomes Payer** Profit Other Costs Bank Government, Fund Manager. Quasi-Principal Principal Pension Fund governmental, Insurance Co. Foundation Business. Individual, Service Provider Foundation, Investment Service Social Enterprise. Investment Social Enterprise, Charity, Target: Charity For-profit business Fees SIB Guarantees Intermediary Intermediation Social Enterprise, Charity, Fees For-profit business **Market Builder** Grants Quasi-**Specialists** Technical Assistance governmental, Consultant, Philanthropists, Solicitor, Fees Foundation, Accountant, Charity Evaluator SIB Contract Costs Market Building Gifts Returns & Fees

Figure 3.1 - Social impact bond financial ecosystem

Source: Authors' own

i. The Outcomes Payer

In the definition of a SIB used in this research the main outcomes payer is always the government. This makes the government the principal in the principal-agent relationship. Although funding can come from multiple levels of government, it is usually directed through one body, thus there is usually only one outcomes payer per SIB. However, it is also possible in some circumstances for an external party such as a quasi-governmental organisation or a foundation to act as joint outcomes payer.

SIB commissioners are normally central or local government bodies responsible for

ensuring relevant services are made available to target populations. In countries with a more centralised government system, such as the United Kingdom, it is often government departments responsible for the specific thematic issue being tackled that issue SIBs. In countries with federal state structures, such as the USA and Australia, SIBs have been issued at the state or provincial level (Dear et al., 2016).

As also the outcomes payer, the government seeks to maximise the positive externalities of a SIB. To do this a government hires a service delivery agent to deliver a service outcome and at the same time transfer the financial risk of its delivery onto the investors.

Whilst the SIB will give incentives for higher quality-enhancing effort levels, the government will need to compensate the agent for that effort along with a risk premium arising from the uncertainty involved in the realised payment. Due to the bundled nature of the contract, an ensuing loss of discretion and flexibility may pose as additional risks to government (Hajer, 2018).

This section details the multiple agents who have been contracted and compensated to participate in the exchange relationship with the outcomes payer as the principal.

ii. The Service Providers

The service provider acts as a service delivery agent, delivering the prescribed social service with the aim of achieving the pre-agreed social outcomes. This work is undertaken for a fee with no risk of non-payment to the service provider. In the case of a standard payments-by-results contract the service delivery agent subsumes the financial risk.

There can be a single service provider or a large number, depending on the SIB. Whilst in the original design, service providers were non-profit firms, in practice service providers can include charities, cooperatives, and social enterprises or for-profit

businesses (Gustafsson-Wright et al., 2015; Hajer, 2018). ¹⁷ Based on the data available for the first 100 SIBs, Hajer (2018) found service providers were primarily social enterprises or social economy service providers, and that at least 20 of the 36 for-profit service providers identified had a clearly identifiable social mission (2018, p. 418). The differences between non-profit and for-profit service providers is discussed in more detail in chapter five.

As with many other agents, service providers can assume several other roles. For example, whilst in general SIBs move most of the responsibility of raising upfront capital away from the service provider, which would happen in a conventional payments-by-results contract (Dear et al., 2016), there is evidence of service providers occasionally being responsible for raising capital in SIBs (Gustafsson-Wright et al., 2015).

Service providers receive a fee in return for providing the service, but they can also receive success fees for achieving higher than expected social outcomes (Gustafsson-Wright et al., 2015; OECD, 2016a). Some SIBs treat the service provider and external intermediary acting as investor and being compensated partially based on results. Pauly and Swanson (2017) identified 14 SIBs launched prior to January 2018 where 18 organisations had implemented this, and Hajer (2018) found an additional 11 up to January 2019.

iii. The Investors

Many scholars argue that SIBs tend to introduce a financial profit motive into social service delivery, but SIB investors are varied and likely to have heterogenous and potentially conflicting motivations, across a continuum of risk-return expectations, that range from finance-first at one end, to impact-first at the other (Goodall, 2014; Mulgan et al., 2011; Nicholls, 2010; OECD, 2016a). Across impact investing more generally, a range of investors including philanthropists, charitable foundations and institutional

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¹⁷ Under the definition of a SIB in this thesis a public sector organisation delivering the service means it has not been contracted out and is therefore excluded.

investors have been amongst the early adopters of SIBs (Ormiston et al., 2015).

Theoretically, SIBs should attract mainly impact investors who will usually have a strong interest in promoting certain kinds of public social policy. They will be satisfied with a lower financial return, but most commonly a return slightly beyond the bond market (Maier and Meyer, 2017). Traditional financial investors on the other hand would seek a financial return similar to market-based risk-return-ratios.

The category of traditional investors tend to comprise of banks, pension funds, sovereign wealth funds, and development finance institutions in search of market-competitive financial returns from investments with associated positive environmental and social impact (Freireich and Fulton, 2009). In contrast, many family run foundations and trusts puts less emphasis on financial return and positions themselves as 'impact-first' investors, seeking to maximise social or environmental returns (Freireich and Fulton, 2009; Harji and Jackson, 2012).

The traditional financial risk-return framework has been extended to account for the variable risk profile of investors. A blended risk-return framework encapsulates impact returns and impact risk in addition to financial considerations (Bridges Ventures, 2014; Saltuk, 2012). A positive relationship is generally present between financial risk, which plays a key role in allocation of capital and investment decision-making, and financial return. According to Kettell (2001) this is because higher expected returns are required to compensate investors for accepting higher risk. Thus impact investors, even those investors with a lower threshold for an acceptable rate of return are more generally said to place high importance on financial return (ClearlySo, 2011; GIIN, 2018; Ormiston et al., 2015). At the same time current literature suggests most impact investors also consider protecting downside risk or securing some minimal return as opposed to undertaking risky investments that carry potentially higher returns (Berlin, 2016; ClearlySo, 2011; Godeke and Resner, 2012; Ormiston et al., 2015).

It is worthwhile to mention here that based on the preceding discussion, concerns remains that it may not be feasible to attract a wide base of capital to SIBs because many investors still seek at least market rate returns, a possibility that is unlikely to occur for many SIBs (Gruyter et al., 2020). It is, therefore, to be expected that SIBs

are characterised by the use of risk mitigation strategies, deemed necessary to secure the participation of certain types of investors in the face of the increasing risk associated with the transfer of responsibility and obligations (Del Giudice and Migliavacca, 2019; Gruyter et al., 2020; Hajer, 2018; Warner, 2013).

The risk can be hedged through the use of a guarantees, subordinate investment or capital protection, thus restricting their downside to only a portion of the overall SIB investment (Dagher, 2013; Hajer, 2018; Ormiston et al., 2015; Warner, 2013). The PPP literature suggests that the use of guarantees of any kind increases the probability of both adverse selection (Saussier, 2013) and moral hazard (Engelen et al., 2009; Hellowell et al., 2015). This in turn can lower the incentives of capital investors to reach the target social outcome (Vecchi and Casalini, 2019).

Both Gustafsson-Wright et al. (2015) and Rizzello and Carè (2016) have undertaken detailed reviews of the early SIB investors. Together these comprise a broad mapping of investors relating to SIBs and help inform the way SIB investors are categorised within this research. Examining investors specifically in SIBs during the first five years since their introduction, Rizzello and Carè (2016) produced a typology of SIB investors which is the first of its kind. Their version comprises six categories including: banks; impact funds/social venture capital funds; trusts and foundations; corporates and social enterprises; private/retail investors; and local entities running social investment financial vehicles. In a further overview of the first five years of SIBs, Gustafsson-Wright et al. (2015) found individual, trust, foundation, (impact) investment firm, commercial bank, credit union, community development financial institution, public sector entity, non-profit entity (including service providers themselves), and government agency (other than outcome funder).

Furthermore, Arena et al. (2016) distinguish between philanthropic investors driven by social motivations and traditional investors who are primarily motivated by the investment's expected return. An alternative way of differentiating among investors, more in line with mainstream finance, is in terms of institutional or retail investors. Institutional investors professionally manage risks for a return and as such have access to significant amounts of capital for investment (OECD, 2016a). They include banks, insurance companies, mutual funds, and pension funds. Retail investors

encompass non-lending institutions such as corporations and individuals, as well as non-profit institutions such as foundations, charities, social enterprises, cooperatives, and credit unions.

This research proposes that this diversity of investors is captured in a different, more improved way. As the profits from a SIB are paid from tax revenue, it is important to consider the nature of the entity receiving the monies.

As chapter two outlined, there is a varied nature of entities raising capital, both within a country and between countries. Therefore, the motivations are of paramount importance in understanding the political economy of SIBs. As *figure 3.2* indicates the investors could be divided according to their attitude to profits, that is, not by whether they can make profits but by how those profits can be distributed. ¹⁸ For example, a charity or social enterprise has some form of non-distribution clause implying that profits, or rather 'surplus', cannot be passed to individuals or corporations. Profits could only be reinvested into their own activities or, if they close down, transferred to a similar organisation. A financial institution by its very nature shares its profits amongst the shareholders.

As *figure 3.2* indicates, investors fall into three broad categories: financial institutions, private investors, and non-profit institutions. Phase one of this research indicates that in advanced countries 30 percent of all investors are financial institutions, 7 percent are private investors, and 63 percent are non-profit institutions. ¹⁹ The data also indicates that 33 percent of individual investments were made by financial institutions, 7 percent by private investors, and 59 percent by non-profit institutions.

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¹⁸ A common misconception is that charitable organisations are not profit making. As is discussed herein, they can be profit making but not profit distributing.

¹⁹ Due to reporting irregularities, individuals are not included within these figures, the category of private investors includes businesses only. However, the number of individuals investing are believed to be limited, thus having minimal impact on these figures.

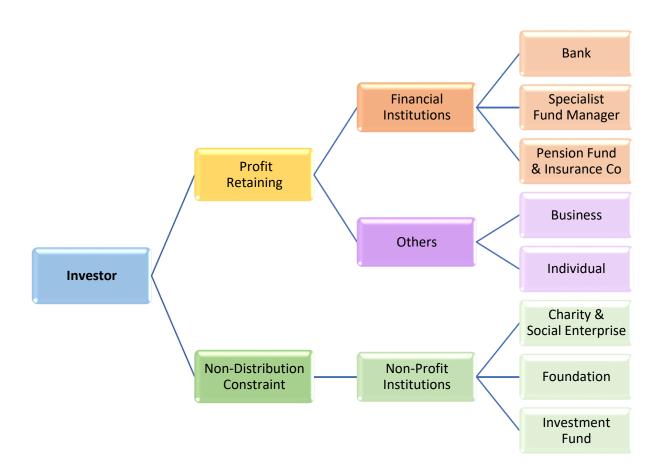


Figure 3.2 - Social impact bond investor typology

Source: Authors' own

The expectations of investors regarding risk, return, and impact vary according to their intentions regarding profits. These providers are discussed below. ²⁰

a) Financial Institutions

At its inception SIB investors were primarily philanthropic organisations but as the markets grew internationally more SIBs were launched, the financial modelling became more sophisticated, and institutional investors began investing in SIBs (Bryan

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²⁰ In the SIB ecosystem the public sector appears as the outcomes payer, but perhaps unusually the public sector can also be an investor on a social investment financial asset. As this 'investment' also derives from general taxation and any profits would be paid to the government by the government, thus these are not considered as 'investors' for the purposes of this research. Essentially it amounts to moving money from one government department to another. Examples of these include the Social Innovation Fund in the United States, which is a government grant; the Sitra Innovation Fund in Finland, which is a public foundation operating under the supervision of the Finnish parliament; and QIC in Australia, which is an investment fund owned by the Queensland Government.

and Rafferty, 2014; Gustafsson-Wright et al., 2015; Hajer, 2018). Institutional investors buy and hold securities to generate risk-adjusted financial returns, whilst financial markets allow individuals to diversify portfolios, hedge idiosyncratic risks and adjust the riskiness of portfolios to suit their risk preferences. It has long been recognised that one of the major functions of financial markets is to provide opportunities for risk sharing (Arrow, 1964).

In the period since the 2007-09 financial crisis there has been an influx of new investors intentionally pursuing social impact alongside financial returns in new markets (Bugg-Levine and Emerson, 2011; O'Donohoe et al., 2010). This expanding sector has resulted in the implementation of new financial instruments designed to target investors interested in socially focussed investments that can yield financial returns in ways that are uncorrelated with other determinants of asset prices such as interest rates, oil prices or commodity cycles (Leventhal, 2012; Trelstad, 2016).

In this context, and as was discussed in earlier chapters, SIBs have been presented as an opportunity to diversify the portfolio of investors (Daggers and Nicholls, 2016; Leventhal, 2012; Loder, 2011; Mulgan et al., 2011; Ragin and Palandjian, 2013). Several academics link a well-developed financial sector to the emergence and development of SIB markets (Hajer, 2020, 2018; Williams, 2018). There has been some academic work focussing on asset pricing and the application of classical bond pricing methods to SIBs, where SIBs are considered as a particular asset for funding specific welfare micro-policies focused on small to medium scale projects that are likely to be easily valued (Schinckus, 2017). There has also been an application of the Wang transformation based pricing method, to the Peterborough SIB (Schinckus, 2018); work has also been undertaken on stakeholder and shareholder value relating to SIBs (Kim, 2014). ²¹

Potential providers of capital are encouraged to consider SIBs as a commercial opportunity which can also encourage private sector involvement with the public sector. It allows investors to obtain legitimacy from socially responsible business

²¹ The Wang transformation technique is a statistically coherent method adapted for projecting future data related to a specific existing situation for which a project will be implemented. See Wang (2000).

practices, including potential to improve the public image of corporations through helping institutional investors demonstrate corporate social responsibility (Barajas et al., 2014; Bolton and Savell, 2010; Goldman Sachs, 2014; Hajer, 2018; Social Finance, 2009). Following an analysis of these investors, Rizzello and Carè (2016) claim that SIBs can be considered a milestone in social impact investing by providing important contact points for sustainable finance, social entrepreneurship, and public policy. Trotta et al., (2019) also claim that SIBs are one of the most promising pillars of impact investing. The financial sector reform narrative further articulates a strong desire to see the social impact investment market 'grow' (Clark et al., 2014; Cohen, 2011; HM Government, 2013, 2012, 2011a; Liebman, 2011).

There is a distinction between those who see SIBs as a niche for social investors who will take higher risks and smaller returns, and those who desire guaranteed returns or higher yields in the evolving social investment field (Fraser et al., 2018a). Traditional Portfolio theory outlined by Markowitz as far back as 1952 observes that when making financial investment decisions an investor should consider not only the expected rate of return but also the riskiness of an investment. An analysis of the SIBs issued worldwide until December 2017, by Del Giudice and Migliavacca (2019) finds that for institutional investors the financial conditions respect the risk–return relationship, therefore, rates of return are expected to vary depending the degree of risk involved in the project. An analysis of a selection of health SIBs by Gruyter et al (2020) suggested that their financial returns are unlikely to be sufficient for institutional impact investors given the level of financial risk involved.

Del Giudice and Migliavacca (2019) argue the main motivation of SIB investment by institutional investors is financial because investments were made in anticipation of profit, and they were not investments in social projects through grants or donations. ²² In their assessment of early SIB investors Rizzello and Carè (2016) point out that even 'impact-first' investors still seek a financial return, but are willing to accept a lower rate if it is in conjunction with a specific level of expected social return. Research of the motivations of institutional investors in impact investing more generally by Ormiston et

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²² Grants and donations are considered a market-making activity within this thesis, not an investment.

al., (2015) found that pension funds, insurance companies, and diversified financial institutions, for example, express apprehension, which they suggest could be due to the fact they manage funds on behalf of others and as such are restricted by their fiduciary duties. Institutional investors face different regulatory and normative pressures which affect their risk-taking profile (Johnson et al., 2010).

It is said that SIB contracts do not provide institutional investors with the necessary risk-management tools to select projects and to monitor the service providers' activities, which discouraged them to invest in SIBs (Del Giudice and Migliavacca, 2019). Taking the principal-agent problems into consideration, lower informational asymmetry and agency problems may encourage greater participation of institutional investors in SIBs (Del Giudice and Migliavacca, 2019). The presence of a local or a federal outcomes payer can increase institutional investors' participation as the former would have greater incentives correctly to monitor the project than a central outcomes payer. Moreover, due to agency motivations and the risk of free riding in terms of both project valuation and monitoring activities institutional investors prefer projects with fewer investors.

The three categories of financial institutions which invest in SIBs, and are discussed in more detail next, are banks, specialist fund managers, and pension funds and insurance companies (see *figure 3.2*).

Banks, in increasing numbers, have established investment impacting entities over the past decade, pursuant to a sustainable finance strategy (Del Giudice and Migliavacca, 2019; WEF, 2013). In terms of SIB investment this category includes commercial and investment banks. ²³ The banks that invest in SIBs exist within a broader framework in which bank lend to organisations that seek to achieve social and environmental objectives. These include a mixture of investment, commercial banks, and social

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²³ Although Rizzello and Carè (2016) included credit unions within the 'Bank' category of their typology I avoided this step in this thesis due to the non-distribution constraint of credit unions. It would be more appropriate to treat them alongside Social Enterprises and Charities under non-profit institutions. There is only a single instance of a credit union acting as investor occurring in the first SIB in Canada, the Sweet Dreams SIB in Saskatoon.

banks. ²⁴ Early research evidences a small number of large banks engaging with SIBs (Gustafsson-Wright et al., 2015; Rizzello and Carè, 2016). These banks provide access to the established networks of investment clients for distribution of SIBs though social impact funds, in addition to making their own principal investments (Belinsky, 2012). Banks do not only act as funders but have also undertaken other roles such as intermediary and the provision of technical support in relation to the financial structuring, whereby they also earn fees.

Specialist fund managers control investment funds, including impact investment private equity funds and social venture capital funds, have an impact-first investment strategy, although they are essentially profit-making private agents that focus on portfolio management for impact investors seeking both financial returns and social impact. These fund managers are not associated with large banks, but are specialised for-profit financial institutions, with the aim of obtaining competitive risk-adjusted rates of return (Loxley and Hajer, 2019; Rizzello and Carè, 2016; WEF, 2013). These institutions earn fees by investing funds on behalf of their clients.

Pension funds and insurance companies are another type of institutional investor, and one that operates in financial markets as well as in impact investing. They seek market rate returns and they are not very active in investments that may deliver below-market risk adjusted financial returns (WEF, 2013). Despite this, there has been some investment in SIBs by pension funds and insurance companies. There has been considerable interest in PPP financing by pension funds and private insurance, which are said to obtain large and stable returns (Loxley, 2012). ²⁵

b) Non-profit Institutions

The non-profit institutions that raise capital for SIBs are foundations, charities and social enterprises, and non-profit investment funds. The non-distribution constraint of

²⁴ Social banks differ from mainstream banks in that their banking activities focus on the creation of social or environmental benefit. See Weber (2011) for a comprehensive discussion.

²⁵ Bond financing for PPP was highly developed in the United Kingdom for very large projects prior to the financial crisis, relied heavily on "monoline" insurance companies "wrapping" the bonds of project companies to enhance their credit rating. In effect, the project company issuing bonds paid a fee to the insurance companies to guarantee their bonds (Loxley, 2012).

this organisational form means that the distribution of residual earnings to individuals is prohibited by law (Hansmann, 1987). However, these organisations are still potentially receiving profits from general taxation.

Foundations are increasingly using impact investing to address social issues, whilst potentially creating a financial return (Hay and Muller, 2014; Mitchell and Sparke, 2016). Foundations are fairly independent from both market considerations and political expectations, predominantly because they have their own assets (Anheier and Leat, 2006; Hammack and Anheier, 2013). Some foundations are engaged in investment for capital preservation purposes, and actually engage as institutional investors in the capital markets investments in order to retain as much capital as possible. However, their non-distribution constraint means that any profits are recycled through their activities (Jeffery and Jenkins, 2013; Jung et al., 2018).

From the literature, it appears that SIBs are aimed at foundations undertaking impact investment rather than foundations seeking mainstream investment returns (Rizzello and Carè, 2016). Those with an impact-first investment strategy are motivated by program-related investments which enable the return of principal that can be recycled into another grant or investment (Hughes and Scherer, 2014; Mulgan et al., 2011). Acting as 'risk absorbers' (Anheier, 2018) foundations can be open to investment in high risk ventures that are not established enough to enter the mainstream of impact investing, such as SIBs. The first SIB at Peterborough prison comprised entirely foundations as investors.

However, the involvement of foundations is not viewed as permanent by all, with some arguments in favour of philanthropy being used to seed fund the emerging market before the transition to mainstream impact investments as the market reaches maturity (Hughes and Scherer, 2014). Showing perhaps the significance of philanthropy during the early stages when commercial investors were unwilling to expose themselves to the risk due to a perceived lack of evidence that would allow risk-return calculations (Berndt and Wirth, 2018).

Charities and Social Enterprises are also included in this section because, although charities are considered profit-making and social enterprises are non-profit making,

their non-distribution constraint connects them in their motivations. They all seek to achieve social goals and only the way they raise funds differentiates them. Whilst charities rely on grants and donations, social enterprises earn profits from business or fees from services, even if these are activities that charities are also increasingly participating in.

In the impact investing charities and social enterprises are not investors, but investment recipients. However, in the SIB ecosystem their role is different, they can be present as a service provider and as an investor. These roles can be linked. Social enterprises and charities can invest in the same SIB in which they are also acting as service provider. Or they can invest in a SIB in which they are also related to the social issue or intervention that is being promoted, such as a housing social enterprise and a homelessness SIB. As they are non-profit distributing entities their motivations are different from banks, specialist fund managers, and pension & insurance investors. They are more similar to foundations, but do not necessarily have a similar source of capital. Where they are acting as both service provider and investor this can impact on their attitude towards risk. Edmiston and Nicholls, (2017) found that this can negatively influence either their capacity or their willingness to innovate in service design. Research also showed that investments have been made in a subordinate capacity, with payments due only after senior investors have been paid (Gustafsson-Wright et al., 2015).

Non-profit investment funds are managed by non-profit institutions, who use their own assets to provide repayable finance and investment to social enterprises and charities to sustain and grow their social impact. They differ from the specialist fund managers as they are not financial institutions, and they are not investing funds on behalf of others.

c) Other Investors

The other investors include businesses and individuals. Not much is known specifically about businesses motivation regarding SIBs, but it is assumed that SIBs are treated as an opportunity to demonstrate corporate social responsibility. Investment appears to occur in two ways: a) larger businesses invest directly or via a Foundation, discussed fully in the next section; b) smaller businesses that are operate locally to

where a SIB is directed engage perhaps in a form of impact-first investment.

Individual investors also feature heavily in impact investing, including retail clients, affluent, high-net worth individuals, ultra high-net worth individuals, family offices, or billionaires (WEF, 2013). As they have greater control over the direction of their investment, they are better placed to implement impact investment when it aligns with personal investment preferences. In other words, the expectations of individual investors regarding risk, return, and impact tend to vary according to their intentions (Ormiston et al., 2015).

In addition to direct investment, individuals can also invest through investment funds or family foundations, discussed in the next section. Those that do invest directly could choose to do so as supporters of the non-profit firm involved in the SIB. Any returns made on their investment would be private. They may also benefit from tax relief (Social Finance, 2012a). For example, in the United Kingdom since 2015 individual investors have been able to benefit from social investment tax relief (SITR) by offsetting 30 percent of their upfront investment against their income tax liability. This is deemed to mitigate the risk of investment to an extent (Dear et al., 2016). Analysing a selection of health SIBs Gruyter et al. (2020) conclude that high net worth individuals present the preferred type of investor because they may be prepared to accept lower financial returns at a higher risk blended with impact returns.

iv. The Specialists

SIBs are essentially a contract, and as such legal advice and contracting expertise is necessary for these deals to take place. There is a raft of ancillary consultants that support the SIB design and evaluation process, providing technical assistance, such as developing economic and financial models, conducting feasibility assessments and strategy development. Specialists can be non-profit firms, universities, or development agencies (Gustafsson-Wright et al., 2015). There are also a number of for-profit consultancies, usually based in major financial centres such as London (Williams, 2018). This is because similar work is undertaken in the financial markets for the provision of legal advice, financial reporting, taxes, and consultation on accounting systems by for-profit firms.

Returning to his analysis, Hajer (2018) found 46 percent of evaluators to be for-profit firms, including established financial firms and research consultants, whilst conversely only 30 percent of technical assistance providers were for-profit firms. The majority of these were financial sector firms focussing on accounting services or wealth management while already providing similar services in the impact investing and mainstream financial ecosystems.

Given the emphasis on social outcomes, a SIB contract could specify the appointment of an evaluator to determine whether a project has been delivered according to the objectives set out by the contractor. In addition to the external evaluator, there may also be a validator, in order to bring rigor to the evaluation process. These roles can be undertaken by an independent evaluation firm, research institution, university, or government agency (Gustafsson-Wright et al., 2015).

v. The Intermediary

Whilst they are not present in every SIB, intermediaries can play an important role in transforming and reallocating the risk in a SIB. The motivation of intermediaries is rarely discussed in the literature but similar to investors they encompass a variety of organisations, and their motivations are inevitably influenced by varying concerns. Research by Gustafsson-Wright et al. (2015) shows their motivation and type of organisation can also depend on the stage of maturity of the SIB market. Within the SIBs ecosystem, intermediaries can include non-profit firms, impact investment firms, policy research organisations, government agencies. They can even include for-profit firms, such as commercial banks or public accounting firms, who engage in similar roles in both the financial and impact investment markets.

Intermediaries are paid a fee which, depending on the structure of the SIB and the maturity of the market, could be paid by the outcomes payer, or via an external grant, which is often philanthropic. The level of fee can vary significantly, and intermediaries can also be paid for their technical assistance for structuring the deal (OECD, 2016a).

As well as receiving a fee for their work, intermediaries can also receive performancerelated pay or a success fee during the implementation phase, if the program achieves its target social outcomes (Gustafsson-Wright et al., 2015). There are reports of the success bonuses being financed through grants sitting outside of the SIB structure (OECD, 2016a). However, Gustafsson-Wright et al. (2015) report that within many of the cases they analysed the closing fee or success fee came from the program budget.

In addition to their intermediary role, intermediary organisations can have multiple other roles, as they also function as investors, evaluators, and technical assistance providers (OECD, 2016a). This increased range of roles means there are also additional opportunities to earn fees or bonus payments. It has been suggested that in more mature markets the service providers themselves will develop enough capacity to coordinate directly with outcomes payers and investors, thus removing the need for intermediaries in these SIBs (Dear et al., 2016).

vi. The Market Builders

The market builders are a range of different entities that provide funding to the project, but are neither principals nor investors. They can provide grants, guarantees, or provide pro bono services, such as legal or accountancy advice. They can be, for example, non-profit firms or for-profit financial services firms.

3.3. The operational model of a social impact bond

The operational model, or structure, of a SIB explains the working relationships between the principal and the key agents and their roles in delivering the SIB. It is through this structure that the risk of under-performance is transferred from the outcomes payer to the investors in return for financial compensation. The level of complexity this brings is a defining feature of SIBs, due to the existence of the multiple agents discussed above, who have differing attitudes and perception to risk, expectations on interests, and goals (Alijani and Karyotis, 2018; Del Giudice and Migliavacca, 2019; Hajer, 2018). Complexity can lead to competing objectives and conflict might arise between the principal and the agents due to the actions of the latter, which might be exacerbated by information asymmetries. For example, there can be hidden actions or efforts of the agent that may in turn impact the verifiable benefit or outcome of the process (Eisenhardt, 1989a).

Whilst their structures are broadly similar, each SIB is unique and designed according to its own specification, therefore the roles of various agents can differ considerably from deal to deal (Gustafsson-Wright et al., 2015). The financiers, service delivery agents and intermediary come together, with the assistance from specialists, to design the social programme and financial instrument. The roles of intermediary and evaluator are unique to SIBs and do not appear in conventional social service delivery models (Maier and Meyer, 2017). In a conventional contract there would be a direct relationship between funding and service delivery; however, as *figure 3.3* indicates, SIBs are a lot more complex.

Financing

Coordination

Funding

Service Delivery

Evaluation

SIB Contract Costs

Market Building Gifts

Returns & Fees

Figure 3.3 - Social impact bond operational model

Source: Authors' own

The implementation of a SIB project begins when the outcomes payer identifies a certain social need and target population (Carè, 2019). According to research by Goodall (2014) and Gustafsson-Wright et al. (2015), depending on the type of contract (direct, managed, intermediated), the outcomes payer can be wholly or partly responsible for several tasks, including: identifying the social challenge; determining

the SIBs feasibility; defining outcome metrics; procuring the service provider; and measuring or validating social outcome achievements. In the United Kingdom outcomes payer can put out to tender for SIBs, and can also accept proposals from consortiums. The government presumably seeks the delivery method that is socially optimal in which the net expected benefit of bundling is sufficient to offset the expected higher transaction costs. In addition, over the course of the contract minimises loss of discretion over service provision (Coulson, 2008; Vining et al., 2005).

i. Coordination

As was discussed in the previous section, one of the reasons SIBs are said to be more efficient than conventional methods is the bundling of contract components, which are said to generate an optimal level of upfront investment in design and/or capital asset quality (Hajer, 2018). The bundling of these components requires the development of complex legal and administrative structures, involving many different agents. The coordination phase can be thought of as the stage when the consortium of agents comes together to design both the social programme and the financial instrument aspects of the SIB.

As the ecosystem indicated (*figure 3.1*) it is clear these agents can include the investors, service providers, intermediaries, and specialists, as well as the outcomes payer. The entire process is coordinated by an intermediary, which may an external consultant or an agent already involved in the SIB. Intermediation can take a dual function. First, the intermediary can act centrally, coordinating all agents in order to reach an agreement regarding the transaction process; second, it can be responsible for raising capital and structuring the deal (Gustafsson-Wright et al., 2015; WEF, 2013). The second function can include acting as project manager; creating assets and investment structures that meet the needs of institutional investors; and managing the funds on behalf of the investors. These functions aim to assist with creating liquidity, reducing risk, lowering transaction and information costs, and facilitating payment mechanisms.

ii. Financing

SIBs require high investment upfront during the development of the programme

intervention, not only for research and development, but also the establishment of the project consortium (Gustafsson-Wright et al., 2015; Hajer, 2018; KPMG, 2014; Social Finance, 2011a). This is provided by the investors before the start of the service delivery, and includes only those investments which are made with the expectation of a return. Should the SIB prove successful and achieve the pre-agreed social outcomes the investors will receive their principal amount back and any profits due.

iii. Market Building

Running consecutively to financing arrangements, the market building phase also provides additional monies, or the promise of them, at the beginning. This can be in the form of grants directly into the programme, or guarantees to the investors to enable them to hedge risk. They are the only stakeholder that will never receive a return of any kind from the SIB.

iv. Service Delivery

The service delivery agents receive the funds collected from the investors and use them as working capital to cover the operating costs necessary to deliver the social service programme, with the aim of achieving the pre-agreed set of social outcomes as set out by the SIB contract. They may also need to provide data in relation to service provision and the achievement of social outcomes.

v. Evaluation

Outcome measurement represents a key element for SIBs as the return of the investors' principal amount, plus any interest due, is determined by the evaluation process. If financial returns are determined by impact measured, investors would require key metrics and an evaluation methodology that are not just clearly defined but also are of sufficient rigour to minimise uncertainty and bias around the true impact of the investment (Berlin, 2016; ClearlySo, 2011; Gustafsson-Wright et al., 2015; Tan et al., 2015).

vi. Funding

If the SIB is successful and the social outcomes are met, and confirmed by an

evaluator where appropriate, the outcomes payer returns the principal amount, which is the cost of running the service, to the investors and some form of interest payment, depending on how well the social outcomes were achieved.

3.4. Concluding remarks

This chapter has provided a comprehensive guide to SIBs on their internal workings and the economic agents which power a SIB, both as a public social policy tool and as a financial instrument.

<u>Chapter Four: a theoretical framework for social impact bonds: the interplay of financialisation, financial systems and welfare systems</u>

4.1 Introduction

This chapter outlines the theoretical framework through which this research seeks to explore the existing heterogeneity in SIB markets across advanced countries discussed in chapter two. SIBs are both a public social policy tool and a financial instrument. Therefore, their in-depth analysis requires situating their development within the context of financialisation to understand their emergence as a financial instrument. The theoretical framework is supplemented with theoretical contribution from the comparative political economy literature to explore how variegation in financial systems and welfare systems affect the development of SIBs across different countries.

One of the contentions of this research, as discussed in chapter two, is that SIBs represent a particularly problematic aspect of financialisation, whereby the state supports financial markets for SIB investments to be developed in the public social policy sphere, thereby partially transferring the financial responsibility of welfare provision to private investors. ²⁶ Following on from these arguments, it is pointed out by scholars such as Dowling and Harvie (2014) as well as Harvie and Ogman (2019) that SIBs enable the extension of financialisation practices into new spaces beyond those of traditional financial markets and financial intermediaries, and directly into the realm of social reproduction.

A number of critical scholarly papers corroborate this view, attributing the emergence and spread of SIB markets to the wider financialisation of public services, which is regarded as antithetical to public values (Lake, 2015; Ryan and Young, 2018; Tse and Warner, 2018; Warner, 2013; Whitfield, 2015). Chapter two briefly discussed the United Kingdom's experiences with PFI, another financial instrument with links to public policy that has many attributes similar to a SIB. It is a financing model which

²⁶ One of the contentions because the other one is that the very structure of SIBs are prone to inefficiency issues, such as moral hazard and information asymmetry, stemming from the principal-agent problem. This will be discussed in detail in chapters five and six.

relies on the financialisation of publicly funded services, including the quantification of previously socialised risk as well as the commodification of this risk, whose management and mitigation becomes a profit-making opportunity for private investors (Loxley and Hajer, 2019; Warner, 2013; Whitfield, 2015). This model represents an encroachment on state activity by the private sector and further advance of neoliberal market expansion (Hajer, 2020, 2018; Loxley and Hajer, 2019; Loxley and Puzyreva, 2015; Warner, 2015, 2013). Financialisation is, thus, a useful concept through which to analyse the SIB, whose model of private investment represents a transition from the public provision of social welfare to the production of public value for private profit.

Theories of financial systems are also a key component of understanding SIBs which, due to their nature as financial instruments, require a financial system to intermediate their use. The descriptive data in chapter two already points toward the most heavily financialised economies, typically with market-based financial systems, leading the way in SIBs. National institutional frameworks guide the interaction between global markets and local financial change and hence determine the shape that financialisation takes in different political economies. Therefore, there are grounds for the 'varieties of capitalism' framework to be used critically to analyse variation in financialisation (see e.g. Engelen et al., 2009; Lapavitsas and Powell, 2013; Ward et al., 2019)

Whilst SIBs are based on financial practices and motives, it would be misleading to present them merely as a new financial invention without a social and historical context (Mitropoulos and Bryan, 2015). The data regarding the size and scope of SIB markets and the policy areas covered, discussed in chapter two, suggests that the type of welfare system in a particular country could affect the development of SIB markets. As mentioned above, SIBs are developed within the public social policy sphere, and therefore the theories of welfare systems are fundamental to explaining to explain the emergence and distribution of SIBs as a public social policy tool. This makes it imperative to include welfare systems as an important component of the theoretical framework of the research.

The rest of this chapter is organised as follows. Section two provides an overview of the theoretical framework that will be applied in the research. This is split into two parts. First, the manifold meaning that the term financialisation takes is briefly reviewed, before the specific interpretation of financialisation as proposed by Lapavitsas (2013, 2011, 2009) that is adopt for the purposes of this research is outlined. Second, different aspects of the broad comparative political economy literature is examined in two parts. First, a focus on financial systems within the economy (Amable, 2003; Hall and Soskice, 2001) with analysis extended to the comparative political economy of 'financialisation variegated' to capture the substantial variability of financialisation. Second, the variability of welfare systems is examined through a review of the seminal work by Esping-Andersen (1990) before more fully engaging with its extension to welfare services by Bambra (Bambra, 2005b, 2005a). The chapter ends with some concluding remarks.

4.2 Financialisation

In view of the preceding analysis, it is necessary analytically to place the emergence of SIBs within financialisation theory, which can be used to capture the mechanisms and forces behind the incursion of finance into areas that were formerly the domain of the state. The broader domain of social investment, to which SIBs belong, has often been considered by heterodox economists and others as part of responding to the over-accumulation of capital in advanced countries in the last four decades by opening new investment opportunities for surplus capital (Dowling and Harvie, 2014; Harvie, 2019; Harvie and Ogman, 2019).

Financialisation is an important aspect of this process, and SIBs are considered to represent a particularly problematic aspect of financialisation. Namely, the state actively supports the creation of financial mechanisms that allow SIB investments to enter the public social policy sphere, thereby partially transferring the financial responsibility of welfare provision to private investors. These mechanisms exhibit considerable variety depending on the institutional and political characteristics of each country. They are also precarious and the outcomes they generate are problematic.

i. Definitions and background

The emergence and dissemination of SIBs coincided with the accelerating pace and development of financialisation, emblematic of the transformation of mature capitalism

that has occurred during the past four decades. Since the 2007-09 financial crisis, the concept of 'financialisation' has grown within academia, and disseminated to policy circles and the wider public consciousness through the media. As such, financialisation is a new topic within an evolving field, and it remains an unclear and fuzzy term. It is not necessary for the purposes of this research to review the relevant literature, which is in any case enormous and continually evolving. Suffice it is to draw on the most pertinent contributions to it with the aim of constructing a theoretical framework through which the emergence, proliferation and country-specific heterogeneity in the development of SIBs across advanced economies can be methodically analysed.

Despite the usage of a common terminology, financialisation has multiple interrelated dimensions and processes that attempt to capture the influence of finance not only in the domain of the economic system, but also of political, cultural, technological as well as into other realms of social life (van der Zwan, 2014). In capturing this essence, Dore (2008) cites the analogy of "globalisation", a term that like "financialisation" offers a convenient catch all phrase to capture 'more or less discrete structural changes in the economies of the industrialized world' (2008, p. 1097).

The rich development of financialisation literature, extending beyond the economic, comes from disciplines as diverse as cultural studies (Haiven, 2018; Langley, 2007), geography (Christophers, 2015; Engelen et al., 2009; Mawdsley, 2018; Pike and Pollard, 2009; Sokol, 2013), and sociology (Bryan and Rafferty, 2014; Ciarini, 2019; Davis and Kim, 2015; Lin and Tomaskovic-Devey, 2013). Among economic perspectives, the literature originates primarily from Post-Keynesian and Marxist tradition, which is the contribution from which most of the current analytical lens is drawn upon.

This growing scholarship of financialisation has been categorised by <u>van der Zwan</u> (2014) into three distinctly different approaches. The first approach considers financialisation as a regime of accumulation. Scholars such as Boyer (2000) trace the inception of financialisation as a regime of accumulation to the late 1960s. In response to declining productivity during this period when the relationship between rising wages and demand for industrial production became severed, Boyer argues, an alternative

regime developed that combined flexible labour markets with the expansion of credit, amongst other things, to sustain consumption in the face of stagnating real wages.

Often associated with the "Regulationist School", interpretations of financialisation such as these tend to coexist with Post-Keynesian analysis which places the figure of the rentier, the functionless investor who profits without producing (Lapavitsas, 2013), centre stage of such a regime of accumulation which is inherently unstable as a financial system. It is also worth mentioning here that the post-Keynesian's also focus on the damaging impact of a flourishing financial sector on production. For example, Epstein (2005) focuses on the increasing level of financial activities in the economy as capital favours investment in finance rather than production. It is Epstein's definition that is the most oft cited broad definition of financialisation as 'the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies' (2005, p. 3), which is characterised by 'significant increases in financial transactions, real interest rates, the profitability of financial firms, and the shares of national income accruing to the holders of financial assets' (2005, p. 4).

The second approach centres around the transformation of the modern corporation. This transformation is expressed or understood in financialisation literature as a growing emergence of shareholder value maximisation as the strongest driving force of corporate behaviour. Shareholder value refers to the idea that the primary purpose of the corporation is to make profit for its shareholders. According to Aglietta, shareholder value has become the 'norm of the transformation of capitalism' (2000, p. 149) and as such has provided the justification for the dissemination of new policies and practices favouring shareholders over other constituents of the firm.

It is important to note here that scholars contributing to this second approach to understanding financialisation tend to interpret shareholder value as an ideological construct that provides legitimacy to a distribution of power and wealth among shareholders, management and workers, and therefore are not treated as a value neutral concept.

The third and final approach on financialisation concerns itself with the financialisation

of everyday life or penetration of finance into areas hitherto not dominated by influence of finance. Shifting their focus from corporations, this particular approach to financialisation aims to analyse the plethora of mechanisms which aim to incorporate households, especially low-income and middle-class households, in financial markets through ever increasing levels of home mortgages, participation in pension plans, and consumption of mass-marketed financial products. In this body of work financialisation almost takes an autonomous form, a decentralised form of power exercised through individuals' own voluntary interactions with new financial technologies and systems of financial knowledge. This interaction in turn shapes an individual's outlook on finance where new norms of financial risk-taking are encouraged and new subjectivities as investors or owners of financial assets are internalised.

However, it is Marxist scholars who put forward the most extensive case for understanding financialisation as a new phase in capitalist development, where financialisation is understood through the prisms of analytical, theoretical, and historical perspectives. As such, it is not regarded as simply the dominance of finance over production, or by extension, of financial capitalists over industrial capitalists, but rather as a deep, uneven, dynamic, and highly unstable transformation of the wider social relations of production and exchange that mark capitalism (Duménil and Lévy, 2011).

Fine (2013) finds financialisation to be the expansion of interest-bearing capital in intensive and extensive forms. In its intensive form it is 'notable in terms of the growth and proliferation of financial assets themselves with increasingly distant attachments to production and exchange of commodities themselves' and in its extensive form it 'involves the extension of interest bearing capital to new areas of economic and social life in hybrid forms with other types of capital' (2013, p. 1). Whilst Lapavitsas (2013) establishes financialisation as 'a systematic transformation of advanced capitalist economies pivoting on the underlying conduct of non-financial enterprises, banks, and households' (2013, p. 15). Through which finance has grown enormously in terms of activities, markets, institutions and profit within an environment determined by neoliberal ideology and shaped through deregulation of labour and financial markets (Lapavitsas, 2013).

According to Lapavitsas (2013, 2011, 2009) the three underlying tendencies of this transformation are as follows. First, that non-financial enterprises are increasingly turning to open markets to obtain finance, and engaging in these financial activities independently. Second, this has led to banks turning to financial-market mediation in their search for alternative sources of profit to traditional lending, and as such are adopting investment-banking practices speculating in open financial markets alongside the provision of financial services to households. Third, there is an increasing reliance by households on the formal financial system for goods and services, attributable to the retreat of public provision from public social policy areas such as housing, pensions, education, and health.

ii. Social impact bonds and the rise of financial market mediation

This research critically adopts Lapavitsas (2013, 2011, 2009) multi-faceted notion of financialisation. It is the second of these tendencies, that of financial-market mediation, which can be used to analyse the emergence of SIBs as a phenomenon over the past decade, as the financial sector has sought new sources of profits. According to Lapavitsas (2013, 2011, 2009) financial liberalisation and financial market reforms have initiated a structural change under which finance has grown enormously in terms of activities, markets, institutions and profits. These changes have seen banks increasingly adopting investment-banking functions as they focus on financial market mediation and extend credit and other monetary facilities to households seeking to explore alternative avenues to sustain their profitability in view of the retreat of traditional business lending.

To put these changes into a historical context it is necessary to outline the ways in which banks have restructured themselves since the 1970s.

First, large non-financial enterprises have increasingly turned to open markets to obtain finance. This is a significant change from traditional commercial banking which has typically involved banks gathering deposits to make customer-specific loans that were kept on the balance sheet, generating business-sustaining profits (Hardie and Howarth, 2013; Lapavitsas, 2013, 2011, 2009).

Second, since the 1990s commercial banks have widely adopted the practice of securitisation, through which illiquid assets or rights such as car loans, lease contracts and insurance premiums, are pooled and transformed into tradeable and interest-bearing financial instruments (Deloitte, 2018). Securitisation represented a sharp acceleration of the trend toward investment banking.

Third, and inextricably linked to the afore-mentioned, risk management became of central importance to banks' business models. Thus, the fees generated through financial trading on global capital markets becoming as important as the traditional interest margins on loans (Hardie and Howarth, 2013).

Fourth, this resulted in the enormous expansion of bank assets in the 2000s, which contributed to the 2007-09 financial crisis (Lapavitsas, 2011). This crisis had little to do with the original remit of banks based on lending to non-financial corporations for investment in production, but rather was a consequence of lending to individuals and to other banks (Lapavitsas, 2011).

Overall, financial liberalisation and financial market reforms initiated the above structural changes to the banking sector that mark financialisation. The changes in banking contributed to the growth of open financial markets, involving primarily the trading of shares, bonds and derivatives, which has presented banks with further opportunities for profit-making (Lapavitsas, 2009).

These same historic tendencies could help explain the emergence and growth of SIB markets across predominantly advanced economies in the past decade. Critics of SIBs, and of social investment more generally, have already argued that SIB markets are driven by investors seeking new opportunities for capital accumulation (Dowling, 2017; Dowling and Harvie, 2014; Harvie, 2019; Harvie and Ogman, 2019; Whitfield, 2019). The structural changes in the banking sector described above have led to closer connections between financial institutions and public policy. These connections became evident when public infrastructure turned into an 'asset class' for private investors, as the state used PFIs to build and run schools and hospitals in the United Kingdom from the 1990s until 2020, as was discussed in chapter two. This tendency has now broadened as SIBs have become part of a new subset of the impact investing

market, which now encompasses public services rather than public infrastructure, or more specifically social services.

The banking sector exists for the pursuit of profit. It is argued that each historical period throughout the development of capitalism has been characterised by distinct patterns and sources of profit (Lapavitsas and Mendieta-Muñoz, 2016). A consequence of the rise of market-orientated banking has been that financial institutions are earning a greater portion of profits through interest spreads, fees, commissions and trading (Lapavitsas, 2013).

Financial profit differs conceptually from those profits which are earned by enterprises through commercial and other activities. This is because financial profit accrues through the ownership or trading of financial assets, and these profits represent a vastly complex economic category (Lapavitsas and Mendieta-Muñoz, 2016).

Financial profit can broadly indicate any profit generated through activities that are specific to the financial sector, with many economic agents earning financial profit, including individuals, non-financial enterprises, and financial enterprises as per Lapavitsas' (2013, 2011, 2009) multi-faceted notion of financialisation. It also encompassed other type of transactions that result in financial profit including but not limited to: money lending, trading in financial assets, as well as real assets that have acquired a financial character, such as housing (Lapavitsas and Mendieta-Muñoz, 2016). A narrow definition of financial profit, favoured by Lapavitsas and Mendieta-Muñoz (2016), focuses on profit earned by financial institutions alone, that is by banks and near-bank financial institutions.

The profit-maximising logic of financial markets also plays an important role in the SIB environment (Berndt and Wirth, 2018). Similar to banking, the concept of 'risk' is fundamental to the SIB narrative, as they represent a shift in logic towards financialised concepts of social value. This new 'value' represents the social outcome being achieved through the delivery of the social services programme under the SIB. The value of the social outcome is supposed to be transferred to the SIB capital providers, using markets that calculate the cost of risk related to the programme's success and assign a price to this risk (Cooper et al., 2016; Dowling and Harvie, 2014;

Hajer, 2020, 2018; Loxley and Hajer, 2019; Ryan and Young, 2018; Warner, 2015, 2013). Thus the quantification and commodification of previously socialised risk facilitates the transfer of the social value to investors, resulting in the introduction of market discipline into social domains not previously evaluated by using financial logic (Berndt and Wirth, 2018; Chiapello and Knoll, 2020; Cooper et al., 2016; Sinclair et al., 2014).

iii. Links between social impact bonds and the financialisation of households

In addition to the second tendency relating to financial market mediation as discussed above, it is important to state that SIBs have links to Lapavitsas' (2013, 2011, 2009) third underlying tendency of financialisation. That is, the increasing reliance by households on the formal financial system for the provision of goods and services such as private healthcare and mortgages, due to the retreat of public provision from areas of public social policy such as education, health and housing. The same underlying factors drawing households into the financial markets for welfare provision have played a role in the emergence of SIBs. This will be explored further in this chapter, in the section examining welfare systems.

These ideas are also linked to the wider discussion of the financialisation of everyday life (Martin, 2002; Sokol, 2017) whereby individuals become 'financial subjects' (Blackburn, 2006; Langley, 2008a). When discussing the use of the formal financial systems by households Lapavitsas (2009) calls the extraction of financial profits from these exchanges 'financial expropriation' to indicate that they originate directly in personal income. Thus, the extraction of financial profits out of taxation revenue, as occurs in a SIB, could be perceived as a peculiar form of financial expropriation.

In sum, the ethics, morality and mindset of finance have penetrated both social and individual life (Lapavitsas, 2009). The consequences of this explicit introduction of financial concerns and profits in these areas previously untouched by finance can be demonstrated through the SIB model and indicate the reframing of the welfare relationship (Chiapello and Knoll, 2020).

iv. The role of the state

Finally, separate to Lapavitsas' (2013, 2011, 2009) three underlying tendencies, but still consistent with his argument, the role of the state also requires attention. The afore-mentioned historical tendencies, although occurring spontaneously, have been supported through the financial liberalisation policies of the state (Lapavitsas and Mendieta-Muñoz, 2016). The social investment market more generally, and SIBs specifically, is symptomatic of further intervention by the state in the sphere of finance as it seeks to open new avenues for profitability through liberalisation.

State financialisation entails 'the transformation of key state functions in support of the growth of risk-oriented financial markets, up to the point where state actors incorporate some of the logics of modern-day financial firms' (Hendrikse and Lagna, 2018, p. 2). This development occurs particularly through the introduction of financial assets and metrics into state budgets (Hendrikse and Sidaway, 2014; Lagna, 2016).

Indeed, it has been explicitly claimed that SIB markets have grown through the use of significant government infrastructure (Hajer, 2018; Loxley and Hajer, 2019). For SIB investments to be developed in the public social policy sphere, it is necessary that they should occur within an institutional context that is directly influenced by state policy making, in both finance and welfare. SIBs are products of the state as much as of the financial markets.

4.3 Financial systems and welfare systems

The development and dissemination of SIBs has been secured through state involvement, both in the financial markets and in the public social policy sphere. Overall, the chronological development of SIB markets, as discussed in chapter two, shows that there is great diversity among countries and over time, as markets have developed at differing rates during the past decade. Comparative political economy can help explain these developments since capitalism varies not only over time but also, and more significantly, between spatially discrete political economic units. In this connection, scholars who focus on the institutions relevant to finance and to welfare emphasise historical specificity, path dependence and evolving political economic social relations and structure over time.

There are two subfields of comparative political economy that underline the importance of institutional variations for public social policy and economic activities, which are important for our purposes. First, cross-national welfare-state research, in which the seminal Three Worlds of Welfare by Esping-Andersen (1990) identified different welfare regimes with significant variations in redistribution and market compatibility, and the various amendments and alternative regimes thereby spawned. Second, the approach of different Varieties of Capitalism, through which Hall and Soskice (2001) postulate the differences between coordinated market economies and 'free market' economies that are in part attributable to the underlying financial system.

The following subsections discuss financial systems, then welfare systems, before finally considering the possibility that there are certain 'institutional complementarities' between the way these two subfields of comparative political economy interact.

i. Financial systems

A key issue in analysing financialisation across international boundaries is how to conceptualise the highly heterogenous manner in which different political-economic institutional configurations have incorporated common pressures associated with the rise of global finance (Dixon, 2011). The processes of financialisation have not affected all countries equally and that, whilst financialisation is widely present, its gradations and influence are quite wide-ranging as global finance is embedded heterogeneously across different national-institutional regimes (Allen and Gale, 2001; Deeg, 2014; Ward et al., 2019).

Thus, the following discussion considers the possible dimensions of an 'institutional fit' between different forms of the financial system with the varieties of capitalism theories, which are important for examining the development and reproduction of financialisation. ²⁷ Financial systems are an integral part of national institutional ensembles, and serve a number of functions that are essential in a capitalist economy,

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²⁷ The term 'varieties of capitalism' is used here in a heuristic sense and not distinctly different to other concepts aimed at capturing institutional complementarities (models of capitalism, social systems of production etc). It is not intended as an unreserved endorsement of Hall and Soskice's full model and its assertions.

including facilitating the exchange of goods and services through the provision of liquidity, and the transfer of risk to those who are willing to bear it. The provision of a SIB can be seen as the exchange of a service which also involves the transfer of risk. As such, the pricing of risk within a SIB requires financial expertise, which is not typically found within government mechanisms (Hajer, 2020, 2018; Loxley and Hajer, 2019; Ryan and Young, 2018; Warner, 2015, 2013). Thus, SIBs require a financial system to intermediate their use, and the precise mechanisms that are required will be discussed more fully in chapter six.

The financial system is an institutional area distinguished in many studies which explore the theory of institutional complementarities in the macroeconomy (e.g. Amable, 2003; Coates, 2000; Hall and Gingerich, 2009; Hall and Soskice, 2001). The seminal 'varieties of capitalism' dualist model from Hall and Soskice (2001) proposed a parsimonious distinction between types of capitalist economies based on the type of relationship between the firm and its financiers.

Namely, first there are market-based 'liberal market economies' including Australia, Canada, Ireland, New Zealand, the United Kingdom, and the United States, which have an equity-based financial system as a key component of a liberal market economy. Such systems seem to be more propitious to a social investment market. Second, there are bank-based 'coordinated market economies', such as Austria, Belgium, Denmark, Finland, Germany, the Netherlands, Norway, and Sweden, which typically reserve a strong role for banking intermediaries.

Amable (2003) also takes into account variables in the financing structure of non-financial firms and the structure of financial intermediaries. Such work focusses less on economic coordination and production and more specifically on the role of the financial market in influencing the conduct of productive agents through the use of regulated stock markets or commercial banks. Under Amable's concept of 'decentralised finance', the financial sector is marked by the strong presence of institutional investors and particularly pension funds, with a highly capitalised stock market, a well-developed venture-capital system, and a profitable banking sector. The cluster of countries with such financial systems is very similar to those countries that Hall and Soskice (2001) call liberal market economy countries.

The descriptive data presented in chapter two of this research already points toward countries with market-based financial systems or those with decentralised finance, which are typically the heavily financialised, as leading the way in SIBs. Including United Kingdom, the United States and Australia. The Netherlands, which as noted in chapter two also has a relatively active SIB market, is classified as having decentralised finance by Amable (2003), unlike Hall and Soskice (2001) classification as a coordinated market economy. ²⁸

Finally, Amable finds the greatest diversity within the group of countries with bank-based financial systems, presenting three heterogeneous clusters of countries. In the first group, which includes Belgium, Denmark, and Sweden, the banks play a 'passive' role, with bonds and securities representing a large part of the banks' assets. In the second group, which represents countries which are relatively minor in terms of banking activity, such as Finland, Norway, and Ireland, foreign banks are particularly important. This group also includes Switzerland: although it is large in terms of banking activity, it is similar to the other countries in terms of the presence of foreign banks. Finally, in the third group comprising Germany, Japan, Austria, France, Italy, Portugal, and Spain, the countries represent the ideal bank-based relational system, comparable to the coordinated market economies of Hall and Soskice (2001), which have an important presence of insurance companies among institutional investors but a relatively weak venture-capital sector. The data in chapter two illustrates how the majority of these countries only have small SIB markets, or no market at all.

As historical and institutional variation are necessary features of financialisation (Lapavitsas, 2013) there are several ways in which the analyses offered within the financialisation and the varieties of capitalism literatures 'fit' each other. The financialisation literature has argued that financialisation depends on multiple background conditions that are also to be found as the key characteristics of Hall and Soskice (2001) liberal market economies. In institutional terms, these conditions entail the presence of a deep and liquid equity market and a funded pension system or its

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²⁸ New Zealand was ranked as a liberal market economy by Hall and Soskice (2001) but was not analysed by Amable (2003)

functional equivalents, such as insurers and mutual funds (Engelen et al., 2009).

Insights from the varieties of capitalism literature have been combined with those from the literature on financialisation studies on several occasions.

First, examining why the repercussions from the 2007-09 financial crisis have not been homogeneous across geographies, Engelen et al. (2009) analysed change in the Netherlands compared to Germany as the ideal-type non-financialised economy and to the United States as the ideal-type financialised economy. The evidence of a more severe aftermath in some localities but not in others suggests that there are distinct geographies of financialisation.

Second, a comparative study using national accounts data over several decades for households, banking, and non-financial corporations in France, Germany, Japan, United Kingdom, United States by Lapavitsas and Powell (2013) demonstrated the presence of financialisation in general but also revealed variation arising from institutional, historical and political factors. Nevertheless, the traditional distinction of bank-based and market-based finance that has characterised German and Japanese versus American and British capitalism is still in evidence.

Third, drawing Lapavitsas and Powell (2013) work on the identification of particular manifestations of financialisation across different domains, Ward et al. (2019) also examined the balance sheets of households, banking, and non-financial corporations for the period 1992–2012, but with the added domain of the state. Using the United Kingdom to represent a liberal market economy, Germany a coordinated market economy, and the Netherlands a hybrid, this analysis further substantiates the notion of 'variegated financialisation'.

ii. Welfare systems

Whilst the previous section was concerned with the literature on how economic value is generated and distributed among productive, commercial, and financial enterprises, the welfare regimes literature that is discussed in this section explores how economic value is re(distributed) among the population. Welfare state modelling has a long pedigree within comparative public social policy (Castles and Mitchell, 1993; Esping-

Andersen, 1990; Therborn, 1987; Titmuss, 1974; Wilensky and Lebeaux, 1958). This literature can help explain SIBs due to their nature as a public social policy tool, delivered by the financial market.

The provision of welfare services is part of the social protection measures of the state. Social protection is a measure of the extent to which countries assume responsibility for supporting the standard of living of disadvantaged or vulnerable groups, such as low-income households, the elderly, disabled, sick, unemployed, or young persons, a task that is achieved through the redistribution of resources. There are several traditional 'social risks' that have become essential for most welfare states, including old age, sickness, accident, disability, unemployment, and motherhood. The changes of family structures and of labour markets since the 1970s have also placed several additional social risks on the agenda of most modern welfare states with regards to unemployment. These include the inability to seek employment due to the time spent on care-giving duties for children or the elderly, or the onset of long-term unemployment due to skills that have become obsolete in the labour market. To protect against these social risks, both old and new, the state delivers social protection through cash benefits, tax breaks with social purposes, and the direct in-kind provision of goods and services (OECD, 2018).

Policy-making in developed economies since the 1980s has been widely described as 'post-welfarist' or 'neoliberal' (Harvey, 2005), driven by the changing political economy of the state. Neoliberal approaches favoured the eradication of government social policies and their replacement with market mechanisms and quasi-markets. Under the ensuing privatisation and subcontracting, the state ceded high levels of control to non-state providers from both the private and third sectors as market competition came to shape the value, purpose and practice of social provision (Le Grand, 2001). The motives and methods of markets made substantial inroads into public social policy formation. SIBs are the latest iteration of neoliberal methods deployed in public social policy, after decades of marketisation, privatisation, and financialisation in social services and social infrastructure.

Within a SIB, the social service delivery agent was originally conceived to be non-profit institutions, which already have a long history of delivering social services on behalf

of the state. The policy areas covered through these in-kind services of the social service variety, can be classified by primary area of activity using the International Classification of Non-profit Organizations (ICNPO) (Salamon and Anheier, 1996).²⁹

The ICNPO system groups organisations into 12 major activity groups, including group 4100 for social services organisations and institutions, which provide social services to a community or target population (Salamon and Anheier, 1996). These include areas such as child welfare, child services, adoption and fostering; youth services and youth welfare including delinquency prevention, health issues, and job programmes; family services including family life/parent education, family violence shelters; services for the disabled including transport facilities and recreation; services for the elderly, such as homemaker services, transport facilities, recreation, and meal programs; and self-help and other personal social services, which include programmes and services for self-help and development; personal counselling, and money management services. As was outlined in chapter two, SIBs cover similar areas that were hitherto characterised by de-commodified provisions, including child & family welfare, criminal justice, education and early years, health, housing & homelessness, and workforce development.

SIBs developed and spread after the 2008-09 economic crisis, driven by macroeconomic developments on both the demand and supply side. Austerity measures following reductions in government expenditure, including spending on social and welfare services, provided opportunities to extend markets even further into the realm of solving social problems through SIBs (Dowling, 2017; Dowling and Harvie, 2014; Joy and Shields, 2018). However, fully to investigate the phenomenon of SIBs, this linear approach would be inadequate.

Social expenditure is a broad and varied category, and welfare states choose to fund a wide variety of different benefits and services. Cuts in expenditure due to austerity may also fall unequally among states in the areas of public social policy that SIBs cover. The existence of a welfare service and the amount of public expenditure on it

 $^{^{29}}$ The ICNPO is the classification system recommended in the United Nations Handbook on Non-profit Institutions in the System of National Accounts

may be less important than what the service actually delivers. That said, SIB empirical work is in its infancy and levels of social expenditure have been used in analysing the conduct and outcomes of SIBs. Hajer (2020, 2018), for instance, uses data from the Organisation for Economic Co-operation and Development (OECD) to compare inkind social public expenditure across a sample of countries to ascertain how reliant those countries are on private social services.

Given the problems described above, a focus on public expenditures could be misleading since the import of expenditures depends on the structures and mechanisms of the welfare state (Scruggs and Allan, 2006). For this reason, several public social policy scholars agree that there are both conceptual and empirical drawbacks to using spending as the primary empirical basis for evaluating welfare states (Castles and Castles, 2004; Esping-Andersen, 1990; Scruggs and Allan, 2006). Instead, issues of decommodification, social stratification and employment have been seen as determining a welfare state's identity (Esping-Andersen, 1990).

The seminal work by Esping-Andersen (1990) on 'The Three Worlds of Welfare Capitalism' detected three highly diverse clusters of countries, or regimes-types. His analysis encompassed the degree of decommodification and the kind of stratification each welfare state produced for society. Decommodification amounts to protecting wage-earners against market risks through the mechanisms of public social policy, in other words it is a process of reducing the dependence of citizens on market income. Stratification refers to the intensity of redistribution and the level of universality of solidarity that is imposed by the welfare state, thus turning certain basic services into citizen rights. Each regime is structured around its own discrete logic or organisation, stratification, and societal integration. Additionally, each regime owes its origins to different historical forces, and follows qualitatively different developmental trajectories. Based upon the two dimensions of decommodification and stratification discussed above, Esping-Andersen distinguished between liberal, conservative-corporatist and social-democratic welfare states.

The focus of these regimes is not on the type of welfare programme, but rather on the ways in which that particular programme elucidates how different nations arrive at their peculiar public-private sector mix. This is because all advanced countries have

developed welfare institutions which deliver varying amounts of welfare activities, resulting in a 'mixed economy' of welfare depending on the country, which can involve many actors including the state, the market, non-statutory organisations, and networks of 'informal' carers (Arts and Gelissen, 2002; Cochrane, 1998). There are significant differences in the way different welfare states are financed and deliver provision (Bonoli, 1997).

A liberal regime, in countries including Australia, Canada, Ireland, and New Zealand, is characterised by a narrow specification of social risks, a restricted view of the role of the state and a preference for market welfare production. This comes as middle-class voters tend to reject a comprehensive welfare state in favour of low taxes, with the result that the government's role in providing and regulating welfare is kept to a minimum. Social risks are perceived as arising from the imperfect operation of markets or 'market failure', and welfare programmes are justified only if they address significant market failures.

In nations where this mode is dominant, which are mainly Anglo-Saxon countries, the result is actually to strengthen the market since all but those who fail in the market will be encouraged to contract private-sector welfare. Thus, the state encourages the market by providing only a minimum safety-net, or actively by subsidising private welfare schemes. Municipalities cooperate with private for-profit or non-profit service providers, but they are not integrated into the process of public social policy making. The precise degree of de-commodification varies with the stringency of the meanstesting and the level of benefits, however.

In contrast, a conservative or corporatist regime, in nations such as Austria, Belgium, France, Germany, Italy, Japan, Netherlands, and Switzerland, places the family at the centre of welfare provision. Social risks are defined as those affecting the family. Any welfare provision from the state or market is designed to respond to 'family failure'. The state is ready to displace the market as welfare provider, although only when family capacity to help is exhausted.

Conservative welfare regimes are characterised by powerful corporate social service providers and social welfare organisations which also play a crucial role in the making

of public social policy. Access to the markets is constricted and controlled by public authorities and most services are tightly controlled by the state using legal regulations. This provision is accessed through limited private insurance and occupational fringe benefits, which are often earnings-related. The impact of private provision regarding the coverage of social risks is still quite insignificant. The degree of decommodification is generally higher than in liberal welfare states, but is largely concentrated among professionals with an adequate employment history. This leaves decommodification in the middle ground. The precise extent of 'market-independence' depends on contributions paid or on employment history, and entitlements. The hierarchical social insurance programme cements middle class loyalty to a particular type of welfare state.

Finally, a social democratic regime, such as those in Denmark, Finland, Norway and Sweden, is characterised by a comprehensive specification of social risks still largely based on public services provided by the state and universal and comparatively generous provision, paid for through higher taxation. Welfare provision is universal and egalitarian, with the state playing a key role. The level of decommodification is typically very high, pushing back the boundaries of the market even further. The impact of private provision on managing social risks remains quite insignificant. The universalistic and generous design means the degree of market-independence under this system would be higher than in the corporate or liberal regimes.

One of the main criticisms of this approach is that the world is composed of more than three qualitatively different welfare-state logics. The range of countries used by Esping-Andersen has been the largest source of debate (e.g. see Castles and Mitchell, 1993; Ferrera, 1996; Leibfried, 1992). The welfare regime types have been subject to various reconsiderations with the number of ideal types contested, usually resulting in new groups of nations being added (Arts and Gelissen, 2002). Thus, the criticisms and revisions of the original 'three worlds' have led to the dissemination of a number of competing welfare state typologies within the comparative public social policy literature.(e.g. Arts and Gelissen, 2002; Castles and Mitchell, 1993; Castles and Castles, 2004; Scruggs and Allan, 2006). The result has been the acknowledgment of an additional three regime types, including Europe's southern countries (Arts and Gelissen, 2002; Ferrera, 1996; Leibfried, 1992); the Confucian model for east Asia

(Goodman and Peng, 1996; Walker and Wong, 2005); and following the break-up of the Soviet Union, the Central and Eastern European states in post-socialist transition (Kvapilová, 1995; Standing, 1996).

The absence of the new Southern EU members of the 1980s, such as Greece, Portugal, and Spain, was deemed to be a major shortcoming (Arts and Gelissen, 2002; Ferrera, 1996; Leibfried, 1992). When these countries are added to the analysis, a fourth 'Southern' world of welfare emerges. It is possible to transfer Italy from the conservative regime to this new Southern regime. The Southern welfare states are described as "rudimentary" because they are characterised by a fragmented system of welfare provision, consisting of diverse income maintenance schemes, from the meagre to the generous, and a healthcare system that provides only limited and partial coverage (Bambra, 2007). Reliance on the family and voluntary sector is also a prominent feature. These features have led to the misspecification, by <u>Katrougalos</u> (1996) for example, of the Mediterranean welfare states as immature Continental ones (Arts and Gelissen, 2002).

The Asian "tiger" economies including, Hong Kong, Singapore, South Korea, and Taiwan form an additional Confucian welfare state regime (Goodman and Peng, 1996; Walker and Wong, 2005). This new regime could also incorporate Japan which was deemed a Conservative country under the earlier Esping-Andersen (1990) typology. This model is characterised by low levels of government intervention and investment in social welfare, underdeveloped public service provision, and the fundamental importance of the family and voluntary sector in providing social safety nets. This minimalist approach is combined with Confucian social ethics of obligation to protect immediate family members, thrift, diligence, and a strong education and work ethic. As such, this regime could be thought of as a hybrid which combines elements of the Liberal, Conservative and Southern regimes.

The post-communist welfare states of Central and Eastern Europe have also been found to form a distinct group of their own (Kvapilová, 1995; Standing, 1996). Variation in the pace of development within these countries has also called for further subdivision into three groups. First, a group of former-USSR countries, including Russia and Belarus; second, a group of relatively successful transitioning Central and

Eastern European countries including Poland and the Czech Republic, and third, a group of developing welfare states, consisting of Romania, Moldova and Georgia (Fenger, 2007).

These rough classifications do not, of course, do justice to the complexity of country variation and the development of the welfare states over time. It should be noted that the three regimes in Esping-Andersen's (1990) original typology are understood as being 'ideal-typical' and variations from the norm may occur, but the larger picture would still remain valid (Weidenholzer and Aspalter, 2008). There have also been strong arguments, as discussed above, that a significant number of welfare states must be considered hybrid cases as countries can embody features of different regimes to varying degrees (Arts and Gelissen, 2002; Schröder, 2009).

Further criticism has also stemmed from the classification of some countries. As discussed above the new typologies have suggested that Italy should be relocated from the conservative regime to the new Southern regime, whilst Japan which was also formerly deemed a conservative country could now belong amongst the fellow east Asian Confucian countries. The United Kingdom has also proved a bone of contention as scholars have questioned its original classification and Ginsburg (1992) argued the liberal classification was due to a mistake as the United Kingdom was on the cut-off point between the liberal and conservative groupings. To add to the debate, Castles and Mitchell (1993) found the United Kingdom was part of a 'radical' welfare regime alongside Australia and New Zealand, combining low social expenditure alongside equality through labour relations.

Replicating Esping-Andersen's (1990) study for the first decade of the new millennium, Talme (2014) found that the United Kingdom experienced a decrease in the level of de-commodification between 2000-2010 in relation to other countries, due to a longer qualification period for unemployment insurance and pension. This analysis draws out some of the key characteristics of the liberal regime such as limited, means-tested assistance with strict entitlement rules. Talme (2014) also notes that the categorisation of the United Kingdom as a liberal regime using 2010 data is more aligned with Esping-Andersen's study, compared to a similar study conducted using data for year 2000. The lower levels of decommodification in 2010 compared to the start of the millennium

could reflect the changes in the welfare state due to the 2007-08 crisis. Considering all of these arguments, it appears, as Kendall and Almond (1999) suggest, that the welfare state of the United Kingdom is simply too difficult to categorise as any particular regime.

In the models discussed above, cash benefits, such as pensions and unemployment payments, are used as indicators of regime type. As such, there has been criticism of the lack of reference to social services by regime analysts, with education systems, social care provisions, and healthcare frequently omitted (Isakjee, 2017). Social scientists often fail to acknowledge that social benefits to households comprise not only cash transfers but also the provision of social transfers in-kind (OECD, 2020). It is the in-kind transfers that form the delivery of services such as education, health or social care, and therefore it is in-kind transfers that are most relevant for SIBs. This distinction is important because there may be internal welfare state inconsistency cross-nationally regarding emphasis upon cash benefits and/or welfare state services (Castles, 1998; Kautto, 2002; Korpi and Palme, 1998).

Indeed, welfare services may well account for the greatest differences both between and within countries' welfare state arrangements (Castles, 1998). For example, with regard to healthcare, the United Kingdom is an obvious example of divergence from the ideal type of liberal regime, a point that is stressed by Ginsburg (1992) and Moran (1999). This is due to the different philosophies which steer the market-orientated cash benefit programmes such as sickness benefit, child allowance, or income support in the United Kingdom, compared to the state-dominated healthcare provision. As such, should the liberal regime labour market principles be extended into healthcare it would suggest funding would come largely from the market. Whilst the NHS used to be funded almost entirely by general taxation, the NHS and public service provision in general, is becoming progressively marketised in the United Kingdom (Krachler and Greer, 2015).

Given the potential for internal diversity within the welfare state arrangements of some countries, perhaps reflecting different political attitudes to the roles of cash benefits or welfare services, it has been proposed that policy-specific research could elicit more fruitful explanatory comparative frameworks (Kasza, 2002; Seeleib-Kaiser, 1995).

Work by Bambra (2007, 2005b, 2005a) extends the principles of Esping-Andersen's typology used for cash benefits towards welfare services, focussing on healthcare, which is considered the primary form of welfare service as it accounts for the largest proportion of welfare-state spend (Bambra, 2005a, 2005b).

This work would be more suitable for analysing SIBs because it refocuses the decommodification qualities of the Esping-Andersen typology to a healthcare setting. Bambra (2005a) replicated Esping-Andersen's work using healthcare data also from 1980 to maintain comparability and compatibility. ³⁰ The healthcare decommodification index was constructed by assessing three measures of the financing, provision and coverage of the private sector in the health system. First, private health expenditure was measured as a percentage of GDP to account for the extent of private financing by identifying through the proportion of a country's total income spent on private health care. Second, private hospital beds were measured as a percentage of total bed stock, which expresses the extent of private provision at a practical level within a health care system. Third, the percentage of the population covered by the health care system was used to indicate the extent of general access provided by the public health care system. ³¹

Bambra's (2005a) results indicate that the larger the size of the private health sector, both in terms of its expenditure and its consumption, the larger the role of the market and, therefore, the lower the degree of health decommodification. As this analysis follows Esping-Andersen's methodology it initially focused on a single data point, but in order to update the analysis, additional analysis was undertaking using the same data sets for 1998. To some extent the 1998 data address the degree to which welfare-state 'decommodification potential' has changed over time, although Bambra (2005b) cautions that a direct comparison should not be made. In spite of this, as a single data point the picture still remains static, even if more recent than the earlier studies.

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³⁰ Bambra (2005b) notes the earlier criticism of this methodology (e.g. Castles and Mitchell, 1993; Kangas, 1994; Pitruzzello, 1999; Ragin, 1994).

³¹ The majority of data used in Bambra's (2005a) health care decommodification index are taken from the OECD's international survey, 'Health data 1998: A Comparative Analysis of 29 Countries' (OECD, 2000). Supplemented where necessary with data from the WHO 'Health for All' database (WHO, 2002).

Whilst in terms of regimes there are many similarities between Esping-Andersen's income maintenance and Bambra's healthcare services, there are also important differences. A direct comparison of the 1980 cash benefits results with the 1980 welfare services data throws up significant differences. The six Anglo-Saxon countries formerly categorised under the liberal regime have now been whittled down to just Australia and the United States as low decommodification countries, whilst Ireland has moved to the conservative-type category of medium decommodification.

Finally, Canada, New Zealand and the United Kingdom are placed alongside the high decommodification counties with the social democratic countries. Thus, the United Kingdom, which has long been questioned as the right fit for a liberal welfare regime, shows high decommodification in its healthcare system, representing a more universalist and redistributive system than a liberal regime typically would. This raises similar questions for the Canada and New Zealand, as well as Italy and Japan which were re-categorised under the alternative cash benefits typologies.

The above discussion shows there is great diversity amongst welfare regimes, just as the development of SIB markets, as discussed in chapter two, evidences great diversity among countries and over time. With the most highly decommodified countries for in-kind services, being the United States and Australia (Bambra, 2005a, 2005b), correspondingly having two of the largest and fastest growing SIB markets. Whilst Canada and New Zealand, which have lower levels of decommodification for in-kind services (Bambra, 2005a, 2005b) compared to cash benefits where they are consider liberal regimes (Esping-Andersen, 1990), have smaller and sluggish SIB markets. This would suggest that using Bambra's (2005a, 2005b) healthcare decommodification index as a proxy for in-kind services when examining SIBs is beneficial compared to using Esping-Andersen (1990) cash benefits typology.

4.4 Concluding remarks

It is important to point out that, although this chapter introduced the various components of the theoretical framework as distinct categories, there is significant conceptual fluidity between them, with the concept of financialisation running as the most prominent thread through them. Drawing on the theoretical concepts and the

relevant empirical work discussed in the preceding sections, SIBs can be characterised as a neoliberal innovation, expanding profitable opportunities for capital whilst further commodifying social reproduction and financialising publicly funded services. SIBs are financial market mechanisms that allow for the extraction of profit out of state revenue. SIBs are also an economic incursion into the non-economic realm of society, placing monetary values on practices previously considered to be 'non-economic' or social.

<u>Chapter Five: social impact bonds: efficiency arguments and empirical contestations</u>

5.1 Introduction

The previous chapter established the political economy theoretical framework that is proposed for analysing SIBs. This chapter takes a deeper theoretical look at SIBs from a critical perspective, exploring the development and theoretical motivations of SIBs.

SIBs are a new and complex approach to public social policy delivery, so this chapter sets out the areas essential to the understanding of SIBs from a contracting perspective. Section two focuses on the proponent public sector reform literature which argues that SIBs can deliver more cost-effective programmes that are of a higher quality and effectiveness, whilst transferring the financial risk away from government and crowding-in private funding.

Section three examines SIBs as a form of social good and how SIBs respond to social service market failure, before seeking to explain the theoretical underpinnings of SIBs as a contract using agency theory and the principal-agent model. Section four subsequently reviews the more critical academic literature which examines how effective SIBs have been in practice during the short period of their existence, and refutes the claims of their proponents on the grounds of cost and quality, with additional concerns highlighted relating to their form of financing. Finally, section six provides the concluding remarks for this chapter.

5.2 Efficiency arguments in favour of social impact bonds

There is an expansive proponent literature, produced by a range of organisations such as government (Butler et al., 2013; Cabinet Office, 2017, 2006; HM Government, 2012, 2011a; Ragin and Palandjian, 2013); government affiliates (BSC, 2016a, 2016b; Social Impact Investment Taskforce, 2014a); think tanks (Brown and Norman, 2011; Joy et al., 2011; Liebman, 2011; Loder, 2011); consultancies (Clifford et al., 2013; Petrick, 2013; Social Finance, 2009, 2011a); and the non-profit sector (Griffiths and Meinicke, 2014; Marsh et al., 2011). In contrast, there is substantially less proponent literature of the academic variety.

The practitioner literature predominantly stems from the early period of SIBs, and assumes a pragmatic perspective with authors typically espousing a 'public sector reform' and 'financial sector reform' narrative (Fraser et al., 2018b, 2018a). The purpose of the 'reform literature' is to analyse how SIBs are being promoted. From the supply side, 'public sector reform' is located within broader theories of New Public Management, to bring rigour to social service interventions. From the demand side, 'financial sector reform' is located within broader theories of social entrepreneurship, aimed at attracting private finance to areas where public investment is lacking.

Empirical work on the actual performance of SIBs has been quite limited to date. For example, many of the early empirical studies were funded by government agencies keen to explore SIBs as an innovative option for public sector reform. Reflecting this reality, the studies are largely framed within the public sector reform narrative with an emphasis on how these services may foster innovation and improvements in social outcomes in policy areas where previous public or non-profit sector provision was deemed problematic (Fraser et al., 2018a). The studies are also useful for their conceptual development as they highlighted differences in the ways in which SIBs may be both structured and implemented (Fraser et al., 2018b).

SIBs are projected to unlock a range of benefits to government and the non-profit sector by responding to the issues facing traditional social service delivery. Proponents highlight their potential regarding more diverse stakeholders, generating better incentive structures in the delivery of social services, more efficiently allocating government welfare expenditure, and promoting innovative social service programmes, whilst shifting the financial risk to the private sector (Fox and Albertson, 2011). Gustafsson-Wright et al. (2015) identify ten distinct claimed advantages of SIBs, such as to crowd-in private funding, prioritise prevention, reduce risk for government, shift focus to outcomes, achieve scale, foster innovation in delivery, drive performance management, stimulate collaboration, build a culture of monitoring and evaluation, and sustain impact.

More generalised arguments are that SIBs generate new resources for unfunded preventative social programs, as well as promote efficiency and innovation in social service delivery and government operations more broadly (Dear et al., 2016; Liebman

and Sellman, 2013; Liebman, 2011). Social Finance, which designed the first SIB, states as its aim 'to improve social outcomes at reduced taxpayer expense, transfer performance risk from government to investors who might be more able to price and bear it, and reward high-performing nonprofits with long-term growth capital to scale proven innovations.' (2012a, p. 3).

Arguments focussing on four central claims made across the proponent public sector reform literature, regarding cost efficiency, the transfer of risk away from government and the non-profit sector, the fostering of innovation, and the tendency to crowd-in private funding are discussed next. These claims stress the cost and quality enhancing efficiencies of the SIBs themselves, alongside the funding aspects.

First, SIBs are designed to be cost effective as the delivery of preventative-style social services is anticipated to save future costs to government through a reduction in the need for crisis interventions (Callanan et al., 2012; Mulgan et al., 2011). Also, more specifically to the form of contracting, they are a way for government to save money by only paying for successful outcomes rather than blanket services (Rees, 2014). Therefore, it matters greatly that the outcomes payments in the contract be correctly structured (Dagher, 2013).

Key agents, such as the Ministry of Justice, Social Finance, Bridges Fund Management, and the Rockefeller Foundation have all made very clear claims that SIBs can create government savings (Ogman, 2016). ³² Should a SIB fail to reach the agreed social outcomes the government would be cash neutral, as they would not be obligated to repay the investors (Dagher, 2013). Transaction cost economics have been used to clarify the trade-off between a robust value case for government and the transaction costs associated with specifying an outcomes-based deal (FitzGerald et al., 2019; Pandey et al., 2018).

Second, SIBs are also said to foster innovation, which in turn leads to more efficient or higher quality programs. There are two lines of argument for enhanced innovation.

³² Bridges Fund Management was formerly known as Bridges Ventures LLP

One being that the redistribution of part, or all, of the financial risk of non-delivery away from government and service providers to the social investors, who bear the cost of unsuccessful interventions, enables service experimentation and innovation, rather than relying on standard and/or proven models of delivery (Callanan et al., 2012; Cooper et al., 2013; Disley et al., 2011; Leventhal, 2012; Mulgan et al., 2011). Whilst the British Government (2012) and Social Finance (2009) further stress that bringing market forces to bear on service providers previously funded by traditional government grants enables innovation in social services. Presumably, there are inherent flaws in non-profit firms styles of service delivery, impact-orientation, and accountability, which have hampered these in effectively tackling entrenched social problems.

Thus, advocates of SIBs promote the application of private sector management techniques and values, such as introducing market incentives and 'market discipline', to drive greater innovation and alleviate these problems (HM Government, 2013, 2011a; Liebman, 2011; Mulgan et al., 2011; Rizzello and Carè, 2016). Moreover, Callanan et al, (2012) describe social innovation as occurring 'at the intersection of the public, private, and social sectors', thus the opportunity offered by SIBs to merge public and private values is seen as advantageous. The combination of different agents in an SIB project is part of the innovation (OECD, 2016a).

Third, in traditional social service provision the government takes on the risk that the delivery of that service provision would prove unsuccessful, i.e., that positive externalities might not be achieved. Furthermore, in outcomes-based contracting models the service provider assumes the risk of non-payment should the service not reach the pre-agreed outcomes. However, with a SIB, some scholars argue, this risk is transferred to the investors, and it is this risk that investors accept in exchange for the potential returns (Callanan et al., 2012; Mulgan et al., 2011).

It has long been recognised that one of the major functions of financial markets is to provide opportunities for risk sharing (Arrow, 1964). This transfer is undertaken by the use of metrics, as these are what are measured to establish whether payment should be made, i.e., whether the risk has actually been transferred. Proponents of social value metrics argue that they help to guide resource allocation so that the outcomes produced in a programme or intervention are optimal (Yates and Marra, 2016).

Fourth, SIBs are designed to attract new private capital into supporting social service delivery, an area where public investment is lacking, thereby reducing the government's own capital requirements (Mulgan et al., 2011; Rizzello and Carè, 2016). These proposals are often linked to austerity, as social investment more generally provides services in a time of austerity using private revenue to counteract fiscal consolidation, enabling governments to fulfil their responsibilities more effectively (JP Morgan et al., 2010; Social Impact Investment Taskforce, 2014b; Warner and Clifton, 2014).

Empirical work undertaken by Gustafsson-Wright et al. (2015), Hajer (2018), and Rizzello and Carè (2016) present evidence that SIBs are attracting capital from traditional grant makers such as foundations, and new investors including banks, pension funds, insurance companies, and specialist fund managers, thus adding to the total amount of private funding for social services.

5.3 Theoretical underpinnings

To assess the efficiency claims appropriately, it is important to consider SIBs within the approach of mainstream agency theory, to which they properly belong. Economists have highlighted that if SIB contracts are to be efficiency-enhancing solutions, relative to alternative procurement models, they must have advantages in addressing principal-agent problems (Hajer, 2018; Pauly and Swanson, 2017; Wong et al., 2016).

These problems arise because the contracted agents are assumed to put their own interests first, which in the presence of asymmetric information (in addition to *divergent goals* and *outcome uncertainty* which are dealt with separately below) provides an opportunity for the agent to take advantage of the principal. As SIBs involve the state, the private sector and the non-profit sector, this section focuses on how SIBs fit into a three-sector economy from this mainstream perspective.

i. Social services: merit goods and market failure

Pauly and Swanson (2017) posit SIBs as a form of public good production, that has both public and private dimensions. However, there is an argument that some of the goods that governments in advanced countries allocate could be more accurately

labelled as merit goods, rather than pure public goods (Fiorito and Kollintzas, 2004). The history of SIBs in its early phase seems to point to some characteristics qualifying them as merit goods.

The concept of merit goods was originally introduced by Musgrave (1959, 1956) as 'merit wants' in the theory of public finance, and in the 1960s such goods and services came to be known as merit goods. They have some features of a private good, because they are both excludable and rivalrous, but they generate strong positive externalities when they are consumed, similar to a public good. Examples of merit goods include vaccinations, housing for the poor, free school lunches and non-tertiary education (Musgrave, 1959, 1956).³³

A merit good would be under-supplied and under-consumed in a free-market economy driven by traditional notions of consumer sovereignty, despite its virtues. This may lead to individuals making sub-optimal choices at the detriment of their own well-being. If a government is dissatisfied with the level of consumption of such goods in the free market, it may intervene to increase consumption if they are deemed of high social importance, even against the wishes of consumers.

By distributing merit goods as a form of in-kind good, the government is involved in a paternalistic intervention that does not respect consumer sovereignty. A consumer is "sovereign when, in his role of citizen, he has not delegated to political institutions for authoritarian use the power which he can exercise socially through his power to demand (or to refrain from demanding)" (Hutt, 1936, p. 257). The paternalistic nature of merit goods led economists such as Buchanan (1960) to repudiate the concept in favour of the concept of externality to conceptualise any form of interdependency. Buchanan questioned the legitimate extent to which government action should extend, stressing that all government action should aim at fulfilling the interests of only the individuals concerned.

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³³ Non-tertiary education is education at the primary and secondary levels. Tertiary education is provided by universities and other higher education institutions following secondary schooling, and in countries such as the United Kingdom and United States is not wholly provided by the government and free of cost to the recipient.

The particular type of merit good a SIB delivers is a social service. Social services are characterised by four main attributes that could lead to market failure, which are externalities, agency problems, informational asymmetries, and distributional concerns (Blank, 2000). In many social service areas, such as education, health, and child care, these four market failures occur in tandem (Poterba, 1996).

It has been argued that in such cases the mainstream presumption in favour of the unregulated private market will no longer hold and government involvement may result in a better outcome (Greenwald and Stiglitz, 1986; Sappington and Stiglitz, 1987).³⁴ However, if there are both agency and distributional problems, as well as positive externalities, then privatisation via 'contracting-out' may be viable as long as the government has the ability to observe and monitor quality (Blank, 2000). This is due to the nature of social services, as the consumer may care more about the quality of services than their price, and if quality is readily observable, the government can regulate non-state providers to ensure standards are met (Blank, 2000).

ii. Social impact bonds from the perspective of agency theory

Although SIBs provide social service programmes, the delivery of which is contracted out to a third-party agent through conventional contracting, there is a significant uniqueness to SIB contracts. Compared to conventional contracting out, and certainly compared to the direct delivery of services by government, undertaking a social service programme via a SIB is more complex as there are additional parties present. There is no longer a direct relationship between the government and the social service provider.

SIBs inject both a financial incentive and accompanying use of monitoring into the delivery of the social service programme. In line with other public sector contracts, such as public-private partnerships or contracting for social services, the complexities that arise due to these circumstances in a SIB can be examined through agency theory

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³⁴ Blank (2000) notes that there is little formal modelling of the decision framework for deciding on the appropriate involvement of government in a market characterised by the market failures common in the social service sector. An important exception is Hart et al. (1997).

(e.g. see Hajer, 2018; Pauly and Swanson, 2017; Puyvelde et al., 2012; Van Slyke, 2006; Wong et al., 2016).

The presence of agency issues have been widely witnessed in different academic fields with connections to SIBs, such as economics (Jensen and Meckling, 1976; Ross, 1973; Spence and Zeckhauser, 1971), political science (Hammond and Knott, 1996; Weingast and Moran, 1983), and finance (Fama, 1980; Fama and Jensen, 1983; Jensen, 1986).

Within the field of economics, Jensen and Meckling (1976) integrate elements from the theory of agency, the theory of property rights and the theory of finance to develop a theory of the ownership structure of the firm. Whilst, Ross (1973) introduces the study of agency in terms of problems of compensation contracting, and clearly identifies the agency problem as generic in society, not merely as a problem in the theory of the firm. Meanwhile, Spence and Zeckhauser (1971) examine decision making under different information states, and propose a theory of optimum insurance provision in contingent claims markets.

In political science, Hammond and Knott (1996) present a formal model of multi-institutional policy-making examining the role of agency in the control of bureaucracy. Similarly, Weingast and Moran (1983) test two opposing approaches about regulatory agency behaviour in the United States, of agencies operating independently of the legislature versus Congress controlling agency decisions.

In finance, Fama (1980) uses agency theory to explain how the separation of security ownership and control, typical of large corporations, can be an efficient form of economic organisation. Alternatively examining the separation of ownership and control Fama and Jensen (1983) analyse the survival of organisations in which decision agents do not bear a major share of the wealth effects of their decisions. Whilst Jensen (1986) examined the role of debt in reducing the agency costs of free cash flow.

Agency theory broadened the earlier risk-sharing literature, which focussed on cooperating parties with differing attitudes toward risk (e.g. see Arrow, 1971; Wilson,

1968), to include the agency problem that occurs when cooperating parties have divergent goals and differing roles (Jensen and Meckling, 1976; Ross, 1973).

As such, agency theory presents a theoretical framework for structuring and managing contract relationships, which explain the behaviours of the principal and the agent. A principal-agent relationship can be defined as 'a contract under which one or more persons (the principal[s]) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent' (Jensen and Meckling, 1976, p. 308). The entities participating in the principal-agent relationship are not restricted to an individual person, but can also comprise groups of people, or as in the case of SIBs an enterprise or the state (Chrisidu-Budnik and Przedańska, 2017).

The principal-agent relationship should reflect an efficient organisation of information and risk-bearing costs (Eisenhardt, 1989a). When these do not align there is a principal-agent problem. Applying such theoretical insights in the context of SIBs, it can be argued that in a SIB that, acting as principal, the outcomes payer delegates the design, financing, and delivery of the social service to multiple agents, both non-profit firms and for-profit firms, but cannot fully observe how they allocate their resources (Loxley and Hajer, 2019; Maier and Meyer, 2017; McHugh et al., 2013; Pandey et al., 2018; Pauly and Swanson, 2017; Stid, 2013; Wong et al., 2016).

Central to principal-agent theory, and at the heart of SIBs is the trade-off between the cost of transferring risk to the agents, the cost of measuring the social outcomes, and the cost of measuring the agent's behaviour (Eisenhardt, 1989a). The principal-agent problem exists when these different agents, being imperfect agents of the outcomes payer, act to maximise their financial return at the expense of the outcome payers' interests. Thus, it is argued that SIBs exacerbate the principal-agent problem that government's face compared to conventional contracting out. Attributable to the large number of agents involved, all with differing motivations, plus conflicting goals of balancing the payment of fees and profits with generating enough savings for government (Maier and Meyer, 2017; Stid, 2013).

Examining the central tenets of the principal-agent problem, with specific regard to

SIBs, unveils there are diverging goals and aligning interests, outcome uncertainty and risk sharing, informational asymmetries and monitoring requirements, and agency costs.

a) Diverging goals and aligning interests

Agency theory assumes that there is goal divergence between the principal and agent (Eisenhardt, 1989a). As outlined in chapter three, SIBs involve a broad range of different agents, all of whom will have different goals and motivations compared to the principal. The goal of the government, as principal, is to implement a successful SIB which achieves its policy objectives. The objectives of the agents include intermediaries who manage the SIB, specialists who provide technical advice to set up and monitor the project, and service providers who deliver the social service programme. The agents contracted to these roles can be for-profit firms or non-profit firms (e.g. see Gustafsson-Wright and Gardiner, 2015; Hajer, 2018). There are also another set of agents who invest capital in the project, similarly these can be both for-profit firms and non-profit firms, but also individuals (see e.g. Gustafsson-Wright et al., 2015; Hajer, 2018; Rizzello and Carè, 2016). The motivations of these investors are different from those agents contracting for the afore-mentioned roles, as investors are motivated by both financial and social return.

Thus, the concept of interests is fundamental to both agency theory and SIBs (Maier and Meyer, 2017). These interests correspond to the principal and agents' utility function, which may take on any form, representing any kind of preferences. If all parties seek to maximise their utility function, then the agents will not always act in the best interest of the principal (Jensen and Meckling, 1976).

For-profit firms, whether they are publicly or privately held, are motivated by profit. As such, they have incentives to divert funds to owners, whilst the incentives or the ability to monitor this diversion are lacking (Hansmann, 1987, 1980). With regards to the delivery of social services programmes, the difficulty in monitoring performance due to informational asymmetries may lead the profit-making firm to provide inferior goods at excessive prices. Thus, for-profit firms have both the incentive and the opportunity to exploit the customers ignorance and weakness (Hansmann, 1987, 1980).

In contrast, non-profit firms are more inclined to share goals with government, and as such may be more reliable contract partners for the provision of social services (Hansmann, 1987; Salamon, 1995). Hansmann (1986) argues that the expectation of contract failure, which could affect the trade-off between efficiency and quality, explains why tasks such as the delivery of social service programmes are more suited to non-profit firms rather than for-profit firms. Non-profit firms may be perceived as more trustworthy because they have a 'non-distribution' constraint that prevents them from sacrificing quality for private profit. ³⁵ As such, compared to private firms, there may be fewer incentives for them to engage in opportunistic behaviour. ³⁶

Additionally, as Brown et al (2003, 2006) and Huque (2005), amongst others, have highlighted, a non-profit firm might draw on its own private philanthropic resources, such as volunteers and endowments, to augment services it delivers under government contract. A non-profit firm may also be assumed to be reinvesting its surplus in providing higher quality services rather than in enriching the owners as well as eliciting more 'caring' behaviour from its employees.

However, it has also been found that non-profit firms that hold a monopsonistic position in local social services markets begin to behave like conventional monopolists in order maintain their resource streams (Van Slyke, 2006). This has been attributed to a lack of consistent monitoring and effective oversight on the part of the government as principal for non-profit agents under long-term contractual obligations.

Like in a SIB, relationships in which the principal and agent have partly differing goals and risk preferences, but engage in cooperative effort, can be problematic. In order to optimise such a contract, the self-interested behaviour of agents needs be realigned to focus on the goal of the principal. In agency theory the principal may restrict interests

³⁵ Hansmann's use of the non-distribution constraint is widely accepted as a way to characterise non-profit organisations: '[T]hey are subject, by the laws of the state in which they were formed, to a constraint [...] that prohibits the distribution of residual earnings to individuals who exercise control over the firm, such as officers, directors, or members.' (1987, p. 28).

³⁶ It should be noted that in some circumstances inefficiency itself is viewed as a signal of 'caring' or higher quality services (Schlesinger, 1998) as organisations that are willing to provide this type of caring behaviour may face higher employment levels and labour costs than is strictly necessary for the minimal provision of the service, but may be judged higher quality providers.

that are divergent from their own through the coalignment of incentives (Eisenhardt, 1989a; Jensen and Meckling, 1976).

One of the key arguments in the SIB literature that has been alluded to earlier is that a well-defined SIB creates an incentive structure that aligns the interests of governments, investors and the social service provider (Dear et al., 2016; Giacomantonio, 2017; Goodall, 2014; Social Finance, 2012a). SIBs align these interests by incentivising the attainment of a pre-agreed set of social outcomes, but the principal and each of the agents maintains their own set of preferences and interests (Maier and Meyer, 2017).

The use of incentives and sanctions between principal and agent is also used within conventional social service contracting, where sanctions can include the withholding of service delivery payments or organisational performance bonuses (e.g. see Laffont and Martimort, 2002; Self, 1993; Walsh, 1995). The return of principal amount plus interest is considered the optimum incentive relationship between an outcomes payer and an investor in SIBs. Therefore sanctions could include non-payment of either to investors (see e.g. Gustafsson-Wright and Gardiner, 2015; Hajer, 2018).

As Maier and Meyer (2017) rightly observe, making payment to the investor dependent on the achievement of social outcomes, and imposing rigorous outcome evaluations, makes what would otherwise have been a game based on incomplete information into a multi-round game based on more complete information. Other agents can also face sanctions, such as the non-payment of success fees to service providers and/or intermediaries (see e.g. Gustafsson-Wright and Gardiner, 2015; Hajer, 2018).

b) Outcome uncertainty and risk sharing

Agency theory also assumes that whilst the principal and agent are engaged in cooperative behaviour, they have differing attitudes toward risk, with an agent deemed to be more risk averse than the principal (Brown et al., 2006; Eisenhardt, 1989a; Nyman et al., 2005). As both parties operate in an uncertain environment risk sharing is desirable. There is outcome uncertainty from, for example, the fact that a SIB is meant to use an innovative service delivery, which is perhaps untested. This exists alongside the risk of an exogenous shock, from governmental policies or a changing

economic climate for example, which may cause uncontrollable variations in outcomes (Eisenhardt, 1989a; Stan et al., 2007).

The dual factors of outcome uncertainty and differences in risk attitude influence contracts between principal and agent (Eisenhardt, 1989a). The level of risk absorbed by the agent for undertaking the work of the principal requires compensating for, and each agent will have its own perception of the risk-reward trade-off. In a SIB this is magnified due to the multiple agents contracted to the principal.

With regards to the optimum contract between the principal and the agent, agency theory suggests two underlying strategies of control, behaviour based and outcome based (Eisenhardt, 1989a). When a principal is buying the agent's behaviour rather than sharing risk, a contract that is based on behaviour is most efficient (Eisenhardt, 1989a). This type of contract does not require any incentives. In a SIB this represents, for example, a fee in return for a professional service. This could be a set fee in return for intermediation, the delivery of a service, or specialist technical assistance such as accountancy, legal or evaluation.

A contract can be based on outcomes as well. The crux of an outcome-based contract rests on aligning the agent's preferences with those of the principal to motivate behaviours, at the price of transferring risk to the agent based on the level of outcome uncertainty (Eisenhardt, 1989a). The costs of shifting risk to the agent are low when outcome uncertainty is low and outcome-based contracts are attractive. However, when uncertainty increases, it becomes progressively expensive to shift risk despite the motivational benefits outcome-based contracts can carry (Gomez-Mejia et al., 2005; Nyman et al., 2005).

The type of behavioural changes within the beneficiaries that SIBs seek to undertake are, by their very nature, difficult to quantify. This leads to a problem as outcomes that are difficult to measure are less suited to outcome-based contracts (Eisenhardt, 1989a). An example of this type of problem could be of SIBs attempting to initiate behavioural change, which is inherently difficult to measure, into quantifiable outcomes.

The agents acting as investors may also seek to diminish their level of risk with the

aim of limiting the downside risk to a portion of the overall SIB investment (Dagher, 2013). This can be done in four ways, two of which require the principal to retain some of the risk, and two which see the redistribution of risk amongst the agents.

First, this can be done by reducing the level of risk the investor shares with the government. This occurs when the outcomes payer offers capital protection to investors, for example, by having fixed coupon payments in the earlier years of a SIB, typically before the performance periods commences. Second, termination rights in the contract mean that the investor can be released from the contract early. Third, the risk can be shared amongst the investors through the use of senior and subordinate investments. Fourth, investors can share part of their risk with a third party, for example through the use of a guarantee which is laid by an external party such as a foundation.

c) Informational asymmetries and monitoring requirements

Mainstream agency theory assumes that the agent operating on behalf of the principal has the informational advantage (Oliveira and Filho, 2017). In a standard principal-agent relationship the principal has imperfect information about the actions of its agents, and the consequences of these actions. This means agents can exploit these asymmetries for self-gain instead for the collective interests of the contracting parties, in turn leading to problems of adverse selection and moral hazard. As a result, this asymmetric information can impact both the efficiency and the quality of outcomes. The crux of the problem being the principal's inability to verify that the agent has behaved appropriately (Eisenhardt, 1989a). However, the rational outcomes payer is aware of this incentive and monitors the programme.

Due to the nature of the informational asymmetries, there are several possibilities for contractual hazards and opportunistic behaviour, both *ex-ante* and *ex-post*. The principal-agent relationship in a SIB leaves room for opportunistic behaviour *ex-ante* through adverse selection. This can occur when a principal is unable to gather sufficient knowledge about an agent's background, motivations, or verify their capabilities prior to entering into a contractual relationship (Nyman et al., 2005; Perrow, 1986). Consequently, the principal runs the risk of purchasing a service of inferior quality. As this can pose particular problems in any contracting situation, considerable attention is required to ensure that the potential for adverse selection

related difficulties can be duly mitigated.

Those same relationships also leave room for opportunistic behaviour by multiple agents *ex post*, where they may be incentivised to partake in moral hazard. Since it is impossible for the principal to monitor all the agent's actions, moral hazard appears during the performance of the contract and refers to lack of effort on the part of the agent (Brown et al., 2006; Gauld, 2007; Moe, 1984). Therefore, the principal is unable to identify the relationship between the agent's effort and the result achieved, meaning an agent in the contract can use information and expertise and act opportunistically, to the exclusion of the pre-agreed contract goals.

d) Agency costs

The problems arising from an agency relationship, as just discussed, impose agency costs for the principal. These costs are higher the more divergent the interests, objectives and values of the principal and agent are. Jensen and Meckling (1976) define agency costs as the sum of monitoring costs, bonding costs, and residual loss. Monitoring costs are those costs borne by the principal in order to control the agent, whilst bonding costs are borne by the agent in order to build his own credibility and convince the principal of their commitment. The residual loss is the opportunity cost of the loss of efficiency, which is due to misalignment of utility, given the divergent nature of the parties objectives, and the difficulty in controlling the agent's activities.

The issue of agency costs is particularly pertinent to SIBs given the delivery of the social service programme is supposed to save the government enough money to offset the costs of running the SIB, including the repayment of investors for the social outcomes achieved. They are also exacerbated by the complex contracting structure.

In agency theory information is regarded as a commodity, and this imparts a prominent role to formal information systems and monitoring mechanisms which act as contractual safeguards against opportunistic behaviour from agents (Eisenhardt, 1989a). This entails the outcomes payer being required to invest in information systems to monitor the agents, which means incurring agency costs. In SIBs this is exacerbated due to the additional agents generally not present in conventional contracts (Pandey et al., 2018; Van Slyke, 2006). Instances where the complexity of

arrangements increase agency costs then this becomes counterproductive to the SIB.

iii. Contract optimisation

From an economic point of view, it could be contended that the agency relationship is one which is strictly an optimisation issue. The unit of analysis which governs the relationship between the principal and the agent is the contract. Therefore the aim of agency theory is to determine the most efficient contract under varying levels of outcome uncertainty, risk aversion, information, and other variables (Eisenhardt, 1989a). Whilst finding ways to minimise agency costs which are higher due to the divergent interests, objectives and values of principal and agent (Chrisidu-Budnik and Przedańska, 2017). The desired end goal is maximisation of the principals' objectives, contributing to a more efficient and effective policy and service delivery outcomes.

Optimisation requires informational asymmetries to be reduced and/or agents activities to be consistent with the principal's expectations, rather than the principal and agent pursuing their own objectives (Laffont and Martimort, 2002). The resulting collaboration between the principal and agent would create a complete contract, but this is the first-best outcome and unlikely to occur. To borrow the words of Eisenhardt (1989a), the objective of optimisation therefore is to form the agency relationship in such a way as to achieve the second-best outcome, which is a result that is as close as possible to the first-best outcome.

There are three pure theoretical contributions to determine the most efficient contract and better understand the characteristics of SIBs when compared with more conventional service delivery contract structures (Hajer, 2018; Pauly and Swanson, 2017; Wong et al., 2016). Both Pauly and Swanson (2017) and Wong et al. (2016) highlight how the payment-by-results contract structure offers incentives for greater non-contactable effort levels because the potential financial loss to the agents motivates effort. Hajer (2018) builds on these ideas but suggests an additional source of efficiency is to be found in the bundling of contract components which generates a more optimal level of upfront investment in design and possibly in capital asset quality. Whilst Pauly and Swanson (2017) and Wong et al. (2016) assume the government is risk averse and the private sector agents risk neutral, Hajer (2018) adopts the reverse

assumption, with a risk neutral government but risk averse investors, which is a more conventional public finance assumption.

Wong et al. (2016) focus on the perceived underperformance of non-profit sector delivery agents and how specific incentives built into SIB contracts can mitigate against this eventuality. Using a principal-agent multi-tasking framework, where investors are rational and able to obtain hard information on non-profit sector service agents performance, Wong et al. (2016) theoretically and experimentally compare SIBs to both input-based and performance-based contracts.

Input-based are contracts based on a piece-rate mechanism, and performance-based contracts on a non-binding bonus mechanism, whilst the SIB has the presence of an investor supervising the non-profit sector service delivery agent. The results indicate that SIBs can alleviate the underperformance of non-profit sector agents and outperform both other contracts because of their perfect enforceability. That is, through tying the private returns of investors to the success of the social programme. However, this enforceability leads the government to lose control of a service provider's payoff to the investors.

Similarly, using methods for engaging private resources in the provision of public goods, Pauly and Swanson (2017) examine the conditions under which a SIB would lead to superior outcomes compared to a standard performance-based contract. They consider how the traditional combination of fundraising through donations and market-based debt differs to a SIB where an altruistic investor exerts greater effort than a traditional donor, contributing effort to programme improvement, given that the investor's own funds are at risk.

Modelling 38 early SIBs implemented by 2015, Pauly and Swanson (2017) found that SIBs do not produce any difference in outcome when compared to standard financing arrangements with private non-profit firms. Their findings suggest that a SIB is unlikely to lead to greater success unless investors' can positively influence the outcomes through their own effort.

This outcome is similar to the insight presented by Wong et al. (2016) on the basis of

the financial incentives facing the investor, and resting on the assumption that because investors have both the incentive and the ability to increase programme quality that the government lacks, the SIB contract can inherently generate superior outcomes.

Moreover, Hajer (2018) draws upon the incentive or contract theory framework in PPP models to explore the perceived enhanced efficiency in SIBs. As discussed in chapter two, SIBs are similar to the PPP model of public infrastructure delivery, and share attributes such as the bundling of private upfront investment and financing with design and ongoing service provision in a single contract (Gustafsson-Wright et al., 2015; Loxley, 2013; Loxley and Puzyreva, 2015; Tse and Warner, 2018; Warner, 2015; Whitfield, 2015).

Hajer (2018) uses two key concepts from earlier PPP studies. First, that in the presence of asymmetric information, the bundling of project components allows a greater unobservable effort to be extracted from the agents (lossa and Martimort, 2015; Pouyet and Martimort, 2008). Second, the presence of incomplete contracts means this delegated contracting structure increases the potential for quality shading (Bennett and Iossa, 2006; Hart, 2003).

Thus, Hajer (2018) includes both quality enhancement through bundling project components and quality shading efforts in his model, unlike the aforementioned models by Wong et al. (2016) and Pauly and Swanson (2017). Hajer finds that under the above conditions SIBs can offer several benefits. First is optimal investment in design quality. Second, a reduction in the cost of hiring private agents due to the accrual of corporate social responsibility benefits. Other benefits include an internalisation of externalities, albeit often partially, resulting from the efforts of the contractor to improve the verifiable design quality of the social programme.

However, highlighting the benefits does not mean ignoring the potential risk of incremental costs that can be significant and include higher financing costs. The challenge of greater quality shading is also worth mentioning, alongside any potential compensation of risk averse agents for taking on risk, newly generated monopoly rents and greater administration costs (Hajer, 2018).

Ultimately the model indicates that SIBs are likely to be more efficient when agents are less risk averse relative to government. In those cases, they tend to obtain a high corporate social responsibility benefit, and the net marginal impact of quality enhancements tend to be large relative to the impact of quality shading. Therefore, as per the argument above one may conclude that the bundling of positive externalities, a better resolution of principal-agent problems, and outcomes-based payment are the sources of potential welfare gains under SIBs.

5.4 Empirical contestations

As the early SIBs are reaching completion and data is becoming available, empirical work has been undertaken to address whether the underlying institutional and behavioural assumptions of SIBs discussed above hold in practice. The literature typically finds that, whilst SIBs can fit into the mould of the principal-agent theoretical construct, the underlying assumptions of the approach are not self-evident, creating doubts as to efficiency-based explanations of SIB emergence (Fraser et al., 2018a; Hajer, 2020; Joy and Shields, 2013; Loxley and Hajer, 2019; Ryan and Young, 2018; Sinclair et al., 2019).

Contradictions have been identified between theory and practice that evidence contract failure leading to problems of cost and quality, and doubts have been raised regarding the true level of risk transference between the outcomes payer and investors e.g. (Azemati et al., 2013; Hajer, 2018; Neyland, 2018; Tse and Warner, 2018; Vecchi and Casalini, 2019).

Several of the criticisms raised in the literature are reviewed next, drawing upon the theoretical and analytical framework of agency cost, risk transference, moral hazard, and goal divergence.

i. Agency costs

The proponent narrative, as discussed in section two, is that the superiority of the SIB model relies on hypothesised efficiencies being realised and being sufficient to offset any incremental costs (e.g. see Butler et al., 2013; Cabinet Office, 2017, 2006; HM Government, 2012, 2011; Ragin and Palandjian, 2013). Maier et al. (2018) assert that

this is inherently problematic because, although they promise cost savings, SIB transactions are very expensive due to uniqueness of each project and the complexity of the negotiations. Following empirical work on institutional investors, Del Giudice and Migliavacca (2019) found SIBs to be relatively complex instruments, with the incentives of the multiple stakeholders potentially difficult to align. As outlined in the previous section the principal-agent problem can lead to agency costs which may hinder cost efficiencies.

Despite the promises of cost efficiency, there is a consensus in empirical work that the transaction costs and administration costs, which include the direct and indirect costs attributable to developing the model itself in addition to the cost of monitoring, have been high and significant (Edmiston and Nicholls, 2017; Fraser et al., 2018b; Joy and Shields, 2018; KPMG, 2007; Maier and Meyer, 2017; Neyland, 2018; Tan et al., 2015; Tse and Warner, 2018; Warner, 2013; Whitfield, 2015; Williams, 2018). Tan et al. (2015) point out that costs are especially complicated to calculate in the absence of (quasi) experimental impact evaluations.

There is empirical evidence strongly to support the claims regarding cost efficiencies. McKay (2013) evaluated a number of risk-cost scenarios in a proposed SIB in Maryland, aimed at reducing recidivism, and concluded that the government would increase operational risks by using a SIB model due to increased transactions costs and greater contractual complexity. Looking at an actual recidivism SIB, the first SIB at Peterborough Prison, McKay adds that estimates of the fixed development and management costs were very likely to exceed any marginal cost savings gained through the outcomes.

Applying transaction cost economics to the same SIB at Peterborough, FitzGerald et al. (2019) found that whilst it achieved the specified decrease in reconvictions, the transaction costs were considerable. Both Disley et al. (2015) and Neyland (2018) found that prolonged negotiation periods notably increase transaction costs. Based on the study of a specific health SIB Lowe (2020) finds SIBs so complex that it is questionable whether a generic contacting mechanism can be found to reduce set-up costs.

There is no assurance that even when a SIB is successful the cost savings from the intervention will be enough to offset the cost of the SIB. As a consequence of this Azemati et al. (2013) estimate that a SIB contract must be worth at least USD 20 million (GBP 12.6 million in 2013) to cover the fixed overhead costs such as legal fees, intermediary and investor costs, plus evaluation expenses. In light of this, FitzGerald et al. (2019) highlight a critical problem with existing British SIBs, since their contract values range from approximately GBP 0.5 million to GBP 8 million.

Moreover, Tan et al. (2015) indicate that savings might not be realised even if social outcome targets are met, raising questions around SIB cost effectiveness compared to alternative delivery models. Commissioners might end up paying more than if they had commissioned the service in a more conventional way. As Hajer (2018) observes, whilst paying for success may be true by construction in a SIB, this is not necessarily optimal especially where higher agency costs, through compensation to agents and provision of informational systems, ends up outweighing any incremental benefit to government.

Further complicating matters and adding to the agency costs, Pauly and Swanson (2017) suggest that risk calculations are likely to be highly context-specific, making it difficult to benefit from the accumulation of past experience in SIB investing, and thereby maintaining the complexity of the process of establishing SIBs. The incremental costs to the principal, as discussed above, include the compensation of risk averse agents for taking on risk (Hajer, 2018).

ii. Informational asymmetries

a) Adverse selection

There is evidence of a lack of clarity at the design stage regarding the choice of outcome metrics. Social Finance (2011a) deem the two criteria for a successful SIB to be measurable outcomes and a comprehensive contract based on expected outcomes. However, the quantification and measurement of social outcomes can be a thorny issue, as social outcomes are notoriously difficult to measure (Berndt and Wirth, 2018; Sinclair et al., 2014). Therefore, selecting outcomes at the contract stage is extremely important. However, there has been found to be a somewhat inevitable

lack of clarity and standardisation. For example, in a report by Social Finance (2012b) school grades were only regarded as an 'output' metric and could not be used as an outcomes measure. However, two years later another Social Finance (2014a) report advised school grades were considered a surrogate 'outcome' and therefore suitable for triggering investors payments.

As to whether there are improved social outcomes compared to existing non-profit sector delivery models, there are concerns about the difficulties of attributing change through measurement (Fox and Albertson, 2011) or relying on narrow forms of measurement (Big Lottery Fund, 2014). Hajer (2018) cautions that it is difficult to compare like-for-like because the two sectors do not have the same resources and are rarely studied under similar circumstances, thereby casting doubt on the reliability of improved social outcomes claims.

b) Moral hazard

Another criticism is that opportunist behaviour by some agents has also been reported, with informational asymmetries being exploited to achieve social outcomes. This in turn has triggered outcomes payments when they might not otherwise be realised.

Due to the principal-agent problem and information asymmetries, the government may be shielded from full knowledge, creating opportunities for collusion between investors, providers, and intermediaries. Especially as the intermediary and private investors have strong incentives for positive evaluation results, as their expected payment is at risk. This has led to concerns that gaming problems and the displacement of intrinsic motivation may lead to success, and therefore investor payout, being achieved through the generation of negative externalities (Warner, 2013).

Maier and Meyer (2017) warn that inadequate outcome measures may create perverse incentives, displacing the previous interests of the service provider to the detriment of their beneficiaries. These include selecting higher performing participants with the best chances of meeting the target whilst those who are worse off and are unlikely to hit target thresholds are underserved (Carter and Whitworth, 2015; Cox, 2011; Fox and Albertson, 2011; Maier and Meyer, 2017; McHugh et al., 2013). As Cox (2011) points out, this is counterproductive because it excludes the individuals who

are costing taxpayers the most money, leaving the underlying social need unaddressed.

Whilst reviews of some early SIBs found no notable opportunistic behaviour (Farr, 2016; OECD, 2016b) there is empirical evidence which refutes these claims in other SIBs. Increased informational asymmetries leading to higher performing participants being selected were reported in the very first SIB in Peterborough Prison (Gustafsson-Wright et al., 2015; McHugh et al., 2013).

It appears this outcome was seen as inevitable as Harvie and Ogman (2019) report the general secretary of the Prison Governors' Association warned those running the scheme 'not to "cherry-pick" the least difficult offenders and leave the hard-line cases to the prison and probation services'. Several other instances have been reported, including the Sweet Dreams SIB in Saskatoon, Canada; the Benevolent Society Bond in New South Wales, Australia; and the Early Childhood Development SIB in Utah, United States (Loxley, 2017; Tse and Warner, 2018).

There is also evidence of investors pressurising service providers to select the beneficiaries with the highest chances of meeting a target whilst leaving out those likely to miss the target. In a review of four SIBs in the United Kingdom, Edmiston and Nicholls (2017) report agencies indicating that they had to take "measures to 'insulate' their front-line staff from the influence of certain social investors" to avoid the promotion of "dysfunctional practices" (2017, p. 65).

iii. Lack of risk sharing

Despite the emergence of markets in SIBs that should allow for further risk sharing, evidence shows that investors are not completely bearing the risk of achieving the social outcomes involved (Dagher, 2013; Hajer, 2018; Vecchi and Casalini, 2019).

a) Lack of innovation

One criticism has been that SIBs are principally either replicating or scaling-up existing proven interventions, not delivering the innovative services they promise (Arena et al., 2016; Carter et al., 2018; Edmiston and Nicholls, 2017; Gustafsson-Wright et al., 2015;

Heinrich and Kabourek, 2019). This lack of innovation in service design has been attributed to the risk profile of investors, given that it is rational to implement a proven programme compared to a novel and untested approach, when capital is at stake and particular as unproven programmes carry additional risks (Dagher, 2013; Maier et al., 2018; Tse and Warner, 2018). Indeed, an analysis of SIB press releases has found that the prioritisation of social investment and collaboration discourses privileges the role of investors, diminishing the role of service providers as innovators (Ormiston et al., 2020).

Whilst the financing mechanism of SIBs is innovative and performance management within service provider agencies is being reformed, it is unclear that this has led to better social outcomes (Carter et al., 2018; Edmiston and Nicholls, 2017; Fraser et al., 2018b).

b) Consistent repayment

These incidents raise questions regarding the real level of risk that investors are absorbing in exchange for their potential returns (Gardiner and Gustafsson-Wright, 2015). Hajer (2020, 2018) and Del Giudice and Migliavacca (2019) find that SIBs have been repaying investors consistently and the expected returns are significantly higher than the current average market returns and in excess of conventional government borrowing costs.

In fact, Hajer's analysis of 35 SIBs with a known repayment status, found that 26 had either repaid investors in full or were on track for full repayment based on available public reports, whilst a further 8 were partially repaid (2018, p. 88). Hajer also found average returns were 6 percent per annum for expected rates of return, and 8.8 percent per annum for maximum rates of return (2018, p. 90). ³⁷ A much larger sample size using data based on investment rates, maximum outcome payments and contract length, found the average estimated maximum rates of return increased to

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³⁷ These were for self-reported SIBs on the Social Finance Impact Bond database (Social Finance, 2020)

17.7 percent (2018, p. 90).

As Fraser et al. (2018a) note, this suggests that private sector investors may be more risk-averse than some SIB proponents have claimed, and are likely to require government or philanthropic funds to guarantee, or underwrite their investment, to reduce their financial risk.

iv. Goal divergence

A final important argument does not relate to goal divergence between the principal and agent, but rather from the principals' original goal. That is the goal of achieving additional funding for the delivery of social service programmes from new private sources.

Despite the empirical evidence showing a variety of both traditional and new sources of finance (Gustafsson-Wright et al., 2015; Hajer, 2018; Rizzello and Carè, 2016), questions have been raised about whether these truly represent additionality or simply a shift in assets under management (Fraser et al., 2018a; Gustafsson-Wright et al., 2015). In other words, does philanthropic investment really signal new investment or are these funds that would have been contributed towards similar services, just as a grant rather than an investment. Likewise, would funds be granted to the non-profit sector to undertake similar work under corporate social responsibility schemes had they not been invested in a SIB.

These issues aside, Gardiner and Gustafsson-Wright (2015) and Gustafsson-Wright et al. (2015) propose the alternative view that because the government ultimately pays for successful SIBs, this capital constitutes new finance, not new funding, thus SIBs are actually just solving a liquidity problem for government by providing upfront capital. Hajer (2018) further argues that any efficiencies that do materialise should not be attributed to this 'new money', but rather to the contract design. Presumably, SIB contracts can better align incentives and therefore investment in quality design of the project is closer to the optimum and accounts better for lifetime total project costs.

5.5 Concluding remarks

As argued in the preceding sections, for SIBs to produce an efficiency gain in the contract theory framework the greater investment in design and service quality needs to offset all added costs. In other words, SIBs must generate service quality improvements or innovation relative to conventional commissioning. There are four central claims made by SIB proponents, which are their ability to be more cost effective; ability to foster innovation; the transfer of risk away from government and the non-profit sector; and to crowd-in private funding.

Whilst it is claimed by proponents that the SIB model has the potential to deliver superior social outcomes by better addressing incentive and agency issues, what has emerged from the theoretical literature and empirical evidence analysed in this chapter is that SIBs are relatively complex instruments that involve multiple stakeholders whose incentives are potentially difficult to align. Conversely, its detractors argue that the complex nature of their contracts exacerbates the agency problems.

There is substantial goal conflict between principal and agents, such that agent opportunism is likely. Whilst at the same time the outcome uncertainty is sufficient enough to trigger the risk implications of the theory. Especially given that SIBs are designed to implement innovative social service programmes, that in addition to being untested are also vulnerable to exogenous shocks such as public social policy changes or economic changes. The monitoring of social outcomes by the principal is also difficult hence formal evaluation by another agent is required.

Thus, SIBs combine goal conflict between organisations, risk, and programme service delivery in which performance evaluation is difficult. It is presumed SIBs can deliver superior social outcomes because they can better address incentive and agency problems. However, the empirical work reviewed in section four of this chapter leads to considerable doubt whether the underlying assumptions are valid, in view of the nature of public social service delivery. In addition, there appears to be little evidence that SIBs are generating innovation in service provision, with projects relying on the replication of existing best practices that have been implemented and proven using conventional means.

Given the above, it is perhaps not surprising that the critical literature, supported by the limited empirical evidence available to date, suggests that these efficiencies in cost and quality are not being met. This can be traced to theoretical problems arising from informational asymmetries and issues of risk transference inherent in the principal-agent model.

In sum, there is no conclusive evidence that SIBs are superior to the conventional contracting of social services. This discussion suggests that SIBs result in complexity and conflicting interests that forestall efficiency. This inevitably raises questions regarding the reasons for the rapid emergence and spread of SIBs. An issue that will be discussed in depth in the chapters that follow.

Chapter Six: theoretical development of social impact bonds

6.1 Introduction

Following the theoretical discussion in chapters four and five, this chapter seeks to develop these broad theoretical frameworks specifically for SIBs. In doing so, addressing the gap in the literature of this nascent social policy and financial instrument.

Chapter four explained how financialisation theory can be used to capture the mechanisms and forces behind the incursion of finance into areas that were formerly the domain of the state. This chapter adds to this theoretical framework by expanding on these mechanisms in two ways. To start, section two examines SIBs as a new type of activity for financial institutions, by exploring the structural characteristics between a SIB and a forward contract, which is a type of derivative. Before section three further examines how this leads to financial institutions accruing financial profit from a new source, which is welfare provision which ultimately is tax revenue.

These mechanisms and the outcomes they generate are problematic, and their inefficiencies were examined in chapter five. Section four of this chapter specifically focusses on the setting, pricing and monitoring of social outcomes which it proposes is the part of this mechanism, which is key to its inefficiency, that which directly links to the SIB as a financial instrument. Finally, section five provides concluding remarks.

6.2 Social impact bonds as derivatives: a new activity for financial institutions?

SIBs represent an expansion of financial profit from new sources, underpinned by new types of activities for the financial sector which are unrelated to other types of mainstream activities. As such, if theory is to account for the type of profit generated through SIBs, this development must be further elaborated. This begins with an examination of SIBs as a financial instrument, and proposes they share similar structural characteristics with forward contracts.

i. The origins of SIBs as a financial instrument

According to Lapavitsas' (2013, 2011, 2009) second tendency of financialisation,

financial liberalisation and financial market reforms have initiated a structural change in advanced economies under which finance has grown enormously in terms of markets, institutions, activities and profits. This has led to financial profits being earned through commissions and fees etc, as source of profits for banks has tended to move away from non-financial corporations.

These same structural changes have also led to closer connections between financial institutions and areas of public social policy. The third tendency of financialisation identified by Lapavitsas (2013, 2011, 2009) is that of an increasing reliance by households on the formal financial system for the provision of goods and services due to the retreat of public provision from areas of public social policy such as education, health and housing. This has led to an increasing volume of financial profits being earned from households with ever increasing penetration of financial transactions into the realm of household revenue, both to borrow and to save, leading to personal revenue becoming one of the most significant sources of profit for banks.

There have already been instances where there is cross-over between these two tendencies. Housing is an area of public social policy which can be used as an example of this, and is also an area of public social policy addressed by SIBs. ³⁸ Some households use the formal financial system to access mortgage loans to meet their housing needs. Whilst mortgage loans have also been used as mortgage-backed securities for collateralised debt obligations which in the in the United States for example, prior to the 2007-09 financial crisis, accounted for 50 percent to 60 percent of the lower-rated tranches of subprime asset-backed securities (Sumerlin and Katzovitz, 2007, p. 13). Thus, there are strong links between banks trading in open financial markets through the market for collateralised debt obligations and the housing market through which mortgage loans are provided to households, and the requirement for housing itself, which is an area of public social policy.

However, the SIB represents a further development, which is the design of a financial

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³⁸ Phase one of this research identified that 18 percent of all SIBs focus on housing & homelessness as a policy area. These SIBs have been implemented in Australia, Canada, the United Kingdom and the United States.

instrument *within* the public social policy sphere itself. This differs from the situation described above, as rather than households accessing the formal financial system in order to privately address welfare needs, these same households now form the underlying asset of a financial instrument through which they are the recipients of the welfare service, which is being delivered on behalf of the state.

So, whereas the mortgage-backed collateralised debt obligation sits within the financial market, with the SIB the state has actively enabled a financial instrument to be developed within the public social policy sphere itself. Thus, SIBs offer an exceptional analytical insight into the role of market-driven financial techniques in the realm of public social policy.

The paragraphs that follow explain this intricacy by exploring SIBs as a new type of financial instrument, representing a new type of activity for financial institutions that generates financial profit from a novel source.

Despite their name 'social impact bond', it should be noted that the term 'bond' is something of a misnomer (Davies, 2014; OECD, 2016a). ³⁹ It has been suggested that SIBs are a customised financial instrument, structured as a mix between traditional bonds with exceptional features (Brandstetter and Lehner, 2015; Nicholls and Tomkinson, 2013; Novak and Sulemankhil, 2012), and a hybrid mixture with elements of debt, equity and derivative (Arena et al., 2016; Maier and Meyer, 2017).

They have also been viewed as customised contracts such as PPP schemes (Hajer, 2020; Loxley and Hajer, 2019; Warner, 2013). The language of the financial markets is present with investments rated through a risk-return framework, incorporating both financial risk and social risk, alongside financial return and social impact (GO Lab, 2019).

Whilst traditional bonds are a fixed-income product with principal protection and specified returns, SIBs do not tend to perform in this way. In a manner more similar to

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³⁹ The term 'Social Impact Bond' was suggested by the then-Chief Executive of the Young Foundation, Geoff Mulgan, in 2008 (Bolton and Savell, 2010).

debt, the investment term is fixed, the return capped, and the capital may be partly or fully secured. However, with debt the owner would have a claim on the underlying asset, which for example could be physical or intellectual property. Conversely, it is argued in some SIBs as the return is contingent on the social outcome of the projects being financed they are more equity-like, in that they provide variable returns tied to impact and often do not offer principal protection (Bolton and Savell, 2010; Liebman, 2011). However, similar to debt holders, for equity the owner would have a claim on the underlying asset, as a share of the company.

Lilley et al. (2020) argue the derivative instrument-like quality of a SIB has been underestimated in the literature to date, in particular the lack of claim on the underlying asset. Noting that as such it both deserves and requires further attention as 'it is not a mere matter of semantics or labels' (2020, p. 923). This research agrees the origins of the SIB lies in its similarities to the derivative, which shall be explored in detail throughout the remainder of this section.

A derivative is a form of security, with a contract whose price is derived from a claim on its underlying asset (Lapavitsas, 2013). This asset can be property or a claim on property or income, such as a financial asset like shares, bonds, or currencies index, or a commodity such as wheat or gold (Blyth, 2013).

Returning to the housing, mortgage loans and collateralised debt obligations analogy. Collateralised debt obligations are a form of securitisation. Securitisation is the practice of pooling illiquid assets and transforming them into tradeable and interest-bearing financial instruments (Deloitte, 2018). In this type of collateralised debt obligation it is the mortgage loan which forms the underlying asset, which is then pooled with other loans and sold in the market. They are apportioned into tranches according to the risk profile, typically as senior, mezzanine or equity tranches, with different interest rates attached (Blyth, 2013).

The SIB, however, is not a type of securitisation, although the narrative through which SIBs are sold to investors can have undertones of such. This can focus on the return of principal plus interest, they are given an interest rate, and can be apportioned into tranches according to risk profile. However, a SIB is invested in as an individual asset,

they are not assets which have been pooled. Even more crucially, there is no guaranteed income stream attached to the underlying asset, as payments to investors are made depending on whether or not the SIB has achieved its stated outcomes.

So what is the underlying asset in a SIB. I argue that the underlying asset in a SIB is the individual who is partaking in the social service programme, or more specifically, it is their behavioural change. Needless to say, there is no free market in which the behavioural change of individuals can be bought and sold, thus the underlying asset has no market price. Therefore, their behaviour is monitored and compared with predetermined outcome metrics, which facilitate the monetisation of this behavioural change.

These developments have been met with criticism that vulnerable people are being packaged up as commodities (Cooper et al., 2016). The growth of financial markets and their varying practices have seen individuals be increasingly drawn into the formal financial system, individuals become 'financial subjects', the wider discussion of the financialisation of everyday life (Blackburn, 2006; Langley, 2008b; Lapavitsas, 2013; Martin, 2002; Sokol, 2017).

These interpretations echo Lapavitsas' (2009) observation that the ethics, morality and mindset of finance have penetrated both social and individual life (Lapavitsas, 2009). According to Chiapello and Knoll (2020), the consequences of this explicit introduction of financial concerns and profits in these areas previously untouched by finance can be demonstrated through the SIB model and indicate the reframing of the welfare relationship.

Returning to the issue of a SIB as a financial instrument, regardless of how this particular 'asset' performs over a particular time period, it has no market value nor income steam to underpin the security. ⁴⁰ Which means, in its basic form, a SIB is arguably a purely speculative financial instrument. More specifically, this research

⁴⁰ This differs from the Charity Bond that was discussed in chapter two for example, as they are a form of long-term debt with a regular income stream (Podd, 2020). Whilst these are not securitised (to my knowledge) they are structurally compatible with securitisation, whereas a SIB is not.

proposes that a SIB shares several key features with a particular type of derivative, that of a forward contract. The following explanation of the structural similarities between a SIB and a forward contract will situate SIBs in a world in which 'derivative logic' is increasingly pervasive (Lilley et al., 2020; Martin, 2015, 2007).

These interlinkages highlight the evolving relationship between the state, households and financial institutions with regards to the delivery and financing of welfare services and welfare infrastructure. Private healthcare and mortgages are markets external to the state as the relationship is between households and financial institutions and the functions of the state are not directly present. On the other hand, the building of hospitals and schools is an internal market within the state with households as beneficiary.

SIBs are located within these complex relationships as households are receiving welfare services through the market relationship between the state and financial institutions. Even so, households are still being drawn into the formal financial system as first, the service recipients form the underlying commodity for the financial instrument, and second, financial institutions are being paid profits and fees from taxation revenues. These interlinkages make it imperative to adopt a multi-layered analytical approach to SIBs in the following chapters.

ii. Social impact bonds and forward contracts: structural similarities

The forward contract is one of the oldest and most commonly used derivatives, which serves as the conceptual basis for many other types of derivatives in use today. Forward contracts to stockpile essential goods that could be resold for a profit at a later date have been in existence at least since the days of antiquity. Buyers would take possession of the wheat, corn, or other commodities upon delivery of the contract, pay the forward price (agreed upon in the contract), and hope that the demand for the good would grow so they could raise prices, resell it, and generate profits. That they were in common usage during the Middle Ages in Europe is historically documented, a tradition that Europeans continued in the New World (Oosterlinck, 2017).

A forward contract is a private agreement between two parties about a future

transaction of an asset. It simultaneously obligates the buyer to purchase an asset, and the seller to sell the asset, at a specified price on a fixed future date, with the price of the asset also fixed at the time the contract is executed (Oosterlinck, 2017). Forward contracts can be used to both hedge a position and speculate on the directional movement of an underlying asset.

The market participants who aim to offset or eliminate risk, often as suppliers of commodities or people who have a demand for commodities, and are referred to as hedgers. They would for example enter into a forward contract to stabilise the revenues or costs of their business operations by locking in the price of an underlying asset, rather than seeking profit. In that sense, a forward contract is a way to hedge against market uncertainty by attempting to reduce the amount of risk, or volatility, associated with the price of an asset. For the state a SIB represents end-user risk management.

Whilst speculators aim to profit by assuming market risk, profiting from fluctuations in the price of an asset by betting against the movements of the market. Speculators are considered to be larger risk takers than other investors. Speculators have no interest in either buying or selling the underlying asset itself, there are no end-user considerations. So, whilst the state is using markets to protect against existing risks, the speculator might have no interest in the public social policy aspect of the SIB at all. Although SIB speculators are perceived to have an interest in social as well as financial returns (GO Lab, 2019).

SIBs are very complex financial instruments. Whilst their structures are broadly similar, each SIB is unique and designed according to its own specification, therefore the roles of various agents can differ considerably from deal to deal (Gustafsson-Wright et al., 2015). The SIB market as a whole is still immature, and there is a lack of publicly disclosed data to date. Thus, given all of the complexities described which surround the nature of SIBs, both as markets, and as an instrument, the model described here is based on the basic structure of a SIB. It is purely illustrative, and to my knowledge, never before has an attempt been made to describe the structural similarities between the design a SIB and a forward contract, nor any type of derivative in detail.

I propose that forward contracts can be used to explain SIBs given that manifold structural similarities can be drawn from their design. They are both non-standardised, private and binding agreements between two parties. They can be tailored to the purchase or sale of a specific asset, for a set amount, on an agreed delivery date. They can also include specified conditions to be met. This makes SIBs an over-the-counter instrument, like forward contracts.

As discussed above, forward contracts attract two types of agents: hedgers and speculators. The outcomes payer to hedge its risk against volatility in the quality of social outcomes, and the investors to speculate on changes in the price of the same outcomes. In a standard forward contract both parties would be focused on price. The hedger would be hedging against volatility in the price of the asset, and the speculator on changes in the price of that same asset. However, in this model adjusted for SIBs it is the quality of social outcomes the outcomes payer is hedging, which in turn informs the price.

When the parties enter into a forward contract, the outcomes payer is buying social outcomes forward, here the supplier is not the service provider delivering the service but a special purpose vehicle that has been set up. Conversely, the special purpose vehicle is selling the social outcomes forward. Because the investors do not have any need for social outcomes, then transaction to buy an outcomes forward represents a speculative bet that the value of social outcomes will rise.

iii. Social impact bonds as hedging forward-like contracts

Parties who want to hedge the volatility inherent in an underlying asset use forward contracts. In social service delivery the state wants to achieve a specific set of social outcomes for a certain price. Thus the outcomes payer purchases a set of specific social outcomes, to be delivered at a future date. This essentially allows the state to hedge its exposure to outcomes volatility, which is the risk of delivery of low-quality social outcomes. In this case, as buyer the outcomes payer assumes the long position, whilst as seller of the asset the special purpose vehicle assumes the short position. This means, should a SIB fail to reach the agreed social outcomes the government would be cash neutral as they only pay for the outcomes delivered (Dagher, 2013).

But how are SIBs valued? The value of a forward contract would be linked to its underlying asset, which might be wheat or gold for example. However, the underlying asset of a SIB is a non-economic entity, thus the value of a SIB is inextricably linked to the achievement of a particular event, in this case its social outcomes. Lilley et al (2020) suggest the underlying asset to be measured is the performance of the service provider. I suggest it is more nuanced than that. If a contract with the service provider was based on output then the underlying asset is the performance of the service provider, but as these contracts are based on social outcomes then arguably the underlying asset is the service recipients, with the focus on their behavioural change. However, behavioural change is a notoriously difficult thing to measure, and it may not be possible to attribute the behavioural changes in the service recipient specifically to the programme being provided by the service provider.

As behavioural change is difficult to measure SIBs stipulate a proxy through a metric, or a series of metrics, which are used to quantify said behavioural change. Because one of the core aims of a SIB is to promote efficiency and innovation through service experimentation, not through the use of established models of delivery, the extent of the behavioural change is volatile (Dear et al., 2016; Fox and Albertson, 2011; Gustafsson-Wright et al., 2015; Liebman and Sellman, 2013). Meaning a minimum level of acceptable quality social outcomes might not be achieved at all. This is what drives the outcomes payer to instigate a forward contract to hedge against this volatility whilst building some certainty around the level and quality of social outcomes that can be achieved at the price. This makes SIBs highly speculative, as there is no way to predict with absolute accuracy whether quality social outcomes will be achieved during the duration of the contract.

However, a SIB does stray from a forward contract in an important way. In a forward contract the amount of underlying asset to be bought, and its price and maturity date are fixed at initiation. However, in a SIB whilst the underlying asset and maturity date are fixed, the price is not due to the volatile nature of social outcomes. Instead, this is addressed in the SIB design, with different levels of social outcome quality corresponding to different social outcome prices, up to a maximum amount.

So, unlike a forward contract, there is a clause that the forward price at contract

expiration may be less if the quality of the social outcomes are not as agreed, in which case the spot price (the market price) is paid. Because there is no 'market price' for a bundle of social outcomes of behavioural change the spot price is represented by the price for that quality of social outcomes as agreed in the pricing structure at contract initiation. Whereas, in a standard forward contract, the spot price is only utilised to ascertain whether the hedger has made or lost money by entering the forward contract.

As an example, the outcomes payer buys long a bundle of social outcomes that will keep young people out of prison for a forward price of GBP 7,500,000, with maturity in 4 years. The outcomes payer is hedging their risk because without the social service programme and subsequent social outcomes, prison costs are forecast to be GBP 17,500,000.

So here, the valuation at initiation date represents the price the outcomes payer is willing to pay for the bundle of social outcomes that will keep young people out of prison. Because this is welfare expenditure and not an investment by a company there is no risk-free rate (the cost of financing the position) in the calculation of the forward price. As it is a service there are also no 'cost to carry' such as storage costs and so on. ⁴¹ Thus, the forward price at initiation is:

$$F_0(T) = S_0$$

As there is no cash exchange at the beginning of the contract, the value of the contract at initiation is zero:

$$V_0(T) = 0$$

The intervention needs to be successful at delivering the required social outcomes at

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⁴¹ The forward price accounts for various factors, including any opportunity costs, interest or foregone interest, or any other costs related to the underlying asset, and the current spot price. The spot price being the current price quoted for immediate settlement of the contract. In a SIB the forward price is not required to account for opportunity cost etc, as this is not investment money from a business, but welfare money that will be spent regardless.

the right level of quality for the short position to be paid. Should the intervention fail to meet the pre-determined metrics, such as the service provider fails to deliver even the low-quality social outcomes, then the value of the contract at expiration is still zero:

$$V_4(T) = 0$$

If at expiration T the bundle of social outcomes are delivered to a high-quality, the value of the forward contract is:

$$V_4(T) = S_4 - F_0(T)$$

If at expiration T the bundle of social outcomes delivered are any other level of quality, the value of the forward contract is:

$$V_4(T) = S_4$$

Where:

- F₀ is the forward price
- S_t is the spot price
- T is the length of the contract in years
- V is the value of the contract

iv. Social impact bonds as speculating forward-like contracts

I argue that SIB investors could be classed as speculators. This is because a SIB investor has no interest in buying or selling a bundle of social outcomes, as the underlying asset, rather they hope to profit on the forward contract itself by 'betting' on the direction the price of a bundle of social outcomes will go. ⁴² The quality of the social outcomes which informs the spot price also affects the level of social returns, with high-quality social outcomes meaning both a higher spot price and a higher social

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⁴² Although in the case of a SIB it should be noted they are also not buying and selling SIBs solely to reap a typically short-term profit from the price movement of that asset due to the fact that as an over-the-counter instrument a SIB is a longer-term commitment. Phase one of this research calculates the average maturity of a SIB to be approximately 4 years, with a range of 1 year to 10 years.

return, with the reverse true for low-quality social outcomes. This aside, it is argued that SIB investors are still speculative in nature based on the following two assumptions. First, the investors have no claim on the underlying asset. Second, there is no guaranteed return with capital 100 percent at risk. ⁴³ ⁴⁴

Returning to the example of the forward contract discussed regarding hedging. The speculator believes the value of the bundle of social outcomes that will keep young people out of prison is going to rise from its current spot price of GBP 5,000,000. ⁴⁵ Therefore, the speculator buys long at GBP 5,000,000 with a maturity date the same as the hedger, in 4 years. If the future spot price is higher than the forward price then there is a profit (the speculator has underpaid for the social outcomes), if the future spot price is lower than the forward price there is a loss (the speculator has overpaid for the social outcomes). At no point does the speculator 'own' the underlying asset, unlike the hedger who will own the social outcomes at contract maturity.

The forward price is the price that a long will pay the short at expiration and expect the short to deliver the asset. So here, the forward price is the predetermined delivery price for the bundle of social outcomes that will keep young people out of prison, to be paid at the predetermined date in 4 years' time. The forward price is calculated using the spot price: ⁴⁶

$$F_{\circ}(T) = S_{\circ}$$

Here we find the second point of departure from a forward contract. Whilst in a normal forward contract there is no cash exchange at the beginning of the contract, hence the value of the contract at initiation is zero, the same is not true for the speculator in a

⁴³ The capital risk can be mitigated in other ways, which is discussed more in section four but typically the source of any returns, that is the money being paid by the hedger/outcome's payer for the delivery of the set of outcomes, is either paid or it is not.

⁴⁴ A notable departure from a forward contract is that in a SIB the investors pay the money upfront (as this is paid into the special purpose vehicle and then onto the service provider to fund the social service programme), whilst in a standard forward no money would change hands until maturity.

⁴⁵ This 'current spot price' is equal to the total capital raised by investors.

⁴⁶ The spot price refers to an asset's current market price. There is no risk-free rate because, unlike in a standard forward contract, the speculator has paid the funds upfront as this money is used to finance the delivery of the social service programme

SIB. They pay the current spot price, which are the funds that are used to finance the social service programme:

$$V_{o}(T) = S_{o}$$

Changes in the price of the bundle of social outcomes will cause the forward to take on a positive or negative value. Thus, at expiration T, the value of the forward contract is:

$$V_4(T) = S_4 - F_0(T)$$

Where:

- F₀ is the forward price
- S_t is the spot price
- T is the length of the contract in years
- V is the value of the contract

This section has detailed the ways through which the state is actively supporting the creation of financial mechanisms in the public social policy sphere, thereby partially transferring the financial responsibility of welfare provision to speculators.

6.3 How social impact bonds make financial profit from the provision of welfare services

As described above, the SIB model represents a transition from the public provision of social welfare to the production of public value for private profit. This private profit includes financial profit, the tremendous growth of which Lapavitsas (2013) argues is the defining feature of financialisation as a historical phenomenon.

i. Social impact bonds and financial profit

This research delineates that SIBs produce two types of profit, general profit and financial profit. The mechanism through which general profit is generated in a SIB was outlined in section 6.2 (iv). If a SIB is successful the general profit is earned by the ultimate transacting parties, let's call them the end-speculators. From the SIB investor

typology this would be the non-profit institutions such as foundations, charities, social enterprises, and non-profit investment funds, as well as the non-financial profit-retaining investors including businesses and individuals. Importantly, this also includes the clients of the financial institutions who speculate in SIBs on their behalf, who are also end-speculators. It does not include any profit earned by financial institutions.

The second type of profit, the type of profit this research is concerned with, is financial profit. Financial profit can be generated through a variety of processes (Lapavitsas, 2013) as discussed in chapter four. However, for the most precise and meaningful results this research uses the narrow definition of the term 'financial profit', as per the work of Lapavitsas and Mendieta-Muñoz (2016), which denotes those profits earned exclusively by financial institutions.

A consequence of the rise of market-orientated banking has been that financial institutions are earning a greater portion of profits through interest spreads, fees, commissions and trading (Lapavitsas, 2013). Investment banks earn commissions and fees on underwriting new issues of securities, or serving as asset managers for their clients. In a manner similar to derivatives, financial institutions act as intermediaries in the flow of speculative funds through a SIB, and are renumerated by ways of commission and fees out of the returns emanating from these flows. It may also be possible to profit through proprietary trading, that is trading their own capital, although the extent to which this occurs in SIBs is largely unknown in this nascent stage.

ii. The recipients of the financial profit

Political economy tends to treat over-the-counter contracts, such as forward contracts which SIBs have been likened to in the section above, as a banking instrument due to their ability to provide market-making services and organise the necessary infrastructure (Lapavitsas, 2013; Lindo, 2013). Although the derivatives market is predominantly a professional wholesale market with banks, investment firms, insurance companies, foundations and corporates as its main participants, at the core of the enormously expanded derivatives markets lie a few international banks (Lindo, 2013). Illustrative of this fact is figures reported by Sinkey and Carter (2000) which

shows in the United States at year-end 1998, seven banks accounted for 94 percent of all derivative contracts held, whilst 99 percent of derivatives were held by the top 25 banks.

Only a small volume of the over the counter derivative market is estimated to be for end-user risk management (Fullerton, 2010), which is the equivalent of the hedging forward-like contract in SIBs. The majority being speculative in nature by financial institutions such as banks, insurance companies, certain corporations, or alternatively dealers hedging speculative trades they facilitate (Fullerton, 2010). In other words, there is an appetite for speculative derivatives, particularly amongst the type of financial institutions that also appear in SIB markets. The speculative volumes being the equivalent of the hedging forward-like contract in SIBs.

Given the structural similarities between SIBs and forward contracts then financial institutions, and banks in particular, would expect to have a prominent role. The investor typology discussed in chapter 3 (*figure 3.2*) identifies a similar range of financial institutions participating in SIB markets, including banks, specialist fund managers, pension funds and insurance companies. Phase one of this research has identified that 58 percent of the 142 SIBs implemented have at least one financial institution as disclosed investor. ⁴⁷ These are institutional investors that typically invest capital on behalf of their clients, with banks and specialist fund managers acting as asset managers for their clients, whilst pension funds and insurance companies invest the savings of their clients. Banks have the ability to trade using their own capital and make markets too.

Whilst there are similarities between the two markets, the SIB market does not represent a substantial total monetary value. In terms of size and importance it is dwarfed by the global derivatives market. The gross market value of just over-the-counter derivatives was USD 15.5 trillion by June 2020 (BIS, 2021), up from a total market size of approximately USD 1 trillion in the 1980s (BIS, 2010). This is several

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⁴⁷ 34 percent of SIBs received investment from non-profit institutions and private investors only, whilst the remaining 8 percent of SIBs do not have full investor disclosure so cannot be categorised either way.

orders of magnitude greater than the total market value of SIBs, which as at March 2020 phase one of this research has estimated at GBP 268 million.

iii. The process of generating the financial profit

The above has described similarities between financial institutions in over the counter markets and SIBs. This section seeks to understand how financial profit is made by these financial institutions through the SIB.

Lapavitsas' (2013) explanation of how financial profit is earned can be adapted to the SIB context. In the first instance, this financial profit is part of the speculative funds committed by the ultimate transacting parties, which is an advance on the general profit anticipated to accrue to the end-speculators. If the social outcomes are achieved and the SIB pays out, the advance from the speculative funds would be recouped and the financial profit would come from the general profits. If the SIB is unsuccessful, the advance from the speculative funds would not be recouped, and financial profit would remain simply a part of the money committed by the end-speculators. These end-speculators being the various types of non-profit institutions, businesses and individuals.

Whilst the financial institutions invest on behalf of their clients, and the end-speculators are largely undisclosed in the various databases and reports, they are known to include other financial institutions, as well as the various types of non-profit institutions, businesses and individuals (e.g. see GO Lab, 2020; Gustafsson-Wright et al., 2015; Hajer, 2018; Social Finance, 2020). This means there can be multiple layers of financial profit being earned in a single SIB.

For example, a SIB may have a bank formally listed as the speculator. However, the bank is acting as an asset manager for an investment fund which includes a pension fund as a client, who in turn is acting on behalf of its retail clients by investing their savings. In this case, both the bank and the pension fund are earning commission and fees from speculating in the same SIB. That is two layers of financial profit. The individual savers in the pension fund are the end-speculators and would earn general profit if the SIB was successful. The bank and the pension fund earn their commission

and fees, their financial profit, regardless of whether the SIB is successful or not.

Thus, in a SIB the general profit is arguably purely speculative, that is, one person's pay-out is another's loss. If the SIB is successful the hedger pays for the successful social outcomes. If the SIB is unsuccessful the speculator loses their speculative funds. However, this is not the case for the financial profit, which is a zero sum game.

iv. The ultimate source of the financial profit

That leaves the question of where this profit is originating from. The fact that for successful SIBs the origins of this profit is tax revenue is widely acknowledged. Whilst questions have been raised regarding whether this capital constitutes new finance, rather than new funding, as SIBs are actually just solving a liquidity problem for government by providing upfront capital (e.g. see Gardiner and Gustafsson-Wright, 2015; Gustafsson-Wright et al., 2015), less has been discussed theoretically regarding this issue.

The historical development of capitalism has been characterised by distinct patterns and sources of profit (Lapavitsas and Mendieta-Muñoz, 2016). This section argues that SIBs represent one such distinct source of profit whereby the welfare state is being harnessed for financial profit through SIBs. More specifically, if a SIB is successful the general profits are paid from tax revenue. That is the money from the hedger who has paid for the special purpose vehicle for the achievement of medium-or high-quality social outcomes. The special purpose vehicle then transfers this payment to the speculators as the spot price to cover the bet on the movement in the price of the social outcomes.

The origin of all financial profit lies in the returns from the underlying asset (Lapavitsas, 2013). Which, in a SIB as discussed above, is not from surplus value that has been generated in production. The commission and fees earned by banks through managing SIBs is different to retail banking, where a bank attracts deposits from savers and makes loans to businesses. Earning money from the interest they earn by lending out money to other clients. The profit from SIBs differs from the profit from production, profits for SIBs do not generate from traditional production but delivery of

underlying/contracted services. In production the ultimate source of the interest which is paid to the financiers comes from businesses which borrowed the money for production (Lapavitsas and Mendieta-Muñoz, 2016). Whereas, in a SIB the ultimate source of the interest in tax revenue.

Because the ultimate source of the financial profit is from tax revenue, SIBs represent a transfer of value to financial institutions from surplus value and revenue collected by the state. When discussing the use of the formal financial systems by households Lapavitsas (2009) calls the extraction of financial profits from these exchanges 'financial expropriation' to indicate that they originate directly in personal income. Thus, the extraction of financial profits out of taxation revenue, as occurs in a SIB, could be perceived as a peculiar form of financial expropriation. Which Lapavitsas (2013, 2009) argues is a characteristic feature of financialised capitalism. Therefore, SIBs evidence the profit motive encroaching into areas such as public social policy which has not been traditionally the domain of finance or influenced by the logic of finance. Gradually blurring the traditional boundaries between 'economic' and 'social' purpose activities (Nicholls, 2010).

6.4 How risk transfer and agency relationships affect the efficiency social impact bonds

The financial mechanisms described above, and the consequences of their use are problematic. This section will examine some of the trade-off's that are at the heart of SIBs and are central to principal-agent theory. Through an examination of how the transfer of risk between the state, financial institutions and other agents affects the principal-agent relationship. Linked to the concept of 'risk' which is fundamental to the SIB narrative, these include the cost of transferring risk to the agents, the cost of measuring the social outcomes, and the cost of measuring the agent's behaviour. Understanding the trade-off between these three shows SIBs to be inefficient.

i. The role of social outcomes in risk transfer

As with derivatives contracts, the speculators accept a high level of risk in return for the possibility of a large reward. Given the unusual nature of SIB speculating contracts this transfer of risk is a very complex process involving the support of multiple agents. As theorised above, the speculators bet against the changes in the 'market' price of social outcomes in a SIB in order to make profits. Thus, the SIB market is underpinned by the differing expectations of these speculators about the future performance of the underlying asset, which is the behavioural change of the SIB participants. The market is underpinned not by the quality of the information used to form speculator expectations, but rather the quality of the information used to determine whether social outcomes have been achieved to a sufficient quality. Which in turn informs the spot price.

Social Finance (2011a), who are responsible for the design of the early SIBs, clearly state the two criteria for a successful SIB is the presence of measurable social outcomes and a comprehensive contract based on expected social outcomes.

What should be clear from the discussion is section 6.2 is that the key component of the speculating forward-like contract, is the setting, pricing and evaluation of the social outcomes. These mechanisms are used to ascertain the quality of the social outcomes, and the quality of the social outcomes in turn informs the spot price. Without these mechanisms the risk cannot be quantified, monetised, and evaluated, which would make it impossible to partially transfer the financial risk of welfare delivery to the speculators. Demonstrating the profit-maximising logic of financial markets.

However, these mechanisms require cooperative action between the principal and agents. As such agency theory can be used as a framework to discuss the setting, pricing and evaluation of social outcomes. Agency theory presents a theoretical framework for structuring and managing contract relationships, which explain the behaviours of the principal and the agent. The agency relationship is one which is strictly an optimisation issue and the unit of analysis which governs this relationship is the contract. Therefore the aim of agency theory is to determine the most efficient contract under varying levels of outcome uncertainty, risk aversion, information, and other variables (Eisenhardt, 1989a). As SIBs are 'procurement contracts [...] issued by government, that enable the delivery of some social service intervention' (Hajer, 2018, p. 17) agency theory is an appropriate theoretical framework for examining the setting, pricing and evaluation of social outcomes, and ultimately shed light on this mechanism's efficiency.

Agency relationships occur when a principal hires an agent to perform a service on their behalf. In a SIB the outcomes payer, as principal, hires a series of agents to exert effort in performing a series of tasks related to the design, implementation and evaluation of the SIB.⁴⁸ This includes the principal delegating the actions for setting, pricing and evaluating the social outcomes. Each of the agents is contracted in a different way to undertake a different task for the principal, exerts different amounts of effort, and has differing interests, goals, expectations, risk attitudes and perceptions (Alijani and Karyotis, 2018; Del Giudice and Migliavacca, 2019; Hajer, 2018). Whilst it is assumed that the agents actions are verifiable and therefore contractible, the output by the agents is not observable to all parties. Therefore, the principal cannot be sure whether agents are exerting effort as they have been contracted for or are acting in their own best interests. As the social outcomes form such a key part of the transfer of risk this mechanism is fraught with potential danger.

ii. Setting social outcomes

The setting of social outcomes is extremely important in a SIB as the outcomes payer uses outcomes as a signalling device in order to mitigate their contractual hazard and reduce their financial risk. Meaning the right signalling can remove inefficiency due to incomplete information (Bhattarai, 2015). As the quantification and measurement of social outcomes plays a key role by determining returns to investors, this means that low-quality services will not achieve the required social outcomes, and the social outcomes payer will not pay for a level of quality that has not been delivered.

The availability of measurable and monetizable social outcomes has been raised as a significant challenge in SIB contracts, and due to their nature are notoriously difficult to quantify and measure, meaning there is a lack of clarity and standardisation (Berndt and Wirth, 2018; Gustafsson-Wright et al., 2015; Sinclair et al., 2014). This is partly because the type of behavioural changes within the beneficiaries that SIBs seek to undertake are, by their very nature, inherently difficult to measure and translate into quantifiable social outcomes.

⁴⁸ As discussed in some detail in chapter three through the financial ecosystem and operational model.

Yet, outcomes that are difficult to measure are less suited to outcome-based contracts which can create problems as there needs to be clear signalling (Eisenhardt, 1989a). Therefore, social value metrics which can be used as a proxy through which success can be evaluated (Social Finance, 2011b; Yates and Marra, 2016). The proxy should be relevant for the intended outcome and easily identifiable, objectively and practically measurable, whilst also remaining meaningful for longer-term economic outcomes or is in alignment with a broader political agenda (Goodall, 2014; Gustafsson-Wright et al., 2015).

Depending on the contract style the service provider or investor may define the outcomes metrics (Goodall, 2014). Given the differing interests, goals, expectations, risk attitudes and perceptions between the outcomes payer and agents this process is open to opportunistic behaviour, such as moral hazard and adverse selection. For example, binary metrics such as whether or not a child enters care could mean only the children least likely to enter care could be selected to participate (So and Jagelewski, 2013). Whilst the use of a frequency of occurrence metric, such as the number of days spent in care, would discourage this kind of behaviour and encourage the service provider to work with the entire population (So and Jagelewski, 2013). As the effort of the agents is unobservable they will still require monitoring which also means the target population of the SIB must both be well-defined and trackable, to enable the social outcomes to be measured against a counterfactual throughout the period of the SIB (Social Finance, 2012a).

iii. Pricing social outcomes

The superiority of the SIB model is said to rely on the hypothesised efficiencies being realised and being sufficient to offset any incremental costs, therefore it matters greatly that the outcomes payments in the contract be correctly structured (Dagher, 2013; Rees, 2014). The social outcomes need to be both measurable and monetizable, this involves the quantification of previously socialised risk and commodification of this risk, whose management and mitigation become a profit-making opportunity for private investors (Loxley and Hajer, 2019; Warner, 2013; Whitfield, 2015). This can lead to a misalignment of the public social policy delivery and the profit motive. There are also two considerations in pricing social outcomes. First, the need to leave the outcomes

payer with enough savings to make the SIB viable, whilst second, they need to be attractive to investors and fit their risk-return profiles.

First, outcome payer considerations. The social outcomes selected undergo a complex budget analysis to calculate the costs and benefits of interventions, which considers all of the prospective payments that the outcomes payer will make should the social outcome measures be achieved. Social Finance suggest this value-formoney calculation includes the current cost to government of a particular target population, the cost of a proposed SIB programme, the estimated impact of the proposed programme, the potential cost savings to commissioner(s), and the estimate of investor returns (Social Finance, 2013a, p. 19). It is vital social outcomes are priced correctly, if not the value of SIB contract might not high enough to cover the fixed overhead costs, meaning savings might not be realised even if social outcome targets are met, which has been evidenced in past SIBs (Azemati et al., 2013; FitzGerald et al., 2019; McKay, 2013; Tan et al., 2015).

If financial returns are determined by impact measured, investors would require key metrics and an evaluation methodology that are not just clearly defined but also are of sufficient rigour to minimise uncertainty and bias around the true impact of the investment (Berlin, 2016; ClearlySo, 2011; Gustafsson-Wright et al., 2015; Tan et al., 2015). It is not only a complex process attempting to reach a consensus, but the limited past experience as the market is in a nascent stage of development makes this task even more challenging (Gustafsson-Wright et al., 2015). A payment schedule needs to be determined, to stipulate the number and frequency of outcomes payments from the outcomes payer to investors. Social outcomes can be measured and paid for more regularly than the end of the contract which provides the holder with a sense of a regular income stream, but the outcomes are still speculative. There is also a lower quality threshold which must be met for payments from the outcome funder to begin.

Second, investor risk, preferences, and incentives. SIBs require high investment upfront (Gustafsson-Wright et al., 2015; Hajer, 2018; KPMG, 2014; Social Finance, 2011a). This is provided by the investors before the social service programme can commence. The return of principal amount plus interest is considered the optimum incentive relationship between an outcomes payer and an investor in SIBs. However,

it is not the effort exerted by the investor which triggers the outcomes payments, rather it is the unobservable efforts of the service provider. Thus, the transfer of risk involves two key stages. First, setting social outcomes as a signalling device as discussed above, and second selecting incentives for the agent based on their utility.

Thus, the principal creates an environment in which an agent is encouraged to align its interests with their own through the use of incentives (Eisenhardt, 1989a; Jensen and Meckling, 1976; Lane et al., 1998). The concept of interests is fundamental to both agency theory and SIBs (Maier and Meyer, 2017). These interests correspond to the principal and agents' utility function, which may take on any form, representing any kind of preferences. Utility is a measure of how much benefit an investor derives from their SIB investment. Investors will have divergent utility functions, expressing their preference with respect to both perceived risk and expected return. With the price of transferring risk to the agent based on the level of outcome uncertainty (Eisenhardt, 1989a). Investors will only be willing to speculate on a SIB if they are incentivised, and without them the SIB cannot proceed. It requires both forward-like contracts, hedging and speculating, to be implemented. This is because the money the investors use to speculate with is used as the advance to run the social service programme by the special purpose vehicle.

SIB investors are varied and likely to have heterogenous and potentially conflicting motivations (Goodall, 2014; Mulgan et al., 2011; Nicholls, 2010; OECD, 2016a). The underlying motivation of an agent will affect its level of utility and therefore its incentive requirements, each agent will have its own perception of the risk-reward trade-off. A criticism of research into agency theory is that it focuses on a single reward, neglecting many situations in which there are multiple rewards (Eisenhardt, 1989a). However, that is taken into account here as SIBs are an impact investment, which means investor preferences include a mixture of both financial and social value (Bugg-Levine and Emerson, 2011; O'Donohoe et al., 2010).

SIBs are purported to add value in two ways, through both financial returns and social returns, although it is noted the traditional boundaries between 'economic' and 'social' purpose activities became increasingly blurred (Nicholls, 2010). The incentives required for the different type of investors are guided by their preferences for value. I

propose this is best considered by examining the marginal rate of substitution in value for investors in a SIB (see figure 6.1). 49

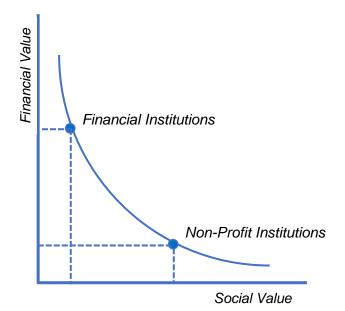


Figure 6.1 - Investor preference for financial and social value

Source: authors own

The financial institutions identified in the investor typology in chapter three (refer back to *figure 3.2*), includes banks, pension funds, insurance companies, and specialist fund managers. These investor types are willing to give up a unit of social value in order to obtain an additional unit of financial value, while maintaining the same level of satisfaction. However, they will forego completely market-competitive financial returns in order for the prospect of a positive social impact. Empirical work focussed on institutional investors has found SIBs to be relatively complex instruments, with the incentives of the multiple stakeholders potentially difficult to align (Del Giudice and Migliavacca, 2019).

In contrast to financial institutions, the non-profit institutions such as charities, foundations, and social enterprises are more likely to be willing to give up a unit of

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⁴⁹ Phase one of this research established that 63 percent of all disclosed speculators are non-profit institutions, and 30 percent are financial institutions. As these two categories cover the majority of all disclosed speculators, they are the only investor types used to examine the marginal rate of substitution in value for investors in a SIB.

financial value in order to obtain an additional unit of social value, while maintaining the same level of satisfaction. This could be because their interest lies in the policy area the SIB is tackling such as homelessness or childhood care, or it could be because the SIB is helping people in their local geographical area. There were early arguments in favour of philanthropy being limited to seed funding the emerging market before transitioning to mainstream impact investments as the market reaches maturity (Hughes and Scherer, 2014). Showing perhaps the significance of philanthropy during the early stages when commercial investors were unwilling to expose themselves to the risk due to a perceived lack of evidence that would allow risk-return calculations (Berndt and Wirth, 2018).

However, this does not mean investors are willing to undertake any level of risk. In agency theory an agent is deemed to be more risk averse than the principal (Brown et al., 2006; Eisenhardt, 1989a; Nyman et al., 2005). Problems may arise as a result because they may prefer different actions (Eisenhardt, 1989). As risk and return are trade-offs and follow a linear relationship, a more risk adverse investor could implement risk mitigation strategies. Although the investor is incentivised to subsume risk on behalf of the outcomes payer, risk mitigation strategies enhance the probability of attracting certain investor types by making the SIB a more attractive investment option. This is because they limit the downside risk to a portion of the overall SIB investment in the face of the high risk associated with the transfer of obligations and responsibility (Del Giudice and Migliavacca, 2019; Gruyter et al., 2020; Hajer, 2018; Warner, 2013).

iv. Monitoring and evaluating social outcome metrics

Returning to the definition of a SIB used in thesis, which was given in chapter two, 'The contract payment structure is based on the contractor's achieved outcomes, as opposed to the undertaking of some specific programming or service output, requiring a mutually agreed upon evaluation methodology, which may involve an independent external evaluator and/or a control group to help isolate the impact of the intervention' (Hajer, 2018, p. 17). The emphasis on outcomes means an evaluator is required to determine whether a project has been delivered according to the objectives set out by the outcomes payer. Meanwhile, a validator can bring rigour to the evaluation process

by confirming these findings. As such these agents are a key part of the information system, acting on behalf of the outcomes payer.

As agency theory assumes that there is goal divergence between the principal and agents, optimisation requires informational asymmetries to be reduced and/or agents activities to be consistent with the principal's expectations, rather than the principal and agent pursuing their own objective (Eisenhardt, 1989a; Laffont and Martimort, 2002). This is why the monitoring of social outcomes is so important in a SIB, because there can be hidden actions or efforts of the agent that impact the verifiable outcome or benefit of the process.

Rather than working towards the collective interests of the contracting parties it is possible agents may choose to exploit these informational asymmetries for self-gain through opportunistic behaviour, as agency theory assumes that the agent has the informational advantage (Oliveira and Filho, 2017). This can create opportunities for collusion between agents such as investors, service providers, and intermediaries, which can in turn lead to sub-optimal outcomes (Loxley and Hajer, 2019; Maier and Meyer, 2017; McHugh et al., 2013; Pandey et al., 2018; Pauly and Swanson, 2017; Stid, 2013; Wong et al., 2016). For example, an agent may be incentivised to overstate positive social outcome metrics in order to receive additional fees and/or profits from the outcomes payer (So and Jagelewski, 2013). This can lead to problems of adverse selection and moral hazard ex-ante and ex-post which can both impede effective contractual performance. This is possible due to the principal's inability to verify that the agent has behaved appropriately (Eisenhardt, 1989a). There are safeguards written into the design of a SIB to reduce the likelihood of opportunistic behaviour by any party, but this can make the contract 'lengthy and complicated' (Pandey et al., 2018).

Thus, an evaluation methodology is required where social outcomes are not only clearly defined but there is sufficient rigour to minimise uncertainty and bias around the achievement of outcomes (Berlin, 2016; ClearlySo, 2011; Gustafsson-Wright et al., 2015; Tan et al., 2015). Social outcome evaluation methods can include historical comparisons, matched control groups, and randomised control trials, or validated administrative data can be used on its own or in any of the other evaluation types

mentioned (Gustafsson-Wright et al., 2015). Ultimately the rigorousness of the evidence base rests on the risk appetite of the investors and the requirements of outcome funders.

When the behaviour of agents is unobservable then the potential for opportunism must be addressed through mechanisms to monitor their behaviour (Stan et al., 2007; Wankhade & Dabade, 2006). In a SIB, the existence of boards, reporting procedures, budgets, monitoring mechanisms and additional layers of management are evidence of this. Thus, the use of a formal information system can help to prevent the self-interest of any single party from undermining the pursuit of the shared objectives (Social Finance, 2012a).

The agent achieving the social outcomes is the service provider. SIBs were originally designed to have non-profit firms as service providers, but empirical research has evidenced they also include for-profit firms (Gustafsson-Wright et al., 2015; Hajer, 2018). However, non-profit firms are more inclined to share goals with government, and as such may be more reliable contract partners for the provision of social services (Hansmann, 1987; Salamon, 1995). Thus their motivations are more likely to be aligned to the outcomes payer, and likewise the literature suggests they might have less of an incentive to shade quality than a for-profit firm due to their non-distribution constraint which will prevent them from sacrificing quality for private profit (Hansmann, 1987, 1980).

Unlike conventional outcomes-based contracting, within a SIB the service provider is not required to undertake the financial risk of non-delivery of the outcomes contracted. This type of contract does not require any incentives, and the agents usually receive a fixed payment for their services (Maier and Meyer, 2017; OECD, 2016a), regardless of the level of effort they exert. However, in some SIBs service providers can defer fees or receive performance related renumeration for achieving higher than expected social outcomes, such as success fees (Gustafsson-Wright et al., 2015; Hajer, 2018; OECD, 2016a; Pauly and Swanson, 2017; TeKolste et al., 2016). This means they subsume partial risk on behalf of the principal and their view of incentives could alter, as each agent will have its own perception of the risk-reward trade-off.

Thus, the service provider plays an important role in the information systems. Although it is noted that this can be very resource intensive, and service providers may not have the requisite time or skills to engage with the data at level of intensity a SIB requires (Hawkins et al., 2017a). For example, the tracking of service participants and their social outcomes over a long period of time requires a robust data collection system. Concurrently, the service provider would also be responsible for harvesting and collating data that would be used for evaluation and validation. It is acknowledged that this can be cumbersome, and it is recommended that evaluation processes should support rather than burden the service provider (Social Finance, 2012a). There are agency costs in both time and money due to the level and potential difficulty in collecting data, the complexity of the data, and the level of analysis and reporting required.

6.5 Concluding remarks

This chapter has drawn on the most pertinent contributions to the financialisation literature, elaborating on the theoretical framework constructed in chapter four. This chapter has placed SIBs within Lapavitsas (2013, 2011, 2009) argument that financial liberalisation and financial market reforms have initiated a structural change in advanced economies under which finance has grown enormously in terms of markets, institutions, activities and profits. With the SIB the state has actively enabled a financial instrument to be developed within the social policy sphere itself. Thus, SIBs offer an exceptional analytical insight into the role of market-driven financial techniques in the realm of public social policy.

In this chapter I propose that a SIB shares several key features with a particular type of derivative, that of a forward contract. It is purely illustrative, and to the best of my knowledge, never before has an attempt been made to describe the structural similarities between the design a SIB and a forward contract, nor any type of derivative in detail. The hedging forward-like contract proposed evidences how the motives and methods of markets have made substantial inroads into public social policy. Whilst the speculating forward-like contract proposed evidences how a SIB represents a new type of financial profit for the financial institutions participating in SIB markets across advanced countries.

I also note there are two points of departure form a forward contract. First, and crucial to understanding the complexity of SIBs, is that the underlying asset has no market value. This is linked to my argument that the underlying asset in a SIB is the individual who is partaking in the social service programme, or more specifically, it is their behavioural change. Second, whilst in a normal forward contract there is no cash exchange at the beginning of the contract, hence the value of the contract at initiation is zero, the same is not true for the speculator in a SIB. They pay the current spot price, which are the funds that are used to finance the social service programme:

This type of contracting structure also indicates the potential for sub-optimal outcomes. Whilst the difficulties this transfer of risk related to social outcomes poses has been acknowledged, largely because the underlying asset has no market value. Thus a complicated system of interaction between various agents is required to set, price and evaluate the social outcomes. Due to their differing motivations and goals these can lead to principal-agent problems.

Chapter Seven: empirical research methodology

7.1 Introduction

This chapter will lay out the research questions and the methodology for the case study exploration in chapters eight, nine and ten, which encompasses phase two of this research. As well as explaining the methodology that was used in phase one of this research.

Section two details phase one of this research, a scoping exercise to ascertain the size and breadth of SIB markets across advanced countries, which formed an integral part of the data underlying this research as a whole. Whilst section three details phase two of this research, a trio of case studies, each examining a different SIB with regards to the two contentions of this research. Finally, section four presents the concluding remarks.

7.2 Phase one: scoping social impact bonds markets in advanced countries

Phase one started in the early stages of the PhD and continued through to June 2020. The long period of data collection was due to the nascent nature of the SIB market. As new SIBs became public knowledge they were added to my database. The data covers the period from March 2010 when the first SIB was contracted to March 2020.

i. Population of interest

The phase of this research was to compile the population of interest. This served two purposes. First, to give an overview of SIBs globally. Second, to be used later to act as the starting point from which to sample the cases for phase two of this research.

For this research, I compiled their own database using the resources discussed in section 2.2. This database only includes those SIBs that fit the definition used throughout this research. SIBs in advanced countries where a) the main outcomes payer is the government, b) the service is outsourced to a third sector or private provider, not provided by a government department, and c) excludes SIBs where investment comes solely from a Government agency. This analysis led to the finding of a population of interest of 142 SIBs, from 17 countries.

The database also only includes SIBs that have been implemented, that is for which the fundraising phase has been completed. Following (Rizzello et al., 2016) the total capital raised for each SIB includes only capital raised by investors, and therefore grants and non-recoverable grants are excluded and dealt with separately. The reason for their exclusion is because any form of grant is a financial gift, and not repayable finance made with the expectation of a financial return.

ii. Quantitative data sources

The data in phase one have been compiled using secondary data sources available in the public domain. I first decided which information would be required, then ascertained where it would be available, and decided how to extract it. I developed spreadsheet to record the required information, in a format that best suited my needs. I identified a secondary data set, evaluated the secondary data set, prepared and evaluated the data.

Data collection for SIBs suffers from two main problems. First, the market is still nascent and official reporting requirements are yet to be devised. Second, although SIBs are funded through public money they are essentially private contracts and commercially sensitive, thus various types of information are not made available in the public domain. Therefore, gathering precise information can be difficult.

The challenge of using this secondary data was that it only provided top-level information. For example, for each named investor collected I had to undertake additional research to categorise the data as for-profit financial services, non-profit and so on.

Also, the timing of phase one proved problematic. Early data collection came from the self-reporting database for impact bonds that is held by Social Finance (Social Finance, 2020). Due to the nascent nature of the market and lack of publicly available information, Social Finance invited SIB stakeholders to register projects on the database. As well as basic metrics such as project value, participant numbers, and launch dates, it also provides fuller information, such as a project overview, a description of the social challenge, and details of the target population. This database

has been widely used by academics and researchers as an early data tool (Gustafsson-Wright et al., 2015; Hajer, 2020, 2018; Rizzello and Carè, 2016).

More recently the Government Outcomes Lab, at the Blavatnik School of Government in Oxford University, has also established a database for impact bonds (GO Lab, 2020). Their Impact Bond Dataset is part of the INDIGO initiative, which is the International Network for Data on Impact and Government Outcomes (INDIGO). ⁵⁰ The database includes data templates which are made available on their website. The template includes a general overview, outcome summary, and financial summary, with the sources of information also recorded. With regards to the basic metrics for each project including capital raised, contract or launch date, and policy area. The data from the GO Lab projects database (GO Lab, 2020) was used extensively as I deem it to be the most accurate. This is because, unlike the self-reporting nature of the Social Finance database, the data in the GO Lab database has been verified by the Blavatnik School of Government in Oxford University. However, this did incur time delays as when the GO Lab database became available I had to recheck the data held in their own database which had been collated during the previous two years and try and integrate the new database with the existing one.

iii. Currency conversion rates

Where disclosed in the various databases, the data regarding capital raised, maximum outcomes payments, and individual investor amounts are published in the local currency. In the literature, market exchange rates are predominantly used in the analysis e.g. (Gustafsson-Wright et al., 2015; Hajer, 2020, 2018; Rizzello and Carè, 2016). In order to facilitate analysis throughout this research the value for capital raised has been converted from the local currency to the British Pound (GBP), using purchasing power parities conversion rates from the OECD (2022). The purchasing power parity rate corresponds to the year the contract was initiated, or if undisclosed

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⁵⁰ The first version of the Impact Bond Dataset was archived in September 2020 and can be accessed at https://golab.bsg.ox.ac.uk/knowledge-bank/indigo/project-database/. The current version of the database can be accessed at https://golab.bsg.ox.ac.uk/knowledge-bank/indigo/impact-bond-dataset-v2/.

the year the SIB was launched.

Purchasing power parities were chosen over exchange rates as they attempt to equalise the purchasing power of the different currencies through the elimination of the differences in price levels, thus making it possible to make comparisons in real terms. Purchasing power parities are used, for example, for analysing welfare measures, consumption patterns, and health costs. The United Nations use purchasing power parities in the Human Development Index. The World Bank uses purchasing power parities in determining its international poverty line and the European Commission uses them for the allocation of structural and cohesion funds.

GBP was chosen as it is the currency of the country I am situated in, because the United Kingdom is considered the world leader for SIBs (Cohen, 2013), and because this research shows that by far the largest number of SIBs have been implemented in the United Kingdom compared to the other countries.

7.3 Phase two: analysing social impact bond case studies

Following phase one, phase two involved an in-depth examination of three SIBs, undertaken via individual case studies. This was in response to the data collated and analysed during phase one, and the diverse array of literature reviewed spanning financialisation, comparative political economy and agency theory. This is an important contribution as the academic literature in this field of study has barely begun to analyse the phenomenon of SIBs.

i. Areas for case study exploration

The proponent literature argues that the superiority of the SIB model relies on hypothesised efficiencies being realised and being sufficient to offset any incremental costs (e.g. Butler et al., 2013; Cabinet Office, 2017, 2006; HM Government, 2012, 2011; Ragin and Palandjian, 2013). However, the nascent cautionary literature represents an increasing body of work refuting these efficiency claims. Given the emergence and spread of SIBs across advanced countries, as discussed in chapter two, it raises questions around their continued prevalence given their apparent inefficiencies. Particularly when these developments have coincided with the

accelerating pace and development of financialisation that is emblematic of the transformation of mature capitalism that has occurred during the past four decades.

Given these contradictions, phase two of this research seeks to challenge the notion that SIBs are an efficient instrument for public social policy delivery through three case studies. The three case studies present an in-depth examination of the two contentions of this research.

The first contention is that SIBs represent a particularly problematic aspect of financialisation, whereby the state supports financial markets for SIB investments to be developed in the public social policy sphere, thereby temporarily transferring the financial responsibility of welfare provision to private investors. This is examined through two sections. Starting with the interests of the state in hedging the risk of buying social outcomes. At the country level, the case studies will briefly address the approach to welfare and SIBs by the state. Followed by a closer study of the structural characteristics the SIB shares with a hedging forward contract, including the forward price. This will be followed by a section examining the interests of financial institutions in speculating on welfare delivery through a SIB, thus earning new financial profits. Again, at the country level, the type of financial system is briefly addressed. Before the financial institutions speculating on the SIB are investigated, alongside how financial profits may be earned, and the source of those profits. This will include an assessment of the structural characteristics the SIB shares with a speculating forward contract, including the forward price. This section will also contain a mini-study focussing on each of the three categories of financial institution proposed in the social impact bond investor typology (see *figure 3.2*)

The second contention, linked to the concept of 'risk' which is fundamental to the SIB narrative, is that the very structure of a SIB is prone to inefficiency issues, such as moral hazard and information asymmetry, stemming from the principal-agent problem. This is examined through the complexity involved in transferring risk through the pricing, setting and evaluating of social outcomes. Finally, using secondary literature a selection of examples of agency costs which have arisen due to the inefficiencies of delivering the social programme through a SIB will be briefly presented.

ii. Case study research methodology

Following a review of the literature, which has been updating at a rapid pace given the nascent nature of SIBs, chapters three, four and five acknowledge the concepts and current findings by academics and supplemented by some empirical work by practitioners, which have been used to help formulate the problem definition, research objective and research question of this research/case studies.

Within social science research different methods used be employed in an 'inclusive and pluralistic fashion' (Yin, 2014). This research uses secondary data from databases and document analysis to uncover the complex principal-agent relationships in SIBs which creates potential for manifold inefficiencies which have been discussed in depth in the preceding sections of this chapter. The research uses mixed methods, of both quantitative and qualitative data, from a range of secondary sources. Phase one of the research methodology, as described in chapter two, formed the population of interest for this research. This phase used quantitative data, predominantly from the GO Lab database, that was extracted in numerical or categorical form (Kumar, 2018). This was used to identify the population of interest of global SIBs constrained within the boundaries of the definition of a SIB used in this research. In phase two the population of interest gathered during phase one was used as a starting point for sampling, to identify the final cases for case study analysis. In addition to the quantitative data from phase one, this was supplemented with qualitative information, which was used to extract the descriptive and narrative information required for the case studies (Kumar, 2018).

Phase two of this research, which is specific to the case studies, commenced by setting out the research questions, and the aims and objectives, which were modified as the research progressed. The quality of the data available was also a driving force in the methodology used.

a) Case studies

A quantitative analysis of SIB numbers and values is sufficient to investigate the emergence and development of SIBs globally. However, in order to analyse the principal-agent problem, drawing upon agency theory to make assessments about

risks posed by conflicting interests of different parties to the contract, an approach based on case studies is required.

Case study methodology is highly relevant to the study of SIBs for a number of reasons. Case studies play an important methodological tool and strategy for conducting social research (Feagin et al., 1991; Yin, 2014) as they represent a "systematic inquiry into an event or a set of related events which aims to describe and explain the phenomenon of interest" and serves as the preferred strategy for research which focuses on contemporary phenomenon within a real-life context (Yin, 2014). Additionally, "irrespective of the type, purpose, unit of analysis, or design, rigor is a central concern in case study research" (Feagin et al., 1991, p. 7).

However, case study research as a research strategy is not without its criticisms, often aimed at the competing objectives of the search for particularity and the search for generalisability. Methodological weaknesses such as causal determinism, non-replicability, subjective conclusions, an absence of generalisable conclusions, biased case selection and lack of empirical clout, are cited alongside inadequate rigour (Creswell, 2014; Idowu, 2016). It is not limited to a detailed examination of a single example, but enables the comparison of different yet similar cases, which can provide reliable information pertaining to the broader class (Widdowson, 2011; Yin, 2014). This means the small sample of SIBs can inform us about the larger population of interest. "in analytic generalisation, previously developed theory is used as a template against which to compare the empirical results of the case study" (Yin, 2014, p. 67). Any generalisation that comes from the results, whether it be from a single or a multiple design, is usually attributed to the theory and not necessarily to the population (Yin, 2014).

However, in spite of these criticism, by using the case study method to research SIBs, which are undoubtedly a contemporary phenomenon, I have been able to closely examine the data within a specific context and bring an understanding of this complex issue thereby adding depth to the currently limited amount of existing knowledge. Given the nascent nature of SIBs I also note the use of a case study "may be useful in the preliminary stages of an investigation since it provides hypotheses, which may be tested systematically with a larger number of cases" (Abercrombie et al., 1984, p.

34).

Case studies of SIBs are more prevalent within the practitioner and public policy literature than in academia. More so, the economic analysis of SIBs by qualitative case studies is still in its infancy, and very few have been analysed this way, with the key qualitative study being Pandey et al. (2018). The alternative studies examining optimisation in SIBs are quantitative models such as those by Hajer (2018), Pauly and Swanson (2017), and Wong et al. (2016) as discussed in the previous chapter.

b) Sampling technique

The work then proceeded by sampling the data. Similarly to the study by Pandey et al. (2018) I have used purposeful sampling to select the SIBs for the case studies. This technique is widely used in qualitative research for the identification and selection of information-rich cases for the most effective use of limited resources (Patton, 2002). The main goal of purposive sampling is to focus on particular characteristics of the population of interest. Purposeful sampling techniques have been well described by Michael Patton (2015, 2002), who provides the following definition (emphasis in the original):

"The logic and power of purposeful sampling lie in selecting *information-rich* cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry, thus the term *purposeful* sampling. Studying information-rich cases yields insights and in-depth understanding rather than empirical generalizations."

(Patton, 2002, p. 230)

Although Patton describes this technique for use in primary research, there are no obstacles to its application to secondary data. Indeed, Suri (2011) argues this technique can be used beyond their originally intended context of primary research in the guise of research synthesis.

Given the emergent nature of SIBs and the difficulties garnering relevant data and evidence, of the 16 types of strategy Patton (2002) suggests the researcher uses

critical case sampling for a small number of cases as the research design strategy (Patton, 2015). This is because "It makes sense to pick the site that would yield the most information and have the greatest impact on the development of knowledge" whilst it also facilitates 'logical generalizations' (Patton, 2002, p. 236).

c) Selection process

Phase one of the research methodology found SIBs to have been widely adopted, with 142 examples in 17 countries worth approximately GBP 268 million. In the knowledge that documents would need to be read, the data set collated for phase one was reduced to English speaking countries. This left 103 SIBs for potential analysis, two in New Zealand, four in Canada, ten in Australia, 22 in the United States, and 65 in the United Kingdom.

Next, as SIBs are such a new phenomenon, and my calculations indicate the average length of a SIB contact across all countries is 49 months, earlier SIBs have the best chance of having sufficient information available, in addition to the basic data collated for phase one. Therefore, the data set was reduced further by eliminating any SIB that was launched after 2014. This left 25 SIBs, 1 in Canada, 2 in Australia, 6 in the United States, and 16 in the United Kingdom.

I then conducted a search on the public domain for relevant information including contracts, analysis of their delivery, official evaluations and so on pertaining to the 25 SIBs. This enabled the final selection of SIBs from which to draw a small number from for analysis. In order to synthesise the data the following principles were followed with regards to the sample selection: 'the data should be sufficient to permit comparisons among selected dimensions and constructs [...] the reports should reflect the work of several distinct and independent investigators [...] the data should be sufficient to answer the research question' (Paterson et al., 2001, p. 37).

In the final set there were few SIBs with sufficient information to be able to analyse the transfer of financial risk and information systems dimensions in sufficient details and depth. The above process led to a choice between analysing three SIBs from a single country, or a single SIB from three countries.

I selected to proceed with the analysis of a single SIB from each of the three countries. The reason for this choice was because in terms of investment styles there are similarities within country-specific SIB markets. That is, SIBs in the United Kingdom are typically very similar with regards to their investment structuring and classes of investor. This is also the case for the United States and Australian SIB markets. Therefore my selection enabled a wider variety of SIB styles to be analysed.

d) Qualitative data sources

Like phase one, the data in phase two has also been compiled using secondary data sources available in the public domain. Given the sensitivity surrounding SIB contracts I believe primary research would not have been possible, and had it been it could not have been as thorough as the research in the secondary literature that has been selected.

The case studies generated a mixture of qualitative and quantitative data, combining multiple techniques to elucidate data can help to strengthen and confirm results (Mohd noor, 2008). Details of the SIB contracts were gathered from the GO Lab database, supplemented by the Social Finance database where necessary. The principal purpose of phase two was to gather qualitative data on the contractual relationships, around how the SIB was set up and if the contracting process worked. The analysis of qualitative data is essential to the empirical advancement of the study of SIBs, as the quantitative data in isolation does not give the nuances of the principal-agent relationship and how it has affected the outcomes of the public policy programme. With different types of data, all independent of each other, available from secondary sources, great care has been taken to ensure consistent treatment across the three cases.

It is widely accepted that using secondary data sources in general comes with limitations such as the availability, format and quality of the data, the extent of which varies from source to source (Kumar, 2018). The challenges of the secondary sources in phase two were distinctly different from phase one. It is widely recognised that the novelty of SIBs makes it challenging to analyse their efficacy (Muir et al., 2017). As mentioned in chapter two there is a paucity of information available on SIBs, not only the details of the contracts themselves but also evaluations of the contracting process

itself as many of the documents available evaluate the SIB in terms of the policy area the SIB is targeted to, rather than an evaluation of the SIB as a contracting process. Given immaturity of SIB markets and the length of contracts, results are often only interim if available, findings are preliminary, and very few SIBs report outcomes payments made.

I reviewed a broad range of journals across the social sciences, business studies, and public policy. As well as existing SIB specific research studies, such as formal evaluations, undertaken by other researchers; government and quasi-government publications; national and international institutions that have links to SIBs; practitioner publications; and mass media such as reports published in newspapers, magazines, and the internet. Broadening the search for data to less conventional sources can enrich the case studies (Eisenhardt, 1989b).

As the existing data from the secondary sources was collected with a different research question in mind, it did to some extent limit the application of the data to this research. However, a distinct advantage of the journals and SIB specific reports such as evaluations is that this is professionally collected data, which goes some way to refuting the perceived weakness regarding the quality of data. A lot of the data is also outside the scope of what I would have been able to collate through primary collection due to the sensitive nature of the subject matter and being given enough access to documents and individuals. Ethically, as the researcher, I am also aware not to misrepresent or misquote any of the information used and has tried to minimise the risk of inaccurate interpretations (Eisenhardt, 1989b; Kumar, 2018).

iii. Cases selected for analysis

The core concepts by discussing three, significant "high-impact case[s]," which Patton (2015) defines as "...cases studied and documented in depth because of the impacts illuminated and the significance of the case to a field, problem, or society" (2015, p. 274).

SIBs are an innovation which requires substantial financial resources from the public purse. Its proponents assert that the innovation are a more efficient way of delivering

social service programs. Through the case studies I will selectively synthesise cases through information-rich secondary data sources in order to logically verify or challenge the claims in the literature (Suri, 2011).

This involves conducting three in-depth case studies to examine the questions raised in section 7.3 (i). The use of case studies in this research has the advantage of providing the reader with a clear sense of how the activities of finance have permeated into the social sphere through SIBs, and how problems arising from the principal-agent relationships may lead to sub-optimal outcomes.

Whilst these three critical cases cannot be used to make statistical inferences, it can be argued that they can help in making logical generalisations on their efficacy, prevalence, complexity as well as unintended outcomes as shall be demonstrated in the following chapters. An overview of the three cases are as follows.

a) United States

Social Impact Bond market selection

The United States SIB market is the first case study. The significance of this SIB market is the involvement of global investment banks, with banks overall being the most significant financial institution investing in the United States. The theoretical development of SIBs in chapter six emphasises connections between over-the-counter derivatives markets, which belong to banking, and SIBs. This case study includes a mini-study on banks across all SIB markets in advanced countries.

Social Impact Bond selection

The SIB selected was the Massachusetts Juvenile Justice Pay for Success Initiative.

The policy significance of this SIB is that phase one of this research shows that the policy area of Criminal Justice represents 45 percent of all SIBs in the United States, with an average value GBP 6,077,004 representing some of the largest SIBs on average. In the United States the area of criminal justice is deemed to be an critical area due to the fact it has "...the highest incarceration rate in the world, accounting for almost 25 percent of the world's incarcerated population and spends over \$70 billion annually on correctional facilities" (Social Finance, n.d.).

The contract significance of this SIB is that it is one of the earliest and the largest social impact bonds focused on juvenile justice in the United States. Additionally, of significance is the use of senior and subordinate debt and capital protection by the outcomes payer.

The data sources for this SIB are as follows. The key qualitative data for this case study includes a project brief (Kodali et al., 2014a) and lessons learned (Kodali et al., 2014b) documents, both prepared by the intermediary Third Sector capital partners. The quantitative data comes from the GO Lab database (GO Lab, 2020).

b) United Kingdom

Social Impact Bond market selection

The United Kingdom SIB market is the second case study. This SIB market was selected because the main investor in this SIB is a specialist fund manager, which are the most significant financial institution investing in the United Kingdom. This case study includes a mini-study on the role of specialist fund managers across all SIB markets in advanced countries.

Social Impact Bond selection

The SIB selected was the Essex Edge of Care SIB.

The policy significance of this SIB is that this SIB is classified child & family welfare, which phase one of this research shows is one of the most important policy areas, covering approximately roughly 23 percent of SIBs in the United Kingdom. ⁵¹ The SIBs in the child & family welfare policy area also have the highest average value at GBP 2,161,000. ⁵²

The contract significance of this SIB is that it was the first SIB in the United Kingdom to be commissioned by a Local Authority, and also to have multiple financial

⁵¹ The other significant policy areas being housing & homelessness accounting for 28 percent of SIBs

and workforce development 25 percent.

52 Housing & homelessness and workforce development have values of less than GBP 1,000,000 on average.

institutions investing. This SIB also presents a good example of complexity as it took several years to get from planning to service delivery. This is one of only a handful of SIBs in the United Kingdom not to be commissioned via a SIB Fund. ⁵³ It would have been interesting to select a SIB from a SIB Fund as a case study as the United Kingdom is the only country to use them. However, unfortunately, there is very little information in the public domain regarding the evaluations of these types of SIB.

The data sources for this SIB are as follows. The key qualitative data for this case study includes an interim evaluation report from the appointed evaluators OPM (Roberts and Cameron, 2015), a key learnings document based on this SIB aimed at commissioners, providers, funders and managers also prepared by OPM (2016), a review of the first operational year of the SIB by Social Finance (Green and Matthews, 2014). The quantitative data comes from the GO Lab database (GO Lab, 2020).

c) Australia

Social Impact Bond market selection

The Australian SIB market is the third and final case study. This SIB market was selected because investment by pension funds is unique to the Australian SIB market. This case study includes a mini-study on the role of insurance companies and pension funds across all SIB markets in advanced countries.

Social Impact Bond selection

The SIB selected was the Benevolent Society Social Benefit Bond. This SIB is one of a pair of SIBs both designed together in New South Wales as trial SIBs.

The policy significance of this SIB is that this SIB is also a child & family welfare policy area, which accounts for 30 percent of SIBs in Australia. The average value of a SIB in this policy area is GBP 3,838,827, which also represents the policy area with the highest average value. Although they are roughly similar across all SIBs in Australia, with the exception of Workforce Development which is lower.

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⁵³ SIB Funds are discussed in more detail in chapter nine.

The contract significance of this SIB is that portion of the investors are completely risk free as the outcomes payer offers one hundred percent capital protection to Class P holders.

The data sources for this SIB are as follows. The key qualitative data for this case study comes from an evaluation of the planning and development of Australia's first two social benefit bonds in New South Wales, which was undertaken by KPMG at the request of the New South Wales Treasury. In the KPMG evaluation interviews were conducted with multiple stakeholders including government agencies subject matter experts; the Expert Advisory Group; Government Steering Committee; service providers; investors and financial intermediaries (KPMG, 2014). Additionally, a comparative analysis of the application of SIBs to the financing of three child welfare programmes in Canada and in Australia, undertaken by the Canadian Centre for Policy Alternatives (Loxley, 2017). The quantitative data comes from the GO Lab database (GO Lab, 2020).

7.4 Concluding remarks

This chapter discussed in detail phase one and phase two of this research. Phase one focussing on the population of interest, enabling both a detailed analysis of SIB markets across advanced countries and formed the basis for the selection of case studies for phase two of the research. Phase two then considers SIBs theoretically from the perspective of agency theory and from the perspective of political economy drawing upon the theoretical framework of financialisation. The reasoning behind the selection of the three case study SIBs was also presented.

Chapter Eight: United States case study

8.1 Introduction

This chapter presents the first of three case studies, on the United States SIB market. This includes a specific focus on the Massachusetts Juvenile Justice SIB. This SIB aims to reduce recidivism and improve employment outcomes for young men at high risk of re-offending in the Boston, Chelsea, and Springfield areas of Massachusetts (GO Lab, 2020). Service delivery commenced in January 2014, making it the fourth SIB to be implemented in the United States (GO Lab, 2020).

This case study seeks to challenge the notion that SIBs are an efficient instrument for public social policy delivery. The analysis is theoretically informed by the existing financialisation, comparative political economy, and agency theory literature discussed in chapters four and five. Incorporating the theoretical elaboration of SIBs as derivative instruments and the principal-agent problems associated with the setting, pricing and transfer of risk, proposed in chapter six.

To recap, there are two key contentions of this research which will be examined in further details through the case studies. The first, and core, contention is that SIBs represent a particularly problematic aspect of financialisation, whereby the state supports financial markets for SIB investments to be developed in the public social policy sphere, thereby temporarily transferring the financial responsibility of welfare provision to private investors.

This contention is examined within sections two and three, drawing upon the theoretical elaboration of SIBs as forward-like contracts discussed in chapter six. Section two specifically focuses on the interests of the state in hedging its risk when buying social outcomes. At the country level the case study briefly addresses the type of welfare system in the United States, and SIB specific legislation enacted by the government. Followed by a closer study of the structural characteristics the Massachusetts Juvenile Justice SIB shares with a hedging forward contract, including its forward price.

Given the accelerating pace and development of financialisation that is emblematic of

the transformation of mature capitalism that has occurred during the past four decades, section three focuses on the interests of financial institutions in speculating on social outcomes through a SIB, and the financial profits they can earn from such speculation. Again, at the country level, the type of financial system is briefly addressed. Before the financial institutions speculating on the SIB are investigated, alongside an examination of the potential for financial profits, and source of those profits. This will include an examination of the structural characteristics the SIB shares with a speculating forward contract, including its forward price. Given that an investment bank speculated on this SIB, and the links made between SIBs and overthe-counter derivatives in chapter six, this section also contains a mini-study focussing on banks in SIB markets.

The second contention is that the very structure of a SIB is prone to inefficiency issues, such as moral hazard and information asymmetry, stemming from the principal-agent problem. Tackling specifically this issue, section four examines the principal-agent problems associated with the transfer of risk within this particular SIB through the complex process of setting, pricing and evaluating social outcomes, as laid out in chapter six. Whilst section five examines three areas where the rehabilitation of juvenile offenders in Massachusetts through the use of a SIB has led to agency costs. Finally, section six presents concluding remarks.

8.2 The interests of the state: hedging risk when buying social outcomes

As discussed in chapter four, some scholars have tended to characterise SIBs as a neoliberal innovation, expanding profitable opportunities for capital whilst further commodifying public services. For SIBs to be developed in the public social policy sphere, it is necessary therefore that they should occur within an institutional context that is directly influenced by state policy making, in both finance and welfare. This section examines the involvement of the state through the type of welfare system in the United States, the legislation implemented by the state, before more specifically examining the forward-like hedging contract for the Massachusetts Juvenile Justice SIB.

i. Welfare systems and state infrastructure

The provision of welfare services such as the rehabilitation of juvenile offenders is part of the social protection measures of the state. The extent to which welfare is delivered can be partially explained through welfare regime theories, which may to some extent explain why the state would want to hedge their risk when buying social outcomes. This is an area not fully explained in the literature, but could be viewed as a mixture of a tendency towards lower levels of decommodification, and the potential to reduce the costs of future welfare expenditure.

As the descriptive data in chapter two alluded to, SIBs exhibit considerable variety depending on the institutional and political characteristics of each country. Analysing early SIB data, Hajer (2020, 2018) found the SIB model to be congruent with liberal governance regimes. The discussion in chapter four regarding welfare regimes and decommodification (Bambra, 2005a, 2005b; Esping-Andersen, 1990) found the United States to have lower levels of decommodification compared to other advanced countries, increasing the dependence of citizens on the market for their social welfare needs, due to a restricted view of the role of the state. In liberal regimes municipalities are said to cooperate with for-profit and non-profit service providers, but they are not integrated into the process of public social policy making.

Examining healthcare, used in this context as a proxy for in-kind services, Bambra (2005b, 2005a) found the larger the size of the private health sector in terms of expenditure and consumption, the larger the role of the market and, therefore, the lower the degree of health decommodification. Therefore when the level of decommodification is low, the state does not protect against the market.

The United States has the lowest score in Bambra's health care decommodification index, for both 1980 data (2005a), and 1998 data (2005b). In such liberal style regimes, the state generally encourages the market to act as a co-provider of benefits, partly by providing a low level of public services, and containing a larger for-profit and non-profit component (Esping-Andersen, 1999, 1990; Hicks and Kenworthy, 2003; Schröder, 2013). Therefore, the data for healthcare services would suggest there is a very large role for markets in welfare services in the United States, which would include

policy areas such as the rehabilitation of juvenile offenders.

It has been explicitly claimed that SIB markets have grown through the use of significant government infrastructure (Hajer, 2018; Loxley and Hajer, 2019). The development of the United States SIB market has been underpinned by strategic, coordinated measures, and an active role by policymakers, for substantial pay-for-results and SIB related policy making activity at federal, state and city levels.

At a national level there has been new legislation and amendments to existing legislation to support SIBs, such as the Social Impact Partnership Act and the Social Impact Partnerships to Pay for Results Act, and policy specific such as the Second Chance Act which was implemented by the Justice Department (Dear et al., 2016; Gustafsson-Wright et al., 2015). There has also been a US Department of Treasury bill requesting the secretary of the treasury to seek proposals from states or local governments for SIB projects (Gustafsson-Wright et al., 2015). ⁵⁴

At the Province/State Level there have been various legislative efforts to authorise the SIB process, create study committees, begin pilot projects, engage in feasibility studies, and understand which types of programs would be suitable. At least twelve pieces of SIB related legislation enabling departments or individuals to engage in contracts had been passed in eleven states and local jurisdictions (Cobb Curran, 2017). In Massachusetts', for example, legislation permits the use of SIBs in order to improve outcomes while decreasing costs for the state (Hawkins et al., 2017b).

In addition, there are a raft of other government actions supporting SIBs. The Obama administration created the Office of Social Innovation and Civic Participation. Several funds have been launched, including the Social Innovation Fund, which was established by the White House, and awards grants to facilitate the development of SIBs. This has included the Harvard Kennedy School's Social Impact Bond Technical Assistance Lab (SIB Lab) (Gustafsson-Wright et al., 2015). Local and state governments have partnered with the SIB Lab, receiving technical assistance to help

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⁵⁴ Bill HR 4885

develop SIB projects, including the Massachusetts government. Federal agencies supporting SIBs includes the Department of Justice, which assisted with this SIB.

The result of the deliberate and direct actions of the state have led to a SIB market that is important in terms of its size, value, and speed of growth. The United States was the second country to implement a SIB, with their first SIB contracted in 2012. Since then, a total of 22 SIBs have launched across the country, with SIBs being implemented every year between 2012 and 2018. The total market share by volume of SIBs across all advanced capitalist countries is the second largest at 15 percent (see *figure 2.3* in chapter two). The total market share by total value across all advanced economies is the largest at GBP 118,759,394, which is 44 percent of total capital raised (see *figure 2.4* in chapter two). Phase one of this research shows the average monthly increase is 0.24 SIBs per month, which is the second fastest growing rate of all advanced capitalist countries.

The United States has a federalist system of government, which means there is no unified welfare system, with central government playing a limited role, and many important functions, including the provision of social services, held by the States (Spicker, 2013). Phase one of the research shows SIBs have correspondingly been issued at the state or provincial level, across 11 states including California, Colorado, Connecticut, Illinois, Massachusetts, Michigan, New York, Ohio, Oklahoma, South Carolina, and Utah. The state of Massachusetts, which is responsible for this SIB, has issued the largest number of SIBs, at 4, alongside California. At central government level, there have been three departments acting as outcomes payers, including the US Department of Labor, U.S. Department of Housing & Urban Development, and the U.S. Department of Veterans Affairs.

With regards to the areas of public social policy these states have implemented SIBs for, phase one indicates SIBs have been implemented across all six policy areas. This SIB comes from the most prevalent category, which is criminal justice with a total of 10 SIBs. Whilst housing & homelessness had 4 SIBs, child & family welfare 3 SIBs, 2 SIBs each for health and workforce development, and finally a single SIB for education & early years. The state of Massachusetts has implemented a SIB in housing & homelessness, plus two in workforce development, and this SIB in criminal justice.

ii. State hedging its risk of paying for low-quality social outcomes through a forwardlike contract: Massachusetts Juvenile Justice SIB

Now the approach to welfare by the state which underpins the United States has been briefly addressed, this section describes the policy issue the outcomes payer, the Commonwealth of Massachusetts, identified as problematic, and for which they decided to hedge their financial risk through a SIB. This is followed by an explanation of the forward price for this hedging forward-like contract.

The state of Massachusetts identified recently released young men at high-risk of reincarceration as a problematic policy area which needed addressing. In the United States the policy area of criminal justice is deemed to be critical as it has "the highest incarceration rate in the world, accounting for almost 25 percent of the world's incarcerated population and spends over USD 70 billion annually on correctional facilities" (Social Finance, n.d.). Whilst in the juvenile justice system in Massachusetts approximately 4,000 high-risk young men are released annually, with 64 percent reincarcerated at least once in the five years following release, averaging another 2.4 years in prison (Kodali et al., 2014a; Urban Institute, 2014). This has been linked to a national shortfall in support services for high-risk young men after their release (Kodali et al., 2014a).

The Commonwealth of Massachusetts identified that savings could be made to the public purse by addressing the number of young men being reincarcerated. This was based on evidence that annual incarceration costs to the Commonwealth of Massachusetts are in excess of USD 280 million annually, with just 35 percent of these high-risk young men employed one year after their release (Kodali et al., 2014a; Urban Institute, 2014). Meanwhile, estimated budgetary savings show a reduction in incarceration of 40 percent would generate USD 22 million in savings, whilst a 55 percent reduction would yield USD 33 million (Rangan and Chase, 2015; Tortorice et al., 2020). These savings would be achieved through a reduction in court costs and policing, alongside direct savings to the state Department of Corrections and the county Houses of Correction (Rangan and Chase, 2015). A social intervention was anticipated to lead to not only budgetary savings, but also a reduction in violence and crime (Kodali et al., 2014a).

In order to make savings, the Commonwealth of Massachusetts sought to implement a social programme, through an external provider, to reduce the level of incarceration and also lead to higher rates of employment (GO Lab, 2020). They required this to be completed within 7 years, for a maximum price of GBP 18,857,988 and contracted Youth Services Inc to arrange the programme, who then contracted Roca to run the programme (GO Lab, 2020). This SIB was also supported by financial contributions at the federal level as the SIB was awarded a Department of Labor Workforce Innovation Fund grant (Lantz et al., 2016).

An existing specialist intervention programme was identified, which Roca had been delivering since 1988, and was shown to reduce three-year incarceration rates by 33 percent amongst this population (Kodali et al., 2014a). The programme aiming to assist very high-risk young men to stay out of prison, secure jobs, and stabilise their lives through outreach work, intensive case management; life skills, educational, prevocational, and employment programming; and work opportunities with community partners (Kodali et al., 2014a).

As elaborated in chapter six, the above agreement can be said to share structural characteristics with a forward contract in a number of ways. The Commonwealth of Massachusetts is looking to hedge their position with regards to incarceration and employment rates. With the SIB providing a private agreement between the two parties, Commonwealth of Massachusetts and Youth Services Inc, about a future transaction of an asset, the asset here being the behavioural change of the programme participants. Thus the SIB simultaneously obligates the buyer to purchase an asset, and the seller to sell the asset, at a specified price on a fixed future date, with the price of the asset also fixed at the time the contract is executed (Oosterlinck, 2017). Thus, the forward price for the hedging forward-like contract is explained as follows.

The Commonwealth of Massachusetts buys long a bundle of social outcomes that will keep young men at high-risk of recidivism out of prison for a forward price of GBP 18,857,988 with maturity in 7 years. The Commonwealth of Massachusetts is hedging their risk because without the social service programme and subsequent social outcomes, incarceration costs are likely to be significant. Estimates of savings

show a reduction in incarceration of 40 percent would generate approximately USD 22 million in budgetary savings, whilst a reduction of 55 percent would yield approximately USD 33 million in savings (Rangan and Chase, 2015; Tortorice et al., 2020).

So here, the valuation at initiation date represents the price the Commonwealth of Massachusetts are willing to pay for the bundle of social outcomes that will keep young men at high-risk of reincarceration out of prison. Because this is welfare expenditure there is no risk-free or cost to carry. Thus, the forward price at initiation is:

$$F_0(T) = S_0$$

As there is no cash exchange at the beginning of the contract, the value of the contract at initiation is zero:

$$V_0(T) = 0$$

The intervention needs to be successful at delivering the required social outcomes at the right level of quality for the short position to be paid. Should the intervention fail to meet the pre-determined metrics, which is an improvement in 'recidivism bed days avoided' and 'improved employment outcomes' measured against a control group through a randomised controlled trial evaluation, there should be no payment due meaning the value of the contract at expiration would still be zero:

$$V_{7}(T) = 0$$

If at expiration T the bundle of social outcomes are delivered to a high-quality, the value of the forward contract is:

$$V_7(T) = S - F_0(T)$$

If at expiration T the bundle of social outcomes delivered are any other level of quality, the value of the forward contract is:

$$V_7(T) = S_5$$

Where:

- F₀ is the forward price
- S_t is the spot price
- T is the length of the contract in years
- V is the value of the contract

The description of the hedging forward-like contract for the Massachusetts Juvenile Justice SIB evidences how the state has ceded high levels of control to non-state providers, further evidencing how market competition has come to shape the value, purpose and practice of social provision (Le Grand, 2001). Further, the commodification of public services is regarded as antithetical to public values (Lake, 2015; Ryan and Young, 2018; Tse and Warner, 2018; Warner, 2013; Whitfield, 2015).

8.3 The interests of financial institutions: speculating on the value of social outcomes for financial profit

The broader domain of social investment, to which SIBs belong, has often been considered by heterodox economists and others as part of responding to the over-accumulation of capital in advanced countries in the last four decades, by opening new investment opportunities for surplus capital (Dowling and Harvie, 2014; Harvie, 2019; Harvie and Ogman, 2019). This section will examine the type of financial system in the United States, and the financial institutions involved in this SIB, including how they have earned financial profits from the delivery of this social service programme. More specifically, given the connections between SIBs and forward contracts, which are an over-the-counter banking instrument, this chapter also examines the role of banks across the SIB markets. This particular type of speculator is most prevalent in the United States SIB market.

i. Financial systems and financial institutions

SIBs were explained as having links to derivatives and investment banking in chapter six, with evidence presented throughout that SIBs are based on financial practices and motives. Therefore, theories of financial systems are a key component in understanding SIBs which, due to their nature as financial instruments, require a

financial system to intermediate their use. Particularly, as this kind of financial expertise is not typically found within government mechanisms (Hajer, 2020, 2018; Loxley and Hajer, 2019; Ryan and Young, 2018; Warner, 2015, 2013). Chapter six also elaborated on the ways in which SIBs present a new type of financial activity for financial institutions, also enabling financial profit to be earnt in a new way. Which is part of the transformation of capitalism according to Lapavitsas (2013, 2011, 2009).

The theoretical discussion in chapter four suggests that a country interested in SIBs is likely to be market-based. Financialisation can take different shapes depending on different political economies (Engelen et al., 2009; Lapavitsas and Powell, 2013; Ward et al., 2019). The United States, identified as of the most heavily financialised economies (Lapavitsas and Powell, 2013) is considered to have a market-based financial system (Hall and Soskice, 2001), or belong to a cluster of countries with 'decentralised finance' (Amable, 2003). As such, the United States is deemed to have a financial sector marked by a strong presence of institutional investors and particularly pension funds, with a highly capitalised stock market, a well-developed venture-capital system, and a profitable banking sector (Amable, 2003).

Phase one of this research indicates that of the 22 SIBs implemented in the United States, 59 percent of them have received investment from at least one financial institution. Of the GBP 118,759,394 total speculative capital that has been raised, GBP 64,529,209 comes from SIBs which have at least one financial institution investing, which is 54 percent of the total speculative capital.

Of the 85 individual investments disclosed in the United States, 25 percent of these are from financial institutions. This breaks down to 9 percent by banks, 5 percent by pension funds or insurance companies, and 1 percent by specialist fund managers. There is a clear involvement of financial institutions in the SIB market in the United States, with investors corresponding to those identified by Amable (2003), in particular a profitable banking sector with banks the most prominent financial institution investing in the SIB market.

Within the Massachusetts Juvenile Justice SIB sits a single financial institution which intermediated speculative capital on behalf of their clients, the end-speculators. This

institution is a bank, the investment bank Goldman Sachs.

Goldman Sachs was the first financial institution in the United States to invest in a SIB, the first across all advanced countries, considering themselves 'a pioneer in the creation of the social impact bond' (Goldman Sachs, 2014). Their presence indicates this must be an important avenue for them to invest their capital, as they are one of the key players globally, featuring in the top 30 of Standard & Poor list of the world's 100 largest banks by value of assets (S&P, 2020).

Goldman Sachs is also a key player in the derivatives markets, with total derivatives held as at June 2011 of USD 7.7 trillion (Lindo, 2013). By comparison, their first SIB investment made a year later in August 2012 was considerably less at GBP 6,735,686 (GO Lab, 2020). Impact investing is also an area Goldman Sachs already had expertise in, with their Urban Investment Group having invested over USD 4.3bn since 2001 (Goldman Sachs, 2013). Their Social Impact Fund, valued at USD 250m, was one of the first domestic impact investing vehicles to be sponsored by a major financial institution in the United States (Gustafsson-Wright et al., 2015).

The involvement of financial institutions such as investment banks in the social policy sphere tends to draw criticism on the grounds of the commodification of public services (Lake, 2015; Ryan and Young, 2018; Tse and Warner, 2018; Warner, 2013; Whitfield, 2015). Such developments also tend to affirm the tendency of modern capitalism to evolve in a way interpreted by scholars such as Lapavitsas (2013, 2011, 2009) where financial institutions search for new types of financial activity, moving away from productive to speculative investments that enables them to earn financial profits in a novel way. From the aspects of the case study hitherto discussed, I contend that SIBs appear to be a current manifestation of the same tendency. This analysis is further elaborated in the sections that follow.

<u>ii. Speculating on the value of social outcomes through a forward-like contract:</u> <u>Massachusetts Juvenile Justice SIB</u>

Now the type of financial system has been addressed, this section turns its attention to the speculators who wish to bet on the direction of those same social outcomes.

As explained in chapter six, because the investors have no claim on the underlying asset, the transaction to buy a social outcomes forward-like contract represents a speculative bet that the value of social outcomes will rise. That is, speculating on changes in the price of the social outcomes that will keep very high-risk young men out of prison, secure jobs, and stabilise their lives. The changes in price are dependent upon the level of quality of the social outcomes achieved. SIB speculators are perceived to also have an interest in social as well as financial returns. The quality of the social outcomes which informs the spot price also affects the level of social returns, with high-quality social outcomes meaning both a higher spot price and a higher social return, with the reverse true for low-quality social outcomes.

There are three speculators in total in the Massachusetts Juvenile Justice SIB, comprised of a single financial institution, and two third sector institutions including a foundation and a non-profit investment fund. They are Goldman Sachs as discussed above, the Kresge Foundation and Living Cities (GO Lab, 2020). Together the speculative capital raised by the three investors was GBP 8,381,328. Phase one of this research indicates this is higher than the mean average value of GBP 5,976,685 raised by speculators for SIBs in the policy area of criminal justice in the United States. In fact, at the time of its implementation this was the largest SIB across all advanced countries in terms of capital raised. The large value of this SIB could be attributable to a key financial institution such as Goldman Sachs investing.

The speculators speculate on the directional movement of the value of the underlying asset. The underlying asset in this SIB was the approximately 1,000 high-risk young men aged 17-24 from the prescribed geographical area, and are leaving the juvenile justice system, involved in the probation or parole system, or leaving the custody of Correction facilities (GO Lab, 2020).

Criminal justice is the most prevalent policy area for SIBs in the United States, with 45 percent of SIBs implemented in this area. Phase one of the research indicates that in excess of 15,000 men and women, youth and adults, who are at risk of reoffending, in the probation system, in custody within the county jail, or have a mental health and/or substance-use disorder have been participants in these SIBs. These individuals have been the underlying asset for 50 percent of all the speculative capital raised in

the United States, GBP 59,766,845.

As discussed in chapters four and six such developments have been met with criticism that vulnerable people are being packaged up as commodities and SIBs lead to a reframing of the welfare relationship (Chiapello and Knoll, 2020; Cooper et al., 2016). Further evidence that the ethics, morality and mindset of finance have penetrated both social and individual life (Lapavitsas, 2009).

Thus the quantification and commodification of previously socialised risk facilitates the transfer of the social value to investors, resulting in the introduction of market discipline into social domains not previously evaluated by using financial logic (Berndt and Wirth, 2018; Chiapello and Knoll, 2020; Cooper et al., 2016; Sinclair et al., 2014). The forward price for the speculating forward-like contract is explained as follows.

The speculators believe the value of the bundle of social outcomes that will keep highrisk young men out of prison is going to rise from its current spot price of GBP 8,381,328. Therefore, the speculators buy long at GBP 8,381,328 with a maturity date the same as the hedger, in 7 years.

The forward price is calculated using the spot price:

$$F_{\circ}(T) = S_{\circ}$$

Whilst in a standard forward contract there is no cash exchange at the beginning of the contract, hence the value of the contract at initiation is zero, the same is not true for the speculator in a SIB. They pay the current spot price, which are the funds that are used to finance the social service programme:

$$V_0(T) = S_0$$

Changes in the price of the bundle of social outcomes will cause the forward to take on a positive or negative value. Thus, at expiration T, the value of the forward contract is:

$$V_7(T) = S_7 - F_0(T)$$

Where:

- F₀ is the forward price
- S_t is the spot price
- T is the length of the contract in years
- V is the value of the contract

The maturity date of this SIB is 7 years, due to complete in 2021 (GO Lab, 2020). Unfortunately, no results were publicly available at time of writing. If the spot price at maturity $V_7(T)$ is higher than the forward price $F_0(T)$ the speculator underpaid for the bundle of social outcomes and therefore made a profit. However, if $V_7(T) < F_0(T)$ at maturity the speculator will make a loss.

<u>iii. Financial profits earned through the speculating forward-like contract:</u> <u>Massachusetts Juvenile Justice SIB</u>

In a SIB the primary profit arguably is purely speculative, that is, one person's pay-out is another's loss. If the SIB is successful the hedger pays for the successful social outcomes. If the SIB is unsuccessful the speculator loses their speculative funds. However, this is not the case for financial profit, this is a zero sum game.

As discussed in chapters four and six, the narrow definition of financial profit, used by Lapavitsas and Mendieta-Muñoz (2016), focuses on profit earned by banks and nearbank financial institutions. In this SIB financial profits are due to a single financial institution, the investment bank Goldman Sachs, which acted as asset manager through its Social Impact Fund. Investing GBP 6,285,996 on behalf of its clients (GO Lab, 2020). Although the outcome of this SIB is currently unknown, Goldman Sachs will have earned secondary financial profits through commission or fees, regardless of the SIB outcome, because for financial institutions SIBs are a zero sum game.

When the final results are released, if the social outcomes are not achieved as agreed, the advance of commission and fees would not be recouped, and the financial profit to Goldman Sachs would remain part of the investment committed by the Social Impact Fund end-speculators. The details of whom are undisclosed. If the social outcomes are achieved, and the returns to speculators paid, the financial profit would

ultimately be paid from tax revenue. Either way the financial profits still represents a peculiar type of financial expropriation.

Any general profits will also go to the two non-financial institutions of Living Cities and the Kresge Foundation, who speculated GBP 1,047,666 each (GO Lab, 2020). These would be paid directly from tax revenue. Due to the layered structure of this SIB, as Goldman Sachs' clients are the senior investors, the two non-financial institutions will be paid general profits only after Goldman Sachs' end-speculators have been paid.

The involvement of foundations in SIB markets is not viewed as permanent by all, with some arguments in favour of philanthropy being used to seed fund the emerging market before the transition to mainstream impact investments as the market reaches maturity (Hughes and Scherer, 2014). Showing perhaps the significance of philanthropy during the early stages when commercial investors were unwilling to expose themselves to the risk due to a perceived lack of evidence that would allow risk-return calculations (Berndt and Wirth, 2018).

iv. Banks and social impact bond markets

This case study has ascertained that of the financial institutions present in the social impact bond investor typology (see *figure 3.2*), proposed by myself in chapter three, the main speculator in the Massachusetts Juvenile Justice SIB was an investment bank. This supports the links made between the emergence of SIBs and the changes identified by Lapavitsas (2013, 2011, 2009) which have seen banks adopting investment banking practices as they sought to explore alternative avenues to traditional business lending to sustain their profitability. Thus the connections between banks and SIB markets merits deeper analysis.

Chapter six discussed the interconnections between SIBs and over-the-counter derivatives, with banks earning financial profits from both. Large investment banks are the foundation of over the counter derivatives markets, where they provide market-making services and organise the infrastructure of derivatives markets (Lapavitsas, 2013; Lindo, 2013; Orçun and Frieß, 2015). However, their role in the SIB market is more opaque, as is often their role in impact investment more generally, as observed

by Lilley et al. (2020). The role of banks in SIB markets is examined in more detail here, so to what extent is there a cross over from global investment banks who also trade derivatives.

SIBs have attracted capital from multiple banking institutions, beyond Goldman Sachs. Phase one of this research indicates that 25 banks operate across 11 of the 17 SIB markets, and have made 40 investments across 32 SIBs. The largest market for bank investment is the United States with 7 banks, followed by 3 each in Australia, Japan and New Zealand, 2 each in Belgium and Portugal, and a single bank in Canada, France, Israel, Korea and the Netherlands. Whilst beyond those banks registered as speculators, Triodos Bank intermediated six SIBs in the United Kingdom, a role which included raising capital (GO Lab, 2020; Gustafsson-Wright et al., 2015). Additionally, Deutsche Bank Social Investments and J.P. Morgan both invest in two of Bridges Fund Management's funds (GO Lab, 2020; Gustafsson-Wright et al., 2015). ⁵⁵

The majority of these banks are investment banks or have investment banking arms, with asset management functions, and manage significant portfolios for other financial institutions such as pension funds and insurance companies. Many are from the top group of banks in their respective countries. For example, all four 'pillars' of the Australian banking system are involved in their local SIB market, as are two of the United States 'big four', with interest from a top tier bank in Belgium, Canada, France, Germany, Israel, Japan, Netherlands, Spain, and Switzerland. The majority of these banks, or their parent companies, feature in the most recent Standard & Poor list of the world's 100 largest banks by value of assets (S&P, 2020). ⁵⁶ The presence of the behemoths of the investment banking industry indicates this must be an important avenue for banks to invest their capital, as these are some of the key players globally.

⁵⁵ It is unknown how many SIBs these banks have invested in, but overall Bridges Fund Management have raised capital for a total of 30 SIBs in the United Kingdom.

⁵⁶ These are (in ascending ranking order): JP Morgan Chase & Co, 7th; Bank of America (which includes Merrill Lynch), 8th; BNP Paribas SA, 9th; Sumitomo Mitsui Financial Group Inc, 12th; Mizuho Financial Group Inc, 15th; Banco Santander SA, 16th; Deutsche Bank AG, 21st; Royal Bank of Canada, 23rd; ING Groep NV, 28th; Goldman Sachs Group Inc, 30th; UBS Group AG, 33rd; Commonwealth Bank of Australia, 44th; Rabobank, 47th; Australia and New Zealand Banking Group Ltd, 48th; Westpac Banking Corp, 51st; National Australia Bank Ltd (which includes the Bank of New Zealand), 52th; ABN AMRO, 69th; Erste Bank Group AG, 93rd.

A number of these banks are also big players in derivatives markets. At the beginning of this century Goldman Sachs, Deutsche Bank, Merrill Lynch, J.P. Morgan, BNP-Paribas, ABN AMRO were in the top twenty derivatives dealers (Clow, 2000). A decade later, around the same time that SIBs were being designed, banks were reported to be constantly entering new product segments in derivatives markets (Deutsche Börse AG, 2008). With large derivative dealers in 2008 including Goldman Sachs Group, BNP Paribas, UBS, Bank of America (which owns Merrill Lynch), Deutsche Bank and JPMorgan (Lindo, 2013).

Many of these large banks that deal in derivatives, also have impact investing arms such as ABN AMRO (2018), BNP Paribas (2021), Goldman Sachs (2020), JP Morgan (2020), and UBS (2021). With several also holding membership to the Global Impact Investing Network, as Bank of America, Deutsche Bank, J.P. Morgan, Northern Trust, and UBS as asset owners and ABN AMRO Bank N.V., and Triodos Investment Management as asset managers (GIIN, 2021a). ⁵⁷

However, whilst there are similarities between these two markets, and the SIB market does represent a substantial total monetary value, in terms of size and importance it is dwarfed by the global derivatives market, which is several orders of magnitude greater than the total market value of SIBs. As the total amount of capital raised per SIB varies significantly, particularly when examining SIBs cross-nationally, it is difficult to attribute changes in investment size meaningfully, particularly when there is so little data available of actual investments made per investor. However, using Goldman Sachs, which featured in the case study, as an example. By way of comparison, the total derivatives held by Goldman Sachs as at June 2011 was USD 7.7 trillion (Lindo, 2013), whilst their first SIB investment made a year later in August 2012 was for GBP 6,735,686. Their total investment across three SIBs between 2012 and 2014

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⁵⁷ Established in 2009, GIIN is a non-profit membership organisation with 280 members across 41 countries building industry infrastructure and supporting activities, education, and research that help accelerate the development of the impact investing industry. Membership provides access to a diverse global community of organisations interested in deepening their engagement with the impact investment industry.

raising GBP 16,219,822. 58

Goldman Sachs was the first financial institution in the United States to invest in a SIB. the first across all advanced countries. The SIB market in the United States started off with multiple big investment banks, taking the lead, either as the only investor or with one or two non-profit institutions taking subordinate investment. Goldman Sachs raised capital through their Urban Investment Group which is part of the asset management function, and through their Social Impact Fund (Goldman Sachs, 2014). Similarly, through its wealth management platform, Bank of America Merrill Lynch raised capital from 44 of its qualified private and institutional investor clients (Rizzello and Carè, 2016; Social Finance, 2014b). Then over time the presence of banks shifted, seeing multiple investors, even multiple financial institutions, not a single dominant bank. Which had often come with guarantees or some other form of capital protection. Some of the larger investment banks exited the market early. Goldman Sachs considered themselves 'a pioneer in the creation of the social impact bond' (Goldman Sachs, 2014) yet made only three investments. ⁵⁹ Whilst Bank of America Merrill Lynch, which only made a single investment, claimed at the time to be committed to transforming the SIB into a new investment class which would be a standard component of client portfolios (Social Finance, 2014b).

There was also significant interest from banks in the early stages of many of the other SIB markets early on, as and when these markets opened. Two of the Australian 'big four', Westpac Bank and Commonwealth Bank of Australia, took a leading role in one of the first two SIBs which were developed together. Triodos Bank acted as an intermediary, raising capital, for the second SIB in the United Kingdom (which was also the second SIB worldwide). In the Netherlands ABN AMRO took an early interest in the SIB market, making several more investments in subsequent years. The first

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⁵⁸ The total investment by Goldman Sachs is comprised of GBP 6,735,686 in the 'NYC ABLE Project for Incarcerated Youth' SIB in New York City in 2012; GBP 3,198,141 in the 'Utah High Quality Preschool Program' in Salt Lake County in 2013; and GBP 6,285,995 in the case study SIB, the 'Juvenile Justice Initiative' SIB in Massachusetts in 2014 (GO Lab, 2020).

⁵⁹ Goldman Sachs made an additional investment into the 2014 'Child-Parent Center' SIB in Chicago, but this SIB does not meet the definition of this thesis so has not been included. The service provider is Chicago Public Schools, not at third party. Coincidently, they are also acting as outcome funder alongside the City of Chicago Office of the Mayor (GO Lab, 2020; Gustafsson-Wright et al., 2015).

SIB in New Zealand saw investment from three banks, Bank of New Zealand, Australia and New Zealand Banking Group Ltd, and Westpac. One of the first two SIBs contracted together in France in 2016 saw capital raised by BNP Paribas. The first SIB in Israel in 2019, and all three pilot SIBs in Japan all saw early investment by banks.

60 As did the only SIB in Korea whose investors have been disclosed, from UBS.

In terms of multiple investments by banks, Northern Trust invested in six SIBs in the United States, and ABN AMRO in five SIBs in the Netherlands. Whilst BNP Paribas invested in three SIBs in France, two in the United States, and more recently a SIB in Belgium.

ABN AMRO is an interesting case in point. All five SIB investments were made through their Social Impact Fund. This fund was not comprised of assets under management, but the banks own money. The aim of the fund being to develop the social enterprise market in the Netherlands, as it seeks to enter what it calls a 'relatively young market' (ABN AMRO, 2021, 2020; Bobeldijk, 2013). ⁶¹ In terms of financial profits, this is the only known bank which would earn financial profits from proprietary trading should the SIB prove successful and the spot price at maturity be higher than the forward price ABN AMRO will have underpaid for the bundle of social outcomes and made a profit.

BNP Paribas is also an interesting case. It has signed a co-investment agreement with the European Investment Fund to specifically invest in SIBs across the European Union through the BNP Paribas European Social Impact Bonds Fund, which is managed by the subsidiary BNP Paribas Asset Management (BNP Paribas, 2020). BNP having already structured multiple SIBs, and invested in 6 across France, the United States, and Belgium (GO Lab, 2020). There was also 'direct investment' by its Belgian subsidiary BNP Paribas Fortis in its most recent SIB (BNP Paribas, 2020; GO Lab, 2020). Further details are unclear, but could be another example of financial profits being made from proprietary trading in the event the SIB proves successful.

Whilst Israel launched its first SIB under this thesis' definition the most recently in 2019, they tested the concept using non-profit or quasi-governmental funds as outcomes payer first, as early as 2015.
 ABN AMRO also helps municipal authorities create SIBs and signposts interested parties to SIB professionals and practitioners in the Netherlands and United Kingdom (ABN AMRO, 2021)

Moving away from the discussion regarding large investment banks, there is very little disclosed interest in SIBs from ethical banks. Charity Bank, which is an important retail ethical bank in the United Kingdom, uses savers' money to make loans to charities and social enterprises but is not reported to be connected to any SIBs (Charity Bank, 2021). Triodos Bank is not formerly recorded as investor in any SIBs, but has intermediated six SIBs in the United Kingdom, which included raising capital, although it has not done so since 2015. Yet Triodos manages over a dozen sustainable investment funds, has USD 5.8 billion in assets under management, with more than 750 investments worldwide, and has been actively engaged in impact investing since 1980 (Triodos, 2021). This could be attributable to the fact that Triodos Bank does not undertake investment banking activities, including derivatives, for its customers. This strengthens the argument that in their initial design there was a link between SIBs and over-the-counter derivatives markets.

8.4 The principal-agent problem and the complexity of transferring risk: setting, pricing and evaluating social outcomes: Massachusetts Juvenile Justice SIB

Returning to the specificities of the Massachusetts Juvenile Justice SIB. Sections two and three discussed how this SIB represents financialised concepts of social value. That in order for the value of the social outcome to transfer to the speculators a market is required to calculate the cost of risk related to the programme's success and assign a price to this risk.

The second contention of this research is that the very structure of SIBs are prone to inefficiency issues stemming from the principal-agent problem. Chapter six discussed at length how the mechanisms required to transfer risk through the setting, pricing and evacuation of social outcomes causes inefficiency issues. Attributable to the differing motivations of the principal and various agents. This section will establish the complexity within the Massachusetts Juvenile Justice SIB in order for the social outcomes to be set, priced and evaluated. The process of which is central to the transfer of risk within a SIB and key when examing SIBs as a derivative style financial instrument.

i. Agents involved in the pricing, transfer and evaluation of risk

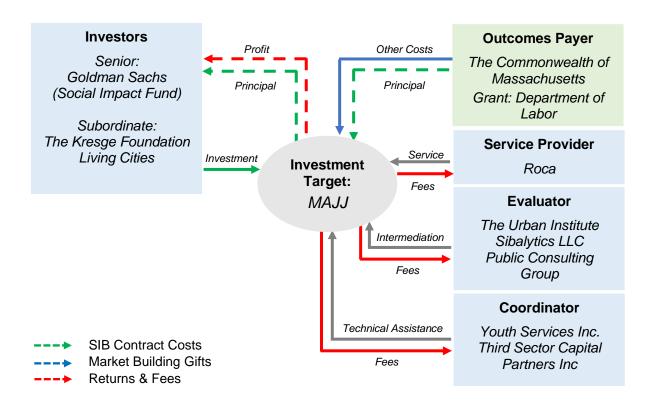
The transfer of risk in this SIB is a very complex process, involving the support of multiple agents. As principal, the outcomes payer hires a series of agents to exert effort in performing a series of tasks related to the design, implementation and evaluation of the SIB. These agents are selected individually, depending on the task they are undertaking for the principal, and exert varying amounts of effort, and have differing interests, goals, expectations, risk attitudes and perceptions (Alijani and Karyotis, 2018; Del Giudice and Migliavacca, 2019; Hajer, 2018).

In order to discuss the principal-agent problem and the complexity of the interactions between the various agents in relation to the pricing and transfer of risk through social outcomes, it is first necessary to state who these agents are. The outcomes payer as principal, and the special purpose vehicle and speculators acting as agents of the principal were discussed in sections two and three. However, additional agents include Roca acting as service provider, Third Sector Capital Partners Inc acting as intermediary and supporting the special purpose vehicle Youth Services Inc, and Deloitte as validator.

The financial ecosystem (see *figure 8.1*) shows the various roles the principal and the agents play in the Massachusetts Juvenile Justice SIB, and the renumeration they receive in return.

In the Massachusetts Juvenile Justice SIB, the Commonwealth of Massachusetts has delegated the management of the SIB to Youth Services Inc., which is a special purpose vehicle supported by the intermediary Third Sector Capital Partners Inc. In turn Youth Services Inc delegated the delivery of the social service programme to the service provider Roca. Separately, Youth Services Inc raised money from the speculators which it uses to finance the delivery of the social service programme by the service provider. In order for the speculators to be repaid, the social outcomes of the service are required to be monitored and evaluated. Only high-quality social outcomes will trigger a payment from the outcomes payer the Commonwealth of Massachusetts to Youth Services Inc, which in turn will be used to pay the speculators Goldman Sachs, The Kresge Foundation, and Living Cities (GO Lab, 2020).

Figure 8.1 - Social impact bond financial ecosystem: Massachusetts Juvenile Justice SIB



Source: authors own, data (GO Lab, 2020)

The key agents from the Massachusetts Juvenile Justice SIB financial ecosystem who have not been discussed yet are outlined more here, including the intermediary, special purpose vehicle, service provider, and evaluator.

The intermediary is the only direct relationship and line of communication between the outcomes payer and the various agents, and as such the only agent whose effort the outcomes payer can directly monitor. There are two intermediaries within this SIB. A special purpose vehicle, Youth Services Inc, which was formed as the legal entity for managing the project. It is operated by Third Sector Capital Partners Inc, sitting within its non-profit structure, but jointly controlled by all stakeholders (Blum et al., 2015; GO Lab, 2020; Overholser and Klein, 2015).

Thus, Third Sector Capital Partners, a non-profit firm, is responsible for overseeing the SIBs implementation, arranging financing and distributing capital funds to the service provider Roca, and managing repayment to funders through Youth Services Inc (Blum

et al., 2015; Harvard, 2014; Kodali et al., 2014c).

Whilst perceived to enhance efficiency, it is possible that the presence of an intermediary could exacerbate principal-agent problems, as the additional agent adds to the inability of the outcomes payer to supervise the performance of the service provider (Stid, 2013). Or to enforce a particular effort or quality of service by any of the agents, who could use information and their expertise to act opportunistically. *Ex-ante* there may be incentives for the intermediary to alter the terms of the contract to suit their individual interests and to enhance their ability to earn bonus or success fees on top of any fixed payment they may be due. However, there are no known success fees to the intermediary in the Massachusetts Juvenile Justice SIB.

The service provider manages the day-to-day operating decisions of the programme implementation, bound by the standard of quality and other obligations agreed within the contract (GO Lab, 2019). They are also responsible for reporting back data on all aspects of the programme's success. However, SIBs are said to be very resource intensive, and service providers may not have the requisite time or skills to engage with the data at level of intensity a SIB requires (Hawkins et al., 2017a).

The service provider selected was Roca, a non-profit firm with 25 years' experience delivering evidence-based high-impact programmes to high-risk youth in the Boston and Springfield areas (Blum et al., 2015; Kodali et al., 2014a). There could be adverse selection *ex-ante* if the outcomes payer does not have control over the selection of the service provider. As an inability to ascertain their background, motivations, or verify their capabilities prior to entering into a contractual relationship could lead to purchasing a service of inferior quality (Nyman et al., 2005; Perrow, 1986). As a non-profit firm Roca is more inclined to share the goal of the outcomes payer which makes them a more reliable service provider for the provision of social service programmes (Hansmann, 1987; Salamon, 1995).

An evaluator or validator would normally act on behalf of the outcomes payer to provide technical assistance and expertise to the SIB. There are three external evaluators and validators, comprised of the Urban Institute, Sibalytics LLC, and Public Consulting Group (Harvard, 2014; Kodali et al., 2014a). The evaluation chosen is very

scientific, with the main technique a randomized control trial, supplemented by a quasiexperimental difference-in-differences study (GO Lab, 2020).

If the social outcomes are sufficiently achieved the investors are repaid their principal amount with additional interest if social outcomes are of high-quality. However, if the programme does not achieve the expected results, the investment may not be repaid at all. Therefore, the investor has strong incentives for positive evaluation results, as their capital investment and potential returns are at risk, and contingent on the successful transfer of risk from the outcomes payer.

ii. Setting social outcomes

In order for social outcomes to be assessed, the potential behavioural change of the high-risk young men was required to be converted into a quantifiable metric. The outcome metric is based on a measure Roca's impact on 'recidivism bed days avoided', and 'improved employment outcomes', both measured against a control group through a randomised controlled trial during evaluation (Kodali et al., 2014b).

The outcome metrics are complex, based on a sliding scale, with each point of success attached to a specific monetary value. For example, the decrease in total number of days that participating young men spent in prison relative to control group is measured at 5 percent, 10 percent, 25 percent, 40 percent, 55 percent, and 70 percent. With the monetary value starting at USD 0 for 5 percent, which is the baseline, up to USD 27,000,000 at 70 percent (GO Lab, 2020). In addition, the value for a participant engaging with a Roca youth worker a minimum of nine times a quarter is USD 789, whilst for an employed participant it is USD 750 a quarter (GO Lab, 2020).

This SIB required technical assistance from staff at the SIB Lab to design the data analysis strategy (Harvard, 2014; Kodali et al., 2015). 62

⁶² There was also assistance from Harvard Business School in developing the procurement for this SIB (Harvard, 2014; Kodali et al., 2015).

iii. Pricing social outcomes

There are three speculators in this SIB. As agents of the outcomes payer these three investors assume the financial risk of the non-delivery of these social outcomes, which they accept in exchange for potential financial returns (Callanan et al., 2012; Mulgan et al., 2011).

The three speculators have divergent utility functions, expressing their preference with respect to both perceived risk and expected return. As a bank Goldman Sachs' preference will lie closer to financial value, whilst the Kresge Foundation and non-profit investment fund Living Cities will lie somewhere closer to social value. Goldman Sachs invested GBP 6,285,996, whilst Living Cities and the Kresge Foundation invested GBP 1,047,666 each (GO Lab, 2020). The marginal rate of substitution in value, which the I proposed in chapter six to analyse investor preferences, is applied in *figure 8.2* the three investors in this SIB.

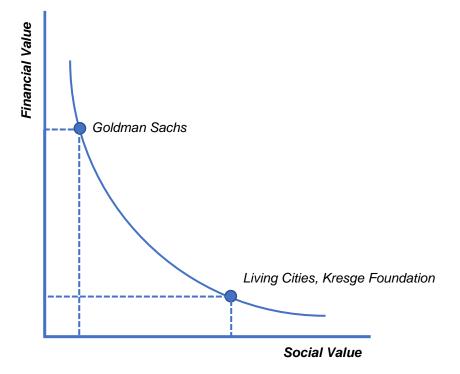


Figure 8.2 - Investor value preferences for Massachusetts Juvenile Justice SIB

Source: authors own, data (GO Lab, 2020)

Given their value preferences, Goldman Sachs should be willing to give up a unit of social value in order to obtain an additional unit of financial value, while maintaining

the same level of satisfaction. Conversely, the non-profit investment fund of Living Cities and the Kresge Foundation should be willing to give up a unit of financial value in order to obtain an additional unit of social value, while maintaining the same level of satisfaction.

The price of transferring risk to an agent is based on the level of outcome uncertainty (Eisenhardt, 1989a). These preferences for value suggest that the financial institution Goldman Sachs would expect a greater financial return for their risk. Which is the case, as Goldman Sachs holds the senior loan which also attracts an interest rate of 5 percent, whilst Living Cities and the Kresge Foundation hold subordinate loans with a lower interest rate of 2 percent (Kodali et al., 2014a, p. 9). ⁶³ Additionally, investors are further incentivised through the use of success fees at higher levels of impact, with up to GBP 698,444 available for Goldman Sachs and GBP 349,222 available for Living Cities and the Kresge Foundation (Gustafsson-Wright et al., 2015). ⁶⁴

Whilst agency costs are higher the more divergent the interests, objectives and values of the principal and the agent, here there are diverging interests amongst the investors themselves. As detailed above, the financial institution Goldman Sachs' has placed itself ahead of the non-profit institutions as senior investor. Therefore, Goldman Sachs will be the first investor to receive its capital if the social outcomes targets are met, plus the potential of the bonus as noted above. Additionally, it is due to receive a higher rate of interest than the two non-profit institutions, even though these are subject to higher risk than the bank with their returns the last to be made.

The primary motivations for the non-profit institutions is reported as the alignment of the aims of the SIB with their mission, and its potential for impact (Rangan and Chase, 2015). It is worthwhile to mention here that institutional investors will by their nature be more risk averse. The fact that Goldman Sachs' funding is being made through an institutional investment vehicle is therefore significant, for this somewhat counters the

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⁶³ The maximum disclosed interest rate in the United States is 12.5 percent (Social Finance, 2020).
64 Goldman Sachs' USD 1,000,000 potential success fee reported in Gustafsson-Wright et al. (20)

⁶⁴ Goldman Sachs' USD 1,000,000 potential success fee reported in Gustafsson-Wright et al., (2015) has been converted to GBP using the same purchasing power parity rate as the project value using OECD data (2022), as has the USD 500,000 potential success fee reported for Living Cities and the Kresge Foundation.

conception of impact investing financial institutions embracing financial risk to achieve measurable social impact.

iv. Evaluating social outcomes

This SIB relies on three external evaluators and validators. The Urban Institute responsible for implementing a statistical evaluation of the impact achieved through a randomized controlled trial (Harvard, 2014), monitored by the evaluation firm Sibalytics LLC (Kodali et al., 2014a), whilst Public Consulting Group assessed the proposed evaluation methodology, and verified social outcome targets (Harvard, 2014).

Additionally, data to establish impact baselines and historical outcomes of high-risk young men was provided by The Office of the Commissioner of Probation and Department of Youth Services (Kodali et al., 2014a). Although it should be noted that independent validation was also a requirement of the Department of Labor grant (Blum et al., 2015).

In terms of information systems, despite delegating the management of the SIB to an intermediary and other coordinating agents, the outcomes payer was highly involved in the development of the SIB. As such several multi-party, rather than bilateral, agreements were required to involve the outcomes payer in the construction and financing of the SIB (Kodali et al., 2014c). Involvement also extended to an operating committee meeting monthly to review project operations, composed of the outcomes payer, the service provider Roca, and the intermediary Third Sector Capital Partners (Kodali et al., 2014c). As well as an oversight committee meeting quarterly to review results and resolve issues involving the outcomes payer, the service provider, the intermediary, and the evaluator (Kodali et al., 2014c).

Given that the outcomes payer has contracted an intermediary and service provider which are both non-profit firms, and are assumed to have similar goals and motivations to the outcomes payer, it does raise questions as to the level of control the outcomes payer maintained. This could possibly be due to the involvement of Goldman Sachs which as an international investment bank and will have strongly divergent interests to the Commonwealth of Massachusetts. This is perhaps evidenced by the outcomes

payer stating one of the reasons for their high level of involvement was ensuring the financing structure was equitable for taxpayers (Kodali et al., 2014c).

8.5 Potential agency costs stemming from the inefficiencies of delivering welfare services through this type of arrangement: Massachusetts Juvenile Justice SIB

The preceding section analysed the principal-agent problems which can occur through the setting, pricing and evaluation of social outcomes, which are part of the process which is key for the transfer of risk within a SIB. The problems arising from an agency relationship impose agency costs for the principal, so the principal-agent relationship should reflect an efficient organisation of information and risk-bearing costs (Eisenhardt, 1989a). The agency costs discussed here are by no means exhaustive, but provide a discussion point of some of the agency costs related to the transfer of risk in the Massachusetts Juvenile Justice SIB.

i. Lack of Innovation in social service programme

SIBs are designed to reduce the need for crisis-based public services through early intervention programmes (Callanan et al., 2012; Joy and Shields, 2018; Mulgan et al., 2011). The transfer of financial risk in a SIB is said to foster innovation as it enables scope for service experimentation rather than relying on established models of delivery. However, the Roca programme is an established programme, having been delivered in Massachusetts since 1988, using proven behavioural change theories, and has been already been proven to reduce three-year incarceration rates by a third (Kodali et al., 2014a). Potentially resulting in investors not bearing enough of the financial risk of the social outcomes being achieved (Arena et al., 2016; Carter et al., 2018; Edmiston and Nicholls, 2017; Gustafsson-Wright et al., 2015; Heinrich and Kabourek, 2019).

Thus, the lack of innovation across SIBs has been attributed to the risk profile of investors (Dagher, 2013; Maier et al., 2018; Tse and Warner, 2018). On the basis that it is rational to implement a proven programme compared to a novel and untested approach, when capital is at stake and particular as unproven programmes carry additional risks. Having a major investment bank such as Goldman Sachs as senior

investor in this SIB adds credence to this theory.

ii. Incentive for opportunistic behaviour by the service provider

Of the three case studies presented in this chapter, this is the only disclosed use of deferred fees by the service provider. Although they have been used in other SIBs alongside other types of performance related renumeration such as success fees which are payable for achieving higher than expected social outcomes (Gustafsson-Wright et al., 2015; Hajer, 2018; OECD, 2016a; Pauly and Swanson, 2017; TeKolste et al., 2016). It is reported that Roca deferred its fees in order to reduce the level of risk for investors, signal its confidence in its own ability to deliver outcomes, and would benefit them financially by sharing any upside (Nicholls and Tomkinson, 2015).

The action of deferring fees actually changes the relationship between Roca as agent and the principal, as Roca is no longer working on a behavioural-based contract, but instead subsuming partial risk on behalf of the principal. This could lead to problems of agency due to the incentive for opportunistic behaviour through adverse selection or moral hazard, *ex-ante* or *ex-post*. Because the principal is unable to enforce a particular effort or quality of service by the agents, and only observe the outcome of the service delivered through the intermediary, the agents could use information and expertise and act opportunistically. It could create opportunities for collusion between the investors and the service provider, which could lead to sub-optimal outcomes. However, as Roca is a non-profit firm and more inclined to share goals with the outcomes payer they are deemed more reliable contract partners for the provision of social services (Hansmann, 1987; Salamon, 1995).

iii. Metric setting too financially sophisticated for the state

Setting the outcome metric proved problematic. First, the original primary metric was 'number of incarcerations' but was changed to 'recidivism bed days avoided' as it did not allow for a 'relapse' through short-term incarcerations for less serious offences, which is allowed by the Roca model (Kodali et al., 2014b). Second, in order to price the social outcomes, Harvard's SIB Lab undertook a detailed cost-benefit analysis and built a 'sophisticated probabilistic model' on behalf of the outcomes payer, to reflect the likelihood of capturing and sustaining savings as the number of bed days avoided

increases (Kodali et al., 2014b). This enabled the outcomes payer withhold 20 percent of the outcomes payments as way to ensure they did not overpaid for preliminary promising outcomes that may be revised through later data (Kodali et al., 2014b).

It is clear to see the state cannot match the level of financial sophistication that is required to partake in a SIB. The pricing of risk is inherently complex. This SIB required technical assistance from staff at the Harvard Kennedy School Social Impact Bond Technical Assistance Lab (SIB Lab) to design the data analysis strategy (Harvard, 2014; Kodali et al., 2015). ⁶⁵ Whilst the technical assistance was pro bono (Kodali et al., 2015) it does raise serious questions about the efficiency of a SIB if such a key element of its design is beyond the capabilities of the outcomes payer.

8.6 Concluding remarks

This case study has sought to challenge the notion that SIBs are an efficient instrument for public social policy delivery. The Massachusetts Juvenile Justice SIB has been shown to support the contention that SIBs represent a particularly problematic aspect of financialisation, whereby the state supports financial markets for SIB investments to be developed in the public social policy sphere. Section two evidenced how the state is willing to participate in this financial instrument in order to hedge their risk. Because without the social service programme and subsequent social outcomes, prison costs were likely to be significant, and they wanted to reduce the risks associated with uncertainty, which is the risk of low-quality social outcomes from the juvenile justice programme. Whilst section three demonstrated how the Massachusetts Juvenile Justice SIB has structural qualities similar to a speculating forward contract. Through which the investment bank Goldman Sachs has earned financial profits from the welfare arrangements of young men at high risk of reoffending. The source of these financial profits being tax revenue.

The Massachusetts Juvenile Justice SIB case study also supports the second contention that the very structure of SIBs are prone to inefficiency issues, such as

⁶⁵ There was also assistance from Harvard Business School in developing the procurement for this SIB (Harvard, 2014; Kodali et al., 2015).

moral hazard and information asymmetry, stemming from the principal-agent problem. Which section four outlines through an examination of the mechanism for setting, pricing and evaluating social outcomes. Whilst section five outlined a number of further agency costs, as the three selected examples attest to, there has been moral hazard and information asymmetry which has led to a lack of innovation in the social service programme, an incentive for opportunistic behaviour by the service provider, and the setting of metrics was too financially sophisticated for the state.

In the following chapter, the aforementioned contentions are put to test in a different social, economic, political and institutional context focussing specifically on the United Kingdom.

Chapter Nine: United Kingdom case study

9.1 Introduction

This chapter presents the second of three case studies, on the United Kingdom SIB market. This includes a specific focus on the Essex Edge of Care SIB. The purpose of this SIB was to reduce the number of days adolescents in the county of Essex spent in residential care (GO Lab, 2020). Service delivery commenced in April 2013, making it the thirteenth SIB to be implemented in the United Kingdom (GO Lab, 2020).

Like the previous case study, the analysis here is theoretically informed by the existing financialisation, political economy and agency theory literature discussed in chapters four and five, alongside the theoretical elaboration of SIBs as forward-like contracts and the principal-agent problems associated with the pricing and transfer of risk, proposed in chapter six.

This case study also seeks to challenge the notion that SIBs are an efficient instrument for public social policy delivery. Addressing the two contentions of this research in the same way as for the Massachusetts Juvenile Justice SIB. As such, the first contention is examined within sections two and three. The only departure from this being a ministudy focusing on the role of specialist fund managers, which is the type of financial institution most prevalent in this SIB, and the United Kingdom SIB market generally. The second contention is addressed in sections four and five. Before section six presents concluding remarks.

9.2 The interests of the state: hedging risk when buying social outcomes

As discussed in chapter four, some scholars have characterised SIBs as a neoliberal innovation, expanding profitable opportunities for capital whilst further commodifying public services. For SIBs to be developed in the public social policy sphere, it is necessary that they should occur within an institutional context that is directly influenced by state policy making, in both finance and welfare. This section examines the involvement of the state through the type of welfare regime in the United Kingdom, the legislation implemented by the state, before more specifically examining the forward-like hedging contract for the Essex Edge of Care SIB.

i. Welfare systems and state infrastructure

The provision of welfare services such as the care of children is part of the social protection measures of the state. The extent to which welfare is delivered can be explained through welfare regime theories, which may to some extent explain why the state would want to hedge the risk of the delivery of welfare services in the first place.

The United Kingdom being not only the architect of the SIB but also the leading SIB market in terms of size and speed of growth. Since 2010, a total of 65 SIBs have launched across the country. The total market share by volume of SIBs across all advanced countries is 45.8 percent (see *figure 2.3* in chapter two). Phase one of this research shows that new SIBs have been implemented every year since inception, meaning the average monthly increase is 0.54 SIBs per month, which is the fastest growing rate of all advanced capitalist countries.

This progress is the result of deliberate and direct actions by the state. Whilst a large amount of legislation has been implemented, similarly to the United States, this case study concentrate some different features. Given that the welfare regime has proven difficult to classify, this case study briefly examines some of the historical changes leading up to the use of SIBs. It also discusses the use of SIB Funds which are unique to the United Kingdom and undoubtedly have contributed to the speed of growth of this market.

Unlike the United States, discussed in the previous case study, which is considered strongly liberal for both in-kind services and cash benefits, the United Kingdom has proven difficult to classify and has been the scrutiny of much debate (Almond and Kendall, 2001; Castles and Mitchell, 1993; Ginsburg, 1992; Kendall and Almond, 1999; Talme, 2014). The discussion in chapter four regarding welfare regimes and decommodification, Bambra (2005a, 2005b) and Esping-Andersen (1990) found conflicting levels of decommodification, depending on whether Esping-Andersen (1990) finding it liberal for cash benefits and Bambra (2005a, 2005b) placing it as the most decommodified for in-kind services (healthcare), higher even than the social democratic countries. The United Kingdom has the highest score in Bambra's health care decommodification index, for both 1980 data (2005a), and 1998 data (2005b). A

score matched only by the social democratic country of Norway, placing the United Kingdom within the highest decommodification group. However, whilst the NHS used to be funded almost entirely by general taxation, the NHS and public service provision in general, is becoming progressively marketised in the United Kingdom (Krachler and Greer, 2015). Also of increasingly great significance is the extent to which non-state, both for- and non-profit provision, has rapidly come to occupy a pivotal role in welfare provision, both publicly funded and otherwise. In the United Kingdom non-profit institutions already have a long history of delivering social services on behalf of the state.

In the United Kingdom, between 1979 and 1997 the Conservative government pursued liberal market reforms with minimal provision, policies developed in parallel with similar 'neo-conservative' and 'free market liberal' policies under the Republican government in the United States. Altering the balance of the mixed economy of welfare through an enhanced role for market forces and a 'roll back' of state. For in-kind provision, the breakup of the states' monopoly of welfare provision created enhanced roles for the private and voluntary sectors, allowing welfare 'consumers' to exercise greater choice amongst different welfare providers. After 1997 the New Labour government policies relied heavily on market provision and on market incentives and increasingly encouraged voluntary activity by citizens, starting to move the responsibility for welfare provision from the state towards community organisations.

Looking at care services more specifically, England was the first European country to marketize social care services (Brennan et al., 2012). From 2006, following the publication of the 'Care Matters' green paper by the institution of Social Care Practices, the introduction of new independent social work practices meant local authorities could contract out social work services for children in care and leaving care to both non-profit and now for-profit providers, reducing the role and responsibility of the state in the delivery of care (Le Grand, 2007).

The march towards marketisation kept pace under the 2010 Conservative Party-Liberal Democrats Coalition. Under this government a specialist team was set up to drive the SIB market, sat within the Cabinet Office, at the centre of where government policy and strategy are co-ordinated. Established in 2012, the Centre for Social Impact

Bonds acted as a central resource for knowledge and best practice for central and local government, delivery partners, investors and intermediaries.

The emphasis on the use of voluntary services to deliver welfare services intensified, and the wholesale financier Big Society Capital was launched as well as SIBs, both a strong sign of the government's commitment to the social investment market. The money advanced by social investors, in expectation of a profit, is supposed to allow social enterprise, responding to social need, to take place. The competitive environment in which such social investment and social enterprise occurs is supposed to ensure innovation and efficiency in public service delivery.

When the Coalition government was replaced by a Conservative government in 2015 social investment continued to be on the agenda. However the relocation of the SIB team away from the Cabinet Office (it now sits within the Department for Digital, Culture, Media and Sport), was seen by some as a sign of SIBs taking a less central ground. However, as the implementation of SIB Funds has streamlined the process of SIBs coming to market perhaps as a policy area it now requires less ministerial attention.

The use of SIB Funds is unique to the United Kingdom and could be viewed as a major driver of the SIB market. This model gives the government the capacity to issue multiple contracts dealing with the same or similar social issues through open competition. The setting of the outcome metric can be difficult, and these outcome metrics also come with a rate which is paid to investors for each metric achieved. Under the SIB Funds the rates payable per social outcome are pre-defined by a rate card, with the outcomes payor paying for one or more social outcomes per participant, up to the maximum prices listed. Seemingly the aim is to increase the efficiency of the SIB, and allowing for larger investments (Gustafsson-Wright et al., 2015; OECD, 2016a). The Essex Edge of Care SIB is one of only a handful of SIBs which were contracted in a standalone manner and not as part of a SIB Fund.

There are eight SIB Funds to date, seven funded through central government and one

by the Big Lottery Fund. ⁶⁶ The Department for Work and Pensions was the first government department to commission SIBs via an open competition. Launched in 2011 the Innovation Fund was a pilot initiative aimed to deliver support to young people over 14 years who are NEET or at risk of becoming NEET, by helping them participate and succeed in education or training. Thereby improving their employability, reducing their longer term dependency on benefits (DWP, 2014a, 2014b). This new form of commissioning increased the number of SIBs being contracted substantially.

Following the establishment of the Centre for Social Impact Bonds there followed a further three funds, the Social Outcomes Fund in 2012, the Youth Engagement Fund in 2014, and the Fair Chance Fund in 2015. Following the rehoming of the Centre for Social Impact Bonds, where it remains within the Government Inclusive Economy Unit, a further three funds were launched. The Life Chances Fund and Rough Sleeping SIB Fund were both launched in 2016, and most recently the Care Leavers SIB Fund in 2018. Additionally, the Big Lottery, which is a non-departmental public body, also launched the Commissioning Better Outcomes Fund in 2013.

These funds are not necessarily SIB specific, some also provide contributions to outcome payments for payment-by-results contracts in general. In addition to outcomes payments, they can provide additional financial support to local authorities and other commissioners to help develop SIBs.

Unlike the United States which has a federalist system of government, the United Kingdom has a centralised government and unified welfare system. Phase one of the research shows SIBs have been issued by five central government departments including Department for Digital, Culture, Media and Sport, Department for Education, Department for Work and Pensions, Ministry of Housing, Communities & Local Government, and the Ministry of Justice. Also the Big Lottery Fund, ten Clinical Commissioning Groups, and 52 local government areas including the local authority Essex County Council which issued this SIB. The Essex Edge of Care SIB was the first SIB in the United Kingdom to be commissioned by a local authority, with Essex

⁶⁶ Big Lottery Fund, since renamed the National Lottery Community Fund, is a non-departmental public body

County Council acting as the outcomes payer (GO Lab, 2020). However, this was not the only activity by the government. There were also financial contributions at the central government departmental level, with the Cabinet Office, Department for Education, Department of Health, and Department for Work and Pensions providing additional funding for set up costs and evaluation (GO Lab, 2020; OPM, 2016).

With regards to the areas of public social policy central government implemented SIBs for, Phase one indicates SIBs have been implemented across all six policy areas, covering a range of social services. With approximately a quarter of the market covered each by housing & homelessness 28 percent, workforce development 25 percent, and child & family welfare 23 percent, which is the area the Essex Edge of Care SIB comes under. With the remaining quarter shared amongst health 14 percent, education & early years 9 percent, and a single criminal justice SIB 1 percent.

ii. State hedging its risk of paying for low-quality social outcomes through a forwardlike contract: Essex Edge of Care SIB

Now the type of welfare regime has been briefly addressed, this section describes the policy issue that the outcomes payer, Essex County Council, identified as problematic, and for which they decided to hedge their financial risk through a SIB.

In the county of Essex, children at risk of being placed into residential care was identified as a problematic policy area by Essex County Council. A lack of sustained and effective investment in preventative services saw an increasing number of crisis admissions to residential care, leading to both a higher than average number of children in care, and at a higher than average cost (Essex County Council, 2012; Social Finance, 2020). ⁶⁷

Essex County Council identified that savings could be made to the public purse by addressing the number of children entering residential care. This was based on

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⁶⁷ Compared to the national average and statistically comparable local authorities, as laid out by the Chartered Institute of Public Finance and Accountancy (Essex County Council, 2012).

evidence that young people who enter care between the ages of 11 to 16 will invariably remain in care for more than 80 percent of their remaining childhood (Essex County Council, 2012; Social Finance, 2020). Such residential provision is also expensive, with costs ranging between GBP 20,000 to GBP 180,000 per year, per child (Social Finance, 2020). Placing a child into residential care is also problematic in other ways, as it habitually leads to children experiencing further issues with regards to their education, with crime and their overall life opportunities (Neyland, 2018).

In order to make savings, and as part of their Children in Care Strategy, Essex County Council sought to buy these social outcomes from Children Support Services Limited in five years' time, for a maximum price of GBP 7,100,000. In order to deliver these social outcomes an existing specialist intervention programme was identified, Multi-Systemic Therapy (MST) is an intensive evidence-based family therapeutic treatment programme with a 30-year international track record, and licensed by MST-UK (Bridges, n.d.; GO Lab, 2020). MST was selected because as an existing evidence-based intervention it was focussed on monitoring and the measuring of impact. By focussing on parenting and relationships in these at-risk families, the programme aims to improve the parenting skills of parents and carers, thereby improving the behaviour of the young people, thus negating or reducing the amount of time they spend in care (Essex County Council, 2012; Green and Matthews, 2014).

As elaborated in chapter six, the above agreement can be said to share structural characteristics with a forward contract in a number of ways. Essex County Council is looking to hedge their position with regards to incarceration and employment rates. With the SIB providing a private agreement between the two parties, Essex County Council and Children Support Services Limited, about a future transaction of an asset, the asset here being the behavioural change of the programme participants. Thus the SIB simultaneously obligates the buyer to purchase an asset, and the seller to sell the asset, at a specified price on a fixed future date, with the price of the asset also fixed at the time the contract is executed (Oosterlinck, 2017). Thus, the forward price for the hedging forward-like contract is explained as follows.

The outcomes payer Essex County Council buys long a bundle of social outcomes that will keep young children out of residential care for a forward price of

GBP 7,100,000 with maturity in 5 years. Essex County Council is hedging their risk because without the social service programme and subsequent social outcomes, residential care costs are likely to be significant. This SIB is forecasted to save Essex County Council GBP 10,300,000 in avoided costs to the care system (Social Finance, 2020) ⁶⁸

So here, the valuation at initiation date represents the price Essex County Council are willing to pay for the bundle of social outcomes that will keep young people out of residential care. Because this is welfare expenditure there is no risk-free or cost to carry. Thus, the forward price at initiation is:

$$F_{\circ}(T) = S_{\circ}$$

As there is no cash exchange at the beginning of the contract, the value of the contract at initiation is zero:

$$V_{0}(T) = 0$$

The intervention needs to be successful at delivering the required social outcomes at the right level of quality for the short position to be paid. Should the intervention fail to meet the pre-determined target, 27 percent care proportion of total care days to total child days compared to a historical comparison group, there should be no payment due meaning the value of the contract at expiration would still be zero.

$$V_{5}(T)=0$$

If at expiration T the bundle of social outcomes are delivered to a high-quality, the value of the forward contract is:

$$V_{\scriptscriptstyle 5}(T) = S - F_{\scriptscriptstyle 0}(T)$$

If at expiration T the bundle of social outcomes delivered are any other level of quality,

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⁶⁸ Minus the cost of running the social service programme

the value of the forward contract is:

$$V_5(T) = S_5$$

Where:

- F_o is the forward price
- S_t is the spot price
- T is the length of the contract in years
- V is the value of the contract

Similarly to the Massachusetts Juvenile Justice SIB, the description of the hedging forward-like contract for the Essex Edge of Care SIB evidences how the state has ceded high levels of control to non-state providers, further evidencing market competition embedded within social provision (Le Grand, 2001). Additionally, the commodification of this public service would be viewed as antithetical to public values (Lake, 2015; Ryan and Young, 2018; Tse and Warner, 2018; Warner, 2013; Whitfield, 2015).

9.3 The interests of financial institutions: speculating on the value of social outcomes for financial profit

This section will examine the financial system in place, the financial institutions involved, how they profited. Before taking a closer look at the role of specialist fund managers in the SIB market. This particular type of speculator is most prevalent in the United Kingdom SIB market.

i. Financial systems and financial institutions

Similarly, to the United States in the previous case study, the financial system in the United Kingdom is a market-finance model with decentralised finance (Amable, 2003; Hall and Soskice, 2001). Marked by the strong presence of institutional investors and particularly pension funds, with a highly capitalised stock market, a well-developed venture-capital system, and a profitable banking sector (Amable, 2003). As with the United States, the United Kingdom is one of the most heavily financialised economies (Lapavitsas and Powell, 2013).

Phase one of this research indicates that from the 65 SIBs implemented in the United Kingdom, 52 percent have received investment from at least one financial institution. Of the GBP 79,469,000 total capital raised by speculators, GBP 49,870,800 or 63 percent, comes from SIBs which has investment from at least one financial institution. So whilst the market in the United Kingdom is smaller than that of the United States by total value of capital raised, 10 percent more of the total value raised has come from SIBs which have at least one financial institution investing.

Of the total number of individual investments disclosed in the United Kingdom, 29 percent are from financial institutions, this is wholly comprised of specialist fund managers who are the only type of financial institution directly raising capital in the United Kingdom market, and represent 11 percent of all investors in this market. This compares to just 1 percent of individual investments disclosed being made by specialist fund managers in the United States SIB market, where banks are more prevalent.

Within the Essex Edge of Care SIB sits two financial institutions which intermediated speculative capital on behalf of their clients, the end-speculators. This was one of the earliest SIBs to receive capital from financial institutions, and the first SIB to attract speculative capital from multiple financial institutions. The two specialist fund managers raising speculative capital for the Essex Edge of Care SIB are Bridges Fund Management and Ananda Ventures.

Bridges Fund Management is a specialist private markets investor. Established in 2002 as Bridges Ventures LLP, Bridges is a specialist fund manager dedicated to impact-driven investments (Bridges, 2020). ⁶⁹ Bridges Fund Management has managed approx. GBP 380 million across six funds since 2002 (Palico, 2021b). ⁷⁰ Several of which have reportedly delivered returns that match or exceed those of

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⁶⁹ SIB investments have been made under both names, Bridges Ventures LLP and later Bridges Fund Management

⁷⁰ The GBP 40 million Bridges Ventures Fund I in 2002; GBP 75 million Bridges Ventures Fund II in 2007; GBP 125 million Bridges Ventures Fund III in 2013; GBP 25 million Bridges Social Impact Bond Fund in 2014; GBP 35 million Social Outcomes Fund II in 2019; GBP 80 million Bridges Sustainable Growth Fund IV (SGF IV) in 2019 (Palico, 2021a)

traditional private-equity managers (Impact Investing Guide, 2021).

Ananda Ventures GmbH is a is a private equity general partner firm based in Germany, and is one of the leading venture capital investors for social enterprises in Europe, addressing social challenges in areas such as education, health and aging population (Ananda, 2020). Ananda Ventures has managed approx. EUR 79 million across three funds since 2010 (Palico, 2021b). ⁷¹ This was the only SIB investment made by Ananda Ventures.

ii. Speculating on the value of social outcomes through a forward-like contract: Essex Edge of Care SIB

Now the type of financial system has been addressed, this section turns its attention to the speculators who wish to bet on the direction of those same social outcomes.

As explained in chapter six, because the investors have no claim on the underlying asset, then the transaction to buy a social outcomes forward-like contract represents a speculative bet that the value of social outcomes will rise. That is, the investors are speculating on changes in the price of the social outcomes that will keep children aged 11 to 17 from at-risk families from entering the care system or reducing their time spent there, to be delivered by the special purpose vehicle, Children Support Services Limited. The changes in price are dependent upon the level of quality of the social outcomes achieved. SIB speculators are perceived to also have an interest in social as well as financial returns. The quality of the social outcomes which informs the spot price also affects the level of social returns, with high-quality social outcomes meaning both a higher spot price and a higher social return, with the reverse true for low-quality social outcomes.

There are eight speculators in total, from the United Kingdom, Belgium, and Germany, including Bridges Fund Management and Ananda Ventures as already discussed, alongside Big Society Capital, Barrow Cadbury Trust, Charities Aid Foundation,

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⁷¹ The EUR 7 million Social Venture Fund I in 2010; EUR 22 million Social Venture Fund II in 2014; EUR 50 million Ananda Impact Fund III in 2018 (Palico, 2021b)

Esmée Fairbairn Foundation, King Baudouin Foundation, and The Tudor Trust (GO Lab, 2020; Green and Matthews, 2014). Together they raised speculative capital of GBP 3,135,000. This is significantly higher than the mean average value of GBP 2,161,000 raised by speculators for SIBs in the policy area of child and family welfare in the United Kingdom.

The underlying asset in this SIB was the 335 young people, aged 11 to 17, from Essex who had been displaying anti-social or offending behaviour, or other conduct disorders such as aggression or violence, that put them at risk of entering the care system (GO Lab, 2020; Green and Matthews, 2014). Child & family welfare is one of the most prevalent policy areas for SIBs in the United Kingdom, with 23 percent of SIBs implemented in this area. Phase one of the research indicates that in excess of 3,000 children and young people in residential care, at risk of entering the care system, experiencing care placement breakdowns, or considered 'harder to place' due to their age, ethnic background, or siblings have been participants in these SIBs. These individuals have been the underlying asset for 43 percent of all the speculative capital raised in the United Kingdom.

As discussed in chapters four and six such developments have been met with criticism that vulnerable people are being packaged up as commodities and SIBs lead to a reframing of the welfare relationship (Chiapello and Knoll, 2020; Cooper et al., 2016). Further evidence that the ethics, morality and mindset of finance have penetrated both social and individual life (Lapavitsas, 2009).

Thus the quantification and commodification of previously socialised risk facilitates the transfer of the social value to investors, resulting in the introduction of market discipline into social domains not previously evaluated by using financial logic (Berndt and Wirth, 2018; Chiapello and Knoll, 2020; Cooper et al., 2016; Sinclair et al., 2014) The forward price for the speculating forward-like contract is explained as follows.

The eight speculators of Ananda Ventures, Bridges Fund Management, Big Society Capital, Barrow Cadbury Trust, Charities Aid Foundation, Esmée Fairbairn Foundation, King Baudouin Foundation, and The Tudor Trust (GO Lab, 2020) believe the value of the bundle of social outcomes that will keep young children out of care is

going to rise from its current spot price of GBP 3,135,000. Therefore, they buy long at GBP 3,135,000 with a maturity date the same as Essex County Council as the hedger, in 5 years. The forward price is calculated using the spot price: ⁷²

$$F_{\circ}(T) = S_{\circ}$$

Whilst in a standard forward contract there is no cash exchange at the beginning of the contract, hence the value of the contract at initiation is zero, the same is not true for the speculators in a SIB. They pay the current spot price, which are the funds that are used to finance the social service programme: ⁷³

$$V_{o}(T) = S_{o}$$

Changes in the price of the bundle of social outcomes will cause the forward to take on a positive or negative value. Thus, at expiration T, the value of the forward contract is:

$$V_5(T) = S_5 - F_0(T)$$

Where:

- F_o is the forward price
- S_t is the spot price
- T is the length of the contract in years
- V is the value of the contract

The Essex Edge of Care SIB completed in March 2019 (Social Finance, 2019). The metric for this SIB was a reduction in the number of days spent in care which constitutes a care proportion 27 percent, compared to a historical comparison group which had a care proportion of 55 percent. (GO Lab, 2020). ⁷⁴ The actual results

⁷² The spot price refers to an asset's current market price.

⁷³ There is no risk-free rate because, unlike in a standard forward contract, the speculator has paid the funds upfront as this money is used to finance the delivery of the social service programme.

⁷⁴ The care proportion is defined as 'total care days'total child days' (Social Finance, 2019)

showed the cumulative proportion of days spent in care by the young people on the programme was 10.8 percent, which was a reduction of more than double the rate expected (Social Finance, 2019). The result being the SIB met all of the pre-agreed social outcomes (GO Lab, 2020; Social Finance, 2019).

Therefore, Essex County Council settled the contract by paying the forward price:

$$V_{5}(T) = F_{0}(T)$$

$$V_{5}(T) = GBP 7,100,000$$

The speculators earned:

$$V_{\scriptscriptstyle 5}(T) = S_{\scriptscriptstyle 5} - F_{\scriptscriptstyle 0}(T)$$

Given the spot price at maturity $V_s(T)$ was higher than the forward price $F_o(T)$ the speculator underpaid for the bundle of social outcomes and therefore made a profit. ⁷⁵

iii. Financial profits earned through the speculating forward-like contract: Essex Edge of Care SIB

The narrow definition of financial profit, used by Lapavitsas and Mendieta-Muñoz (2016), focuses on profit earned by banks and near-bank financial institutions. In this SIB financial profits are due to two financial institutions, Bridges Fund Management and Ananda Ventures.

Bridges Fund Management invested GBP 825,000 through their Social Entrepreneurs Fund (GO Lab, 2020). Information on this fund is limited, but it is known to have a co-investment agreement with another of Bridges' funds, the Social Impact Bond Fund (Bridges, 2017). Launched in 2013 this fund raised GBP 25,000,000 of investment

programme.

⁷⁵ The exact profit figures are unknown as there was not a single payment event for investors in this SIB with payment at maturity (as the model in chapter six shows for simplicity). Rather, the outcome funder paid for outcomes quarterly and the forward price of GBP 7,100,000 includes funds which did not go to investors but to the service provider who recycled them back into the running of the

from financial institutions such as Deutsche Bank Social Investments and J.P. Morgan, alongside local authority pension funds including the Greater Manchester Pension Fund, and the Merseyside Pension Fund (Ainsworth, 2014; Gustafsson-Wright et al., 2015).

Ananda Ventures Social Venture Fund, they invested GBP 250,000 through their Social Venture Fund (GO Lab, 2020). The Social Venture Fund is a EUR 7m private equity fund, launched in 2010. Whilst detail of the investors in this particular fund are unknown, in general Ananda Ventures investors are reported as high net worth individuals, funds, banks, and institutions such as the European Investment Fund (Pomykol, 2021).

As financial institutions acting as fund managers, Bridges Fund Management and Ananda Ventures will have earned secondary financial profits through commission or fees. These will be due regardless of the SIB outcome, as for financial institutions SIBs are a zero sum game.

However, there may be layers of financial profit. When financial institutions are earning financial profit and their client is another financial institution they will also earn financial profits from their underlying clients who are the ultimate end-speculators. For example, Deutsche Bank Social Investments and J.P. Morgan are known investors in some of Bridges Fund Managements funds. If they are acting as fund managers for their own investors through these investments, then they would also earn secondary financial profits, or primary financial profits if proprietary trading using their own funds.

The general profits go to the end-speculators of the Social Entrepreneurs Fund and Social Ventures Fund, or the end-speculators of any clients of other financial institutions investing in either fund. General profits would also be due to the six non-profit institutions. Which are comprised of the two non-profit investment funds Big Society Capital and the Charities Aid Foundation, and the four foundations of The Barrow Cadbury Trust, Esmée Fairbairn Foundation, King Baudouin Foundation, and The Tudor Trust.

Given the successful outcome of the Essex Edge of Care SIB, these financial profits

were ultimately paid from tax revenue. Therefore, the financial profit represents a peculiar type of financial expropriation, as the underlying financial asset is social value and thus future payments attached to these assets would be from tax revenue.

iv. Specialist fund managers and social impact bond markets

The previous case study presented a mini-study on the role of banks across SIB markets. The closer examination showed these banks were often acting as asset managers for the SIB. Given the prevalence of specialist fund managers in this, the Essex Edge of Care SIB, another mini-study is presented to explore their involvement across all markets.

The financial liberalisation and financial market reforms discussed throughout (Lapavitsas, 2013, 2011, 2009) which have seen banks adopting investment banking practices have been coupled with institutional investors, such as investment fund managers, becoming large collectors of savings and suppliers of funds to financial markets.

Fund managers manage assets on behalf of end-investors, whether institutional such as pension funds and life insurance companies, or retail. Specialist funds such as private equity, which often invest in less liquid asset classes, are growing rapidly (Haldane, 2014). For example, between 2003 and 2012 assets under management more than tripled from under USD 2 trillion to over USD 6 trillion, a jump from 5 percent of global assets under management to 10 percent (Boston Consulting Group, 2013). The chief economist of the Bank of England has highlighted the growing influence of the investment industry against the backdrop of the declining power of the banking sector (Haldane, 2014).

Impact funds belong in the wider impact investing ecosystem and invest mostly in the early stage, expansion, and growth stages of companies (GIIN, 2021b). With a focus on both financial and social returns these differ from other types of fund managers. Impact investing funds can take several forms, such as venture capital, private equity and angel investing in private markets, using ordinary and preferred equity or convertible debt (Impact Investing Guide, 2021). Fund managers can structure a fund,

raise capital, and manage reporting requirements after investment, and funds are typically only open to accredited investors such as HNWIs, investment banks, pension funds, and accredited investors and any other financial institutions.

In the GIIN's 2020 Annual Impact Investor Survey, for-profit fund managers accounted for 51 percent of the total sample by number of respondents and managed 51 percent of all assets in the sample by volume of capital invested, 49 percent of all investments made (GIIN, 2020, p. 18). With the reported total volume of capital invested by a for-profit asset managers at GBP 16,339 million, with a median of GBP 13 million (GIIN, 2020, p. 18). ⁷⁶

In the SIB market the specialist fund managers are comprised of venture capital, private equity firm, private wealth management firm, providing early stage venture capital and impact investments, socially oriented. They were predominantly established this century, many after the 2007-09 financial crisis. There is cross over from banking, with ex-employee of Goldman Sachs who had launched and managed its Social Impact Fund and led on signature SIB investments, such as Rikers Island (Maycomb, 2020). Three of the institutions hold asset manager membership in the Global Impact Investing Network, they are Bridges Fund Management, Kois Invest, and Maycomb Capital (GIIN, 2021a).

As discussed, in this SIB the predominant investor type is specialist fund managers. They operate in SIB markets beyond the United Kingdom. Phase one of this research has found 19 specialist fund managers, that's 10 percent of all investors, operating across 8 of the 17 markets in advanced countries. In total, 32 percent of all SIBs have received investment from asset managers (46 of 142). They are dominant in the United Kingdom in terms of the number of investments, with 35 out of a total of 49 investments.

Specialist fund managers are the only type of financial institution that have had a

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⁷⁶ Figures reported as USD 23,710M for total volume of capital invested, with a median of USD 19M in GIIN report (GIIN, 2020, p. 18) and converted to GBP using 2019 purchasing power parity rate the same as other purchasing power parity calculations.

presence every year since financial institutions began investing in 2012, which saw Bridges Fund Management invest in three SIBs.

2013 saw a new entrant to the United Kingdom SIB market, Ananda Ventures as described in the case study (GO Lab, 2020). Whilst the first investment fund to raise capital outside the United Kingdom was Australian Ethical Investments, their first and only disclosed investment (GO Lab, 2020). Bridges Fund Management invested in a further two SIBs in 2013, including the Essex Edge of Care SIB from the case study.

In 2014 Bridges Fund Management invested in a further two SIBs, whilst in Belgium an investor consortium led by Kois Invest (GO Lab, 2020).

2015 also saw another new entrant to the United Kingdom SIB market, Northstar Ventures made their only investment (GO Lab, 2020). Whilst in New Zealand InfraRed Capital Partners Limited made a single investment (GO Lab, 2020). Followed by a further seven SIBs for Bridges Fund Management, through both their Social Impact Bond Fund and Social Entrepreneurs Fund.

In 2016 Leksell Social Ventures Sweden, as did TELUS Ventures in Canada, and IMPACT Partners in France, which was the first entrant into the French market, by (GO Lab, 2020). 2016 saw another new entrant, this time in the United States, through a single investment by Maycomb Capital. Bridges Fund Management invested in a further two SIBs in 2016.

There were two new entrants to the United Kingdom market in 2017, Social and Sustainable Capital LLP, and Resonance (GO Lab, 2020). Whilst there were an additional seven SIBs linked to Bridges Fund Management made a single investment. In New Zealand there was a single investment made by Prospect Investment Management Limited.

Bridges Fund Management raised capital for a further five SIBs in the United Kingdom in 2018. Whilst in Belgium Impact Capital made a single investment.

2019 saw multiple new entrants, with two further investment funds entering the French

market and three into the Australian. They were Ecofi Investissements, INCO Investissement (INCO venture capital funds) in France, and Ethinvest, Koda Capital and Light Warrior Ventures in Australia. Whilst in the United Kingdom Social and Sustainable Capital LLP made a second investment, and Bridges Fund Management invested in a further three SIBs (GO Lab, 2020).

As fund managers these specialist find managers will be earning guaranteed commission and fees for managing the speculative capital of others. For unsuccessful SIBs this renumeration would be paid by the client, for a successful SIB it would ultimately be paid from tax revenue.

Bridges Fund Management are the largest specialist fund manager across the entire market in terms of both volume of SIBs and the value of total speculative capital raised. Of the amounts of investment confirmed, the lowest investment is GBP 100,000 in the 2017, the largest GBP 4,500,000, and average mean is GBP 1,083,333 (GO Lab, 2020) ⁷⁷ The largest unconfirmed investment is GBP 7,200,000 in the 2019 Vulnerable Child Project, from the Life Chances Fund (Social Finance, 2020). These are the minimum and maximum investments for the specialist fund managers across the market as a whole.

To date, the majority most specialist fund managers have only invested in a single SIB. With the exception of Bridges Fund Management, which is the most active financial institution investing, of all types, across all markets.

Whilst these are not investment banks which are the cornerstone of the over-the-counter market, this type of asset manager is perhaps more prevalent in the impact investing. In the United Kingdom in particular, where SIB speculation through specialist fund managers is most prevalent, the overwhelming majority of SIBs are SIB Funds. These require less financial structuring than other types of SIBs, as the come with rate cards etc. Therefore, this key function that the investment banks provide in a SIB are not needed in these circumstances. Whilst more broadly in the financial

⁷⁷ Average calculated using the 12 SIBs where the exact amount invested is recorded publicly, using data from the GO Lab Impact Bond database (GO Lab, 2020).

ecosystem, the trading of derivatives is steadily rising among asset managers (Bloomberg, 2021).

9.4 The principal-agent problem and the complexity of transferring risk: setting, pricing and evaluating social outcomes: Essex Edge of Care SIB

Returning to the specificities of the Essex Edge of Care SIB. Sections two and three discussed how this SIB represents financialised concepts of social value. That in order for the value of the social outcome to transfer to the speculators a market is required to calculate the cost of risk related to the programme's success and assign a price to this risk. The second contention of this research is that the very structure of SIBs are prone to inefficiency issues stemming from the principal-agent problem.

Therefore, providing an empirical examination to the theoretical explanation proposed in chapter six, this section discusses the setting, pricing and evaluation of social outcomes that facilitate the transfer of the financial risk from Essex County Council to the speculators. These processes are central to the transfer of risk within a SIB, and key when examing SIBs as a derivative style financial instrument.

i. Agents involved in the pricing, transfer and evaluation of risk

The transfer of risk in this SIB is a very complex process, involving the support of multiple agents. As principal, the outcomes payer hires a series of agents to exert effort in performing a series of tasks related to the design, implementation and evaluation of the SIB. These agents are selected individually, depending on the task they are undertaking for the principal, and exert varying amounts of effort, and have differing interests, goals, expectations, risk attitudes and perceptions (Alijani and Karyotis, 2018; Del Giudice and Migliavacca, 2019; Hajer, 2018).

In order to discuss the principal-agent problem and the complexity of the interactions between the various agents in relation to the pricing and transfer of risk through social outcomes, it is first necessary to state who these agents are. The outcomes payer as principal, and the special purpose vehicle and speculators acting as agents of the principal were discussed in sections two and three. However, additional agents include Action for Children as service provider, Social Finance acting as intermediary and

supporting the special purpose vehicle Children Support Services Limited. Whilst Essex County Council itself acted as validator.

The financial ecosystem (see *figure 9.1*) shows the various roles the principal and the agents play in the Essex Edge of Care SIB, and the renumeration they receive in return.

Investors Outcomes Payer Other Costs Profit £ Bridges Ventures. Essex County Council Big Society Capital, Principal £ Principal £ Grants: Cabinet Office, Ananda Ventures, DWP*, DoE**, DoH*** Charities Aid Foundation, The King Baudouin **Service Provider** Foundation, Investment Service Investment Action for Children Tudor Trust, Target: Barrow Cadbury Trust, Fees Essex Esmée Fairbairn **Evaluators** Foundation Validation Essex County Council OPM SIB Contract Costs Intermediary Market Building Gifts Returns & Fees Children Support Technical Assistance Services Limited Social Finance * DWP: Department of Work and Pensions Fees ** DoE: Department of Education

Figure 9.1 - Social impact bond financial ecosystem: Essex Edge of Care SIB

Source: authors own, data (GO Lab, 2020)

*** DoH: Department of Health

In the Essex Edge of Care SIB the outcomes payer Essex County Council has delegated the management of the SIB to Children Support Services Limited, which as a special purpose vehicle supported by Social Finance. In turn the special purpose vehicle has delegated the delivery of the social service programme to the service provider Action for Children. Separately, the special purpose vehicle has raised money from investors which it uses to finance the delivery of the social service programme by the service provider. In order for investors to be repaid, the social outcomes of the service are required to be monitored and evaluated. Only successful outcomes will trigger a payment from the outcomes payer. These are paid to the special purpose

vehicle, which in turn pays the investors Ananda Ventures (Social Venture Fund), Bridges Fund Management, Big Society Capital, Barrow Cadbury Trust, Charities Aid Foundation, Esmée Fairbairn Foundation, King Baudouin Foundation, and The Tudor Trust (GO Lab, 2020).

Further details of the key agents from the Essex Edge of Care SIB financial ecosystem whose actions will be discussed throughout this case study are provided here for the intermediary, special purpose vehicle, service provider and validator.

The intermediary is the only direct relationship and line of communication between the outcomes payer and the various agents, and as such the only agent whose effort the outcomes payer can directly monitor. The intermediary can act as the performance management expert reporting on the performance of the SIB, monitoring and supporting the delivery of social outcomes against targets and contractual key performance indicators, ensuring effective data analysis, may have its own data collection system, providing an independent source of information and scrutiny to investors and the outcomes payer, to facilitate informed decision-making (Barajas et al., 2014; GO Lab, 2019; So and Jagelewski, 2013).

There are two intermediaries within this SIB, the special purpose vehicle Children's Support Services Limited was formed specifically for the purposes of delivering this SIB, and was managed by Social Finance Limited (OPM, 2016; Roberts and Cameron, 2015). ⁷⁸ The role of Children's Support Services Limited is to develop and implement the proposed social service intervention, arrange and administer investment capital, mitigate risks, support the service provider to achieve the targeted social outcomes (Essex County Council, 2012).

To assist with this work, Social Finance was selected, due to its SIB expertise, to act as an agent of Children's Support Services Limited. Social Finance provided technical assistance, were responsible for undertaking the feasibility study, scoping the

⁷⁸ It is a distinct entity, incorporated as a Company Limited by Shares with a Board of Directors, its governance processes and publishes a separate set of accounting statements (Essex County Council, 2012).

business case, supporting Action for Children's bid for the contract, raising capital, preparing the payment schedule and ongoing performance management (Essex County Council, 2012; Gustafsson-Wright et al., 2015; Roberts and Cameron, 2015). Social Finance was secured via a competitive process, although it is noted it was unusual as they were the only bidder that passed the pre-qualification questionnaire (Roberts and Cameron, 2015). This could be due to the level of financial complexity in the SIB contracting structure, which might sit outside the scope of other organisations the outcomes payer would normally contract with.

Although perceived to enhance efficiency, it is possible that the presence of an intermediary could instead exacerbate principal-agent problems, as the additional agent adds to the inability of the outcomes payer to supervise the performance of the service provider (Stid, 2013). Or to enforce a particular effort or quality of service by any of the agents, who could use information and their expertise to act opportunistically. *Ex-ante* there may be incentives for the intermediary to alter the terms of the contract to suit their individual interests and to enhance their ability to earn bonus or success fees on top of any fixed payment they may be due. However, there are no known success fees to the intermediary in this SIB.

The service provider manages the day-to-day operating decisions of the programme implementation, bound by the standard of quality and other obligations agreed within the contract (GO Lab, 2019). They are also responsible for reporting back data on all aspects of the programme's success. However, SIBs are said to be very resource intensive, and service providers may not have the requisite time or skills to engage with the data at level of intensity a SIB requires (Hawkins et al., 2017a).

Action for Children, a non-profit firm, were selected to run the MST programme under contract to Children Support Services Limited. Action for Children is a national children's charity, and one of the largest children's charities in the United Kingdom. They support more than 350,000 children, young people and their families, running more than 500 services in local communities, in schools and online across the United Kingdom (Action for Children, 2021).

There is no direct relationship between the outcomes payer Essex County Council and

the service provider Action for Children (GO Lab, 2020). There could be adverse selection *ex-ante* if the outcomes payer does not have control over the selection of the service provider. As an inability to ascertain their background, motivations, or verify their capabilities prior to entering into a contractual relationship could lead to purchasing a service of inferior quality (Nyman et al., 2005; Perrow, 1986). Action for Children was selected as service provider through a competitive process (Roberts and Cameron, 2015). As a non-profit firm Action for Children is more inclined to share the goal of the outcomes payer which makes them a more reliable service provider for the provision of social service programmes (Hansmann, 1987; Salamon, 1995).

An evaluator or validator would normally act on behalf of the outcomes payer to provide technical assistance and expertise to the SIB. Essex County Council chose to validate the reported outcomes themselves against their own historical data. There is also an external evaluator, the Office for Public Management, which is an independent research organisation focused on social outcomes (OPM, 2016). They were tasked with verifying the number of families served by Action for Children during the SIB, and applied the performance measurement criteria and evaluation methodology outlined in the SIB contract.

If the social outcomes are sufficiently achieved the investors are repaid their principal amount with additional interest if social outcomes are of high-quality. However, if the programme does not achieve the expected results, the investment may not be repaid at all. Therefore, the investor has strong incentives for positive evaluation results, as their capital investment and potential returns are at risk, and contingent on the successful transfer of risk from the outcomes payer.

ii. Setting social outcomes

In order for the financial risk to be hedged by the outcomes payer the behavioural change of the service participants needs to be converted into a metric that can be monitored and its quality ascertained. Thus, the social outcomes need to be both measurable and monetizable. In a conventional outcomes-based contract the social outcomes would still require measuring and evaluating, but they would not require to be monetised and commodified in the way they are in a SIB. This is required solely for

the transfer of risk from the outcomes payer as principal to the investor as agent. It also requires the careful monitoring of the effort of the service provider as an additional agent to which neither outcomes payer nor investor has complete information. Thus, calculating the metric ties the financial risk and financial return together (Neyland, 2018).

In the Essex Edge of Care SIB, the underlying asset is the young people in Essex, aged 11 to 17, who were displaying anti-social or offending behaviour or other conduct disorders such as aggression or violence that put them at risk of entering the care system. The outcome metric on which the quality of the social outcomes are measured is the aggregate number of actual 'care placement days saved' which represents the savings made across a typical child's journey (GO Lab, 2020). Measured through the observed number of days spent in care against a baseline historical comparison group, over a 30-month period for each child after their MST referral (GO Lab, 2020). ⁷⁹

However, the setting of social outcomes and their metrics can come with the risk of perverse incentives. There is the possibility that service providers may be incentivised to partake in moral hazard *ex-post*, during the performance of the contract due to a lack of effort on their part (Brown et al., 2006; Gauld, 2007; Moe, 1984). This can include selecting higher performing participants with the best chances of meeting the target whilst those who are worse off and are unlikely to hit target thresholds are underserved (Carter and Whitworth, 2015; Cox, 2011; Fox and Albertson, 2011; Maier and Meyer, 2017; McHugh et al., 2013). This could be more pertinent in SIBs where a service provider is receiving a success fee and/or is participating as an investor. They may be incentivised to overstate positive outcome metrics in order to receive additional fees and/or profits from the outcomes payer (So and Jagelewski, 2013). However, there are no reports of Action for Children earning success fees.

Investors are said to habitually act as participates in the SIB contract negotiations (Maier and Meyer, 2017). If they do there may be opportunity to cheat *ex-ante* as they may be able to influence the setting of social outcomes targets, the type of

⁷⁹ That is the difference in the total number of days that the adolescents treated under the SIB spent in residential care, when compared to those from the control group.

measurement to be used, or even influencing the type of innovation used in the social programme. There is the potential for opportunistic behaviour *ex post* by exploiting the informational asymmetries between the other agents and the outcomes payer. There is empirical evidence regarding investors pressurising service providers to select the beneficiaries with the highest chances of meeting a target whilst leaving out those likely to miss the target (Edmiston and Nicholls, 2017; Gustafsson-Wright et al., 2015; Loxley, 2017; McHugh et al., 2013; Tse and Warner, 2018; Williams, 2018). It is not disclosed whether investors participated in contract negotiations.

The use of safeguards to mitigate against adverse selection and moral hazard can lead to agency costs, which can become counterproductive to the SIB where asymmetric information can impact both the efficiency and the quality of social outcomes.

iii. Pricing social outcomes

The 'speculator' in this SIB is a consortium of investors. Which, as agents of the outcomes payer, assume the financial risk of the non-delivery of these social outcomes, which they accept in exchange for potential financial returns (Callanan et al., 2012; Mulgan et al., 2011). The investors are a mix of social characters, with differing levels of motivations, preferences and utility, expressing their preference with respect to both perceived risk and expected return. As the price of transferring risk to the agent is based on the level of outcome uncertainty (Eisenhardt, 1989a) investors will only be willing to speculate on the SIB if they are incentivised, and without them the SIB cannot proceed.

In preparation for this SIB the outcomes payer stipulated that the achievement of social impact must be a key driver for investors alongside investment return, and as such the profile of investors must protect their reputation (Essex County Council, 2012). In other words, the outcomes payer was seeking investors whose interests, objectives and values were not too divergent from their own. This could be because agency costs are higher the more divergent the interests, objectives and values of the principal and the agent (Eisenhardt, 1989a). As will be discussed later in this section, the two financial institutions that invested are from the impact investing arena, but nonetheless they are

financial institutions whose primary purpose is making profit. As such, their motivations and goals are likely to be more divergent from the outcomes payer than the non-profit institutions, for example.

As discussed, in this SIB the transfer of risk was determined through the outcome metric 'days of care averted'. This measure establishes whether payment should be made, thus the outcome metric is crucial in actioning the transfer of risk. Payment to investors in the Essex Edge of Care SIB was based on a rate of GBP 120 per child, per day (GO Lab, 2020; Neyland, 2018). Although returns are paid on a per-metric basis, to investors they transformed to targeted returns. In this SIB successful social outcomes were expected to achieve a return of 8 to 12 percent per annum (Gustafsson-Wright et al., 2015; Neyland, 2018). ⁸⁰

A SIB investment provides neither fully financial value nor social value, but a mixture of both. The preferences of each type of investor lay somewhere in between the two, along the indifference curve. Financial institutions will lie closer to financial value, non-profit institutions will lie somewhere closer to social value.

The lead investors were Bridges Fund Management (Social Entrepreneurs Fund) and Big Society Capital who provided cornerstone investment to encourage other investors (GO Lab, 2020; Gustafsson-Wright et al., 2015). Whilst the Esmée Fairbairn Foundation, Tudor Trust, Ananda Ventures (Social Venture Fund), King Baudouin Foundation, Barrow Cadbury Trust and Charities Aid Foundation acted as co-investors (OPM, 2016). These represent a mixture of financial institutions and non-profit institutions, their marginal rate of substitution in value for investors is shown in *figure* 9.2.

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⁸⁰ In this SIB a portion of the outcomes payments are recycled through the service provider back into the cost of programming, thereby reducing the cost of capital required at commencement. It is also said that early repayment to investors through a larger portion of the outcomes payments early on in the SIB means the outcomes payer can retain a larger majority of the cost savings in the later years (Gustafsson-Wright et al., 2015). Although arguably this also benefits the investor who receives returns earlier, although their role in setting outcome schedule this way is unknown.

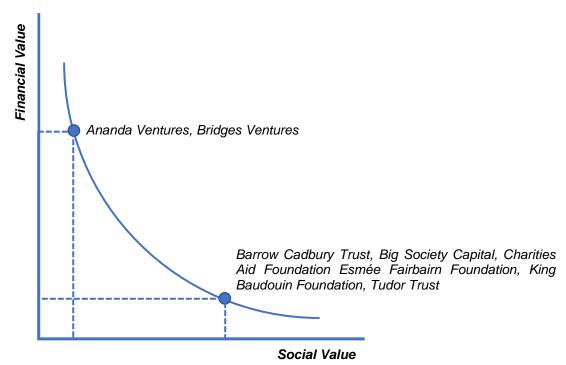


Figure 9.2 - Investor value preferences for Essex Edge of Care SIB

Source: authors own, data (GO Lab, 2020)

As financial institutions Bridges Fund Management and Ananda Ventures would be willing to give up a unit of social value in order to obtain an additional unit of financial value, while maintaining the same level of satisfaction. Note that in the case of this SIB being a financial institution was not a pre-requisite for being a lead investor. As Bridges Fund Management was a lead investor but Ananda Ventures a co-investor, meaning that their investment was much smaller. Bridges Fund Management invested GBP 825,000 whilst Ananda Ventures invested GBP 250,000.

Conversely, the non-profit investment funds of Big Society Capital and Charities Aid Foundation, plus the four foundations of Esmée Fairbairn Foundation, Tudor Trust, King Baudouin Foundation, and the Barrow Cadbury Trust should be willing to give up a unit of financial value in order to obtain an additional unit of social value, while maintaining the same level of satisfaction. Given that Big Society Capital also invested GBP 825,000 then the preference for financial value over social value is not in this case an indicator of the size of investment.

These preferences for value suggest that the two financial institutions, Bridges Fund

Management and Ananda Ventures, would expect a greater financial return for their risk. Yet across all classes of investor the target returns were 8 to 12 percent per annum (Gustafsson-Wright et al., 2015; Neyland, 2018). This suggests there could be agency costs to the outcomes payer as the financial return to investors could have cost less based on their utility functions and preferences for value, given that six of the eight investors were non-profit Institutions. ⁸¹

An alternative argument could be that the two financial institutions were willing to accept a lower rate of return, and therefore 8 to 12 percent per annum represented better value for the outcomes payer. However, as will be evidenced in the next case study, other SIBs with investment from a mixture of financial- and non-profit institutions have seen lower returns (Social Finance, 2020). The interest rate in this SIB is comparable to the Peterborough SIB (discussed in chapter two) which has the highest disclosed interest rate to date in the United Kingdom of 13 percent, despite investment solely coming from non-profit institutions (GO Lab, 2020; Social Finance, 2020). ⁸² It could be possible that with an immature market interest rates are being set that are deemed attractive to financial institutions in order to garner interest for future SIBs.

iv. Evaluating social outcomes

Due to the bundling of contract components in a SIBs' design, which the literature cites as enhancing its efficiency SIBs have a complex information system. ⁸³ This requires agents to bundle up monitoring information regarding the allocation of resources and their social outcomes, from the contracting stage to the act of delivering the service, collating and monitoring the success of the social programme, and relaying the information back to the outcomes payer. The complexity can be exacerbated by the nature of the data itself which can be complex and difficult to collect.

The evaluator or validator would normally act on behalf of the outcomes payer to

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⁸¹ Although the actual value of final returns payments to investors remains undisclosed publicly.

⁸² The lowest disclosed interest rates across all advanced economies have been as low as 0.25 in Switzerland and 1 percent in Austria (Social Finance, 2020). These SIBs did not have any investment from financial institutions.

⁸³ See Hajer (2018) for a comprehensive discussion on the bundling of contract components.

provide technical assistance and expertise to the SIB. There is no formal third-party evaluator for the Essex Edge of Care SIB. Instead, the outcome metrics were validated by Essex County Council against their own historical data. The data validation method uses data from the state care system, based on a historical case file review of 650 cases, with data tracked over 30 months (Gustafsson-Wright et al., 2015; So and Jagelewski, 2013). 84 With regards to informational asymmetries, it could be argued that the risk here is to the investor as the outcomes payer is better informed. Although conversely, Children's Support Services Limited was commissioned to oversee the performance management, monitoring, and data analysis functions, and the lead investors of Bridges Fund Management and Big Society Capital sit on its Board (Essex County Council, 2012; GO Lab, 2020; OPM, 2016). This could result in opportunistic behaviour such as influencing targets. There is no evidence of this, but the contract structure allows for it. There is also an external evaluator, the Office for Public Management, which is an independent research organisation focused on social outcomes (OPM, 2016). They were tasked with verifying the number of families served by Action for Children during the SIB, and applied the performance measurement criteria and evaluation methodology outlined in the SIB contract.

However, Essex County Council also anticipated the possibility of moral hazard regarding data related to social outcomes. As although Children's Support Services Limited carried out the programme management and data analysis functions as contracted, Essex County Council also undertook their own analysis to satisfy for their own due diligence requirements regarding the payment mechanism (OPM, 2016). This is clearly a duplication of work which adds to both the time and cost of undertaking this SIB.

The overall level of formal information systems in place are lengthy and complicated, as the following examples indicate. First, there was a Project Board, which met quarterly and had senior representation from Essex County Council, Children's Support Services Limited, Social Finance and Action for Children (Roberts and

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⁸⁴ Wider outcomes are also monitored in order to understand the broader impact of the service. These include the rate of offending, educational engagement and emotional wellbeing (Green and Matthews, 2014; Social Finance, 2013b).

Cameron, 2015). Second, there was an Operational Steering Group which sat underneath the Board, and also met quarterly, this had representation from Children's Support Services Limited, the Multi-Systemic Therapy Service, Essex Social Care and other local services such as Education and Child and Adolescent Mental Health Services (Roberts and Cameron, 2015). ⁸⁵ Third, the contract between Essex County Council and Children's Support Services Limited was subject to quarterly contract monitoring meetings, which were also used to reconcile and agree the data which feeds into the payment mechanism across all parties and agree the payments due (OPM, 2016). Fourth, Children's Support Services Limited held regular meetings with Action for Children to review the contract delivery (OPM, 2016). Fifth, there was also regular interaction between the licence holder for the service programme, MST-UK, and representatives from the social care teams and service managers at Essex County Council (OPM, 2016).

This appears to be much more complex than a standard service contract which may only include the government and the service provider. This was picked up in the interim evaluation which reported there were informational asymmetries resulting in an unclear understanding of roles and responsibilities leading to overlap in duties and times of confusion (Roberts and Cameron, 2015).

9.5 Potential agency costs stemming from the inefficiencies of delivering welfare services through this type of arrangement: Essex Edge of Care SIB

The preceding section began the examination of the second contention of this research by examining the key agents involved in the Essex Edge of Care SIB, and the different processes they take through the transfer of risk, and how their differing roles and motivations can affect this. Which can lead to problems of adverse selection and moral hazard *ex-ante* and *ex-post* both of which can impede the effectiveness of the social service programme.

Thus, finally, this section explores a selection of agency costs which have arisen due

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⁸⁵ It is reported that both the Project Board and the Operational Steering Group met monthly at the beginning of the project and reduced to quarterly and bi-monthly respectively (OPM, 2016).

to contracting welfare services for children at the edge of care in this way. The agency costs discussed here are by no means exhaustive, but provide a discussion point of some of the agency costs related to the transfer of risk in the Essex Edge of Care SIB.

i. Lack of innovation in social service programme

In a manner similar to the Massachusetts Juvenile Justice SIB, the Essex Edge of Care SIB also lacks innovation in service deign. The social service programme selected, by Essex County Council, was MST, a licenced product with a 30-year track record (Bridges, n.d.; GO Lab, 2020). This indicates that investors may not be bearing enough of the financial risk of the social outcomes being achieved (Arena et al., 2016; Carter et al., 2018; Edmiston and Nicholls, 2017; Gustafsson-Wright et al., 2015; Heinrich and Kabourek, 2019).

This raises questions about why a SIB was used at all. If a proven method of social service delivery were to be used then arguably the risk would have been low enough for the outcomes payer to have implemented the programme without the need to hedge their financial risk. Instead, Essex County Council paid the maximum amount of outcome payments for the delivery of an established model. In the process also incurring agency costs that might not have arisen if the programme had delivered through conventional means.

The answer might lie in the stated aim of this SIB, which Essex County Council claimed was to circumvent the upfront financial costs inherent in conventional procurement approaches when establishing a service internally (OPM, 2016). In addition to avoiding paying for a service that does not achieve the required social outcomes (OPM, 2016).

There was significant investment from two specialist fund managers in this SIB, thus whilst unproven, the lack of innovation across SIBs could be attributed to the risk profile of investors as it has in other SIBs due to the fact that unproven programmes carry additional risks (Dagher, 2013; Maier et al., 2018; Tse and Warner, 2018).

ii. Calculative asymmetry due to differing levels of financial experience

Through primary research examining the investment proposition Neyland (2018) has

identified calculative asymmetry within this SIB. More specifically, this relates to the lack of ability of the outcomes payer to correctly forecast metrics, whilst investors were able to forecast with certainty, resulting in investors taking on a lower level of risk than was perceived (Neyland, 2018). This resulted in the projected cashable savings of GBP 17,000,000 to be questioned once the SIB was operational (Neyland, 2018). This can partly be attributed to the informational asymmetries between the outcomes payer and investors, but there also appears to be something else at play. As will be discussed in more detail in chapter eight, when financial institutions have an advantage in information and power it is possible for them to take advantage of dealings with non-financial entities as they lack knowledge (Lapavitsas, 2009). Although the reasoning is unclear, thus could be a possible explanation.

First, there were issues concerning the basic costings by the outcomes payer. Marginal cost figures based on MST programmes in the United States were used by investors to calculate their fixed costs. ⁸⁶ Investors were also able to calculate their return, based on frontloaded payments as soon as the children at risk entered the programme. Yet the outcomes payer found it more difficult to project costs because of the 'days of care averted' metric, as the more days service providers averted the higher the cost to them. The inexperience of the outcomes payer in setting metrics was also evidenced as they did not foresee general categories of costs, such as staffing, which the investors managed to avoid contractually (Neyland, 2018). ⁸⁷ The evaluation also cites the payment mechanism as being considered 'theoretical' rather than 'practical', as well as overly complex (OPM, 2016, p. 31).

Second, Neyland (2018) also raises the problem of double spend which was absent from the outcomes payers projected costs, as the metric 'days of care averted' was also dependent on several assumptions. The main one being that a child not entering residential care might save on basic costs such as food, clothing, and shelter but larger savings through a reduction in staff numbers or fewer care homes open would require a sufficiently high number of children staying out of residential care. Similarly, looking

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⁸⁶ The marginal cost figures were the cost of treating one more person.

⁸⁷ There were additional costs associated with the running of the service, which were unknown at the time, such as additional recruitment and training costs due to the high turnover of staff (Neyland, 2018).

at the wider picture, a child would require monitoring for a much longer period than that of the SIB if evidence were to be collated regarding how problematic, and costly, their transition into adulthood was (Neyland, 2018). Therefore, these longer period potential savings remain unknown. So whilst costs for the investors were fixed and their financial returns were accumulating, the outcomes payer was not only not making savings, but their costs were also 'expanding significantly' (Neyland, 2018).

So, whilst SIBs are designed to be cost effective and are anticipated to save future costs to government the evidence above suggests this is not the case (Callanan et al., 2012; Mulgan et al., 2011). Neither does it reflect an efficient organisation of risk-bearing costs (Eisenhardt, 1989a). The above suggests the principal-agent problem exists because the investors, being imperfect agents of the outcomes payer, acted in such a way as to maximise their financial return at the expense of the outcome payers' interests.

iii. Referral issues due to differing motivations between outcomes payer and investors

There is also evidence of the difference in motivations of the outcomes payer and the investor causing tension. These issues are exacerbated by a low referral rate at the beginning of the SIB, as staff did not refer young people that they felt were unsuitable for the programme. This reportedly resulted in investors exerting pressure to increase referrals (Roberts and Cameron, 2015). Again, this has been attributed to the payment metric 'care days avoided' as low levels of referrals means significant changes to the investment proposition (Neyland, 2018; Roberts and Cameron, 2015).

As a result of investor pressure, higher numbers of young people were referred to the MST programme. As the costs for each child were fixed the investor returns began to accumulate as anticipated, as soon as a young person entered the service. Resulting in the rigid application of a programme that frontline staff deemed as 'inappropriate' for young people in crisis (Neyland, 2018). This evidences the differing goals and motivations of the outcomes payer and investors. As a result of the conflicting motivations and pressure from investors the SIB appears to be no longer focussing on the most relevant social outcomes for the service participants, but rather focusing on the metric that initiated payment to the investors as they were enrolled in larger

numbers regardless of the outcome for the child.

9.6 Concluding remarks

This case study has sought to challenge the notion that SIBs are an efficient instrument for public social policy delivery. The Essex Edge of Care SIB has been shown to support the contention that SIBs represent a particularly problematic aspect of financialisation, whereby the state supports financial markets for SIB investments to be developed in the public social policy sphere. Section two evidenced how the state is willing to participate in this financial instrument in order to hedge their risk. Because without the social service programme and subsequent social outcomes, the cost of residential care were likely to be significant, and they wanted to reduce the risks associated with uncertainty, which is the risk of low-quality social outcomes from the juvenile justice programme. Whilst section three demonstrated how the Essex Edge of Care SIB has structural qualities similar to a forward contract. Through which two financial institutions, Bridges Fund Management and Ananda Ventures, have earned financial profits from the welfare arrangements of vulnerable adolescents facing residential care. The source of these financial profits being tax revenue.

The Essex Edge of Care SIB also supports the second contention that the very structure of SIBs are prone to inefficiency issues, such as moral hazard and information asymmetry, stemming from the principal-agent problem. Which section four outlines through an examination of the mechanism for setting, pricing and evaluating social outcomes. Whilst section five outlined a number of further agency costs, as the three selected examples attest to, there has been moral hazard and information asymmetry which has led to a lack of innovation in the social service programme, calculative asymmetry between the state and speculators, and tension between the state and speculators due to their differing motivations.

Like the Massachusetts Juvenile Justice SIB in the United States, this case study has shown the Essex Edge of Care SIB to be inefficient.

In the following chapter, the final of the three case studies, the aforementioned contentions are put to test in a different social, economic, political and institutional context focussing specifically on Australia.

Chapter Ten: Australia case study

10.1 Introduction

This chapter presents the final of the three case studies, that of the Australian SIB market. This includes a specific focus on the Benevolent Society SIB. This SIB was aimed at keeping children in New South Wales out of the child protection system and families safely together over the long term. Service delivery commenced in October 2013, making it the second SIB to be implemented in Australia (GO Lab, 2020).

This case study is theoretically informed in the same way as the Massachusetts Juvenile Justice SIB and Essex Edge of Care SIB case studies. Its structure is also approached in a similar manner. The only departure from this being a mini-study focussing on the role of pension funds and insurance companies, as direct speculation by pension funds is unique to the Australian SIB market.

10.2 The interests of the state: hedging risk when buying social outcomes

As discussed in the previous two case studies, this section examines the involvement of the state through the type of welfare system in Australia, with a focus on the legislation implemented by the state, before more specifically examining the forward-like hedging contract for the Benevolent Society SIB.

i. Welfare systems and state infrastructure

The provision of welfare services such as the care of children is part of the social protection measures of the state. The extent to which welfare is delivered can be explained through welfare regime theories, which may to some extent explain why the state would want to hedge the risk of the delivery of welfare services in the first place.

Similarly to the United States, Australia is considered to have a liberal welfare regime for both in-kind services and cash benefits. Although the level of decommodification is not as low as the United States, it is low compared to other advanced countries. Australia has the second lowest score in Bambra's health care decommodification index, for both 1980 data (2005a), and 1998 data (2005b). Thus increasing the dependence of citizens on the market for their social welfare needs. Meaning Australia

shares characteristics associated with a liberal governance regime, which Hajer (2020, 2018) found to be congruent with the SIB model.

When examining care specifically, research by Brennan et al. (2012) finds Australia has limited social rights to services and limited reliance on publicly provided care services, with a history of delivery by for-profit and non-profit providers. With low levels of decommodification and limited reliance on publicly provided care services, it seems likely that the state in Australia would look to use instruments such as SIBs in the delivery of social service style welfare. Just like in the United States and the United Kingdom, it is the result of the deliberate and direct actions of the state that have led to the Australian SIB market being important in terms of its size, value, and speed of growth.

Australia was the fourth country to implement a SIB, with their first SIB contracted in 2013. Since then, a total of 10 SIBs have launched across the country. The total market share by volume of SIBs across all advanced countries is 10 SIBs or 7 percent (see *figure 2.3* in chapter two). Phase one of this research shows the average monthly increase is 0.13 SIBs per month, which is the joint fourth fastest growing rate of all advanced countries.

Like the United States, Australia also has a federal system of government, which means that SIBs have been issued at the state or provincial level (Dear et al., 2016). Local government responsible for the specific thematic issue being tackled and issues SIBs. Phase one shows that four of Australia's states have launched SIBs. These are Queensland, South Australia, Victoria and New South Wales, where The Benevolent Society SIB was implemented. The outcomes payors are also federal, including Government of Queensland, Government of South Australia, Government of Victoria, Government of New South Wales, New South Wales Department of Corrective Services, New South Wales Department of Family and Community Services, and the State of New South Wales Treasury (GO Lab, 2020; KPMG, 2014).

It has been explicitly claimed that SIB markets have grown through the use of significant government infrastructure (Hajer, 2018; Loxley and Hajer, 2019). At a state level, the government of New South Wales has been very active in implementing policy

ideas. This has been directly attributed to growing size of the vulnerable population, and an acknowledgment that the government cannot finance social services alone (KPMG, 2014). As such, there has been a policy shift away from government to non-government organisations for the provision of such services (KPMG, 2014). An Office of Impact Investing has been established, which implemented a Social Impact Investment Policy in 2015, and led a "calls for concepts" for SIBs (Dear et al., 2016; Gustafsson-Wright et al., 2015). A trial to test the proof of concept for SIBs, resulted in the development of the Benevolent Society SIB, and also the Newpin SIB (KPMG, 2014). Similar state-led "calls for concepts" were also held by the states of Queensland and South Australia, which have been attributed to fostering early SIB activity (Dear et al., 2016).

Phase one of this research shows that unlike the United Kingdom and the United States, in Australia there are SIBs across five of the six policy areas. There are no SIBs through Education & Early Years. This SIB is a child & family welfare policy area, which is the most prevalent area alongside housing & homelessness which cover 30 percent of SIBs each. Whilst criminal justice covers 20 percent, and both health and workforce development 10 percent of SIBs each.

ii. State hedging its risk of paying for low-quality social outcomes through a forwardlike contract: Benevolent Society SIB

Now the type of welfare regime has been briefly addressed, this section describes the policy issue the joint outcomes payers, the Department of Family & Community Services New South Wales alongside the State of New South Wales Treasury, identified as problematic, and for which they decided to hedge their financial risk through a SIB.

In New South Wales, Australia, parenting skills for at-risk families was one of five policy areas short-listed as would be an appropriate model of financing through a feasibility study conducted by the Centre for Social Impact on behalf of New South Wales Government. Following this out-of-home care was one of two priority areas identified as a problematic policy area where savings could be made to the public purse and was put out to tender (KPMG, 2014).

In New South Wales the number of children in out-of-home care grew from 12,700 in 2007 to 18,000 in 2012, which is 1.13 percent of all children in the state, a third of whom are Aboriginal and/or Torres Strait Islander children (Social Finance, 2020). Yet, fewer than one in ten of the highest risk families are offered an intensive family support service. With the average cost of out-of-home care estimated at GBP 18,257 per child per annum in 2012/3, this has serious cost implications for the Government of New South Wales (Social Finance, 2020). ⁸⁸ However, no official estimated savings have been published (Loxley, 2017).

In order to make savings, the Department of Family & Community Services New South Wales alongside the State of New South Wales Treasury sought to buy these social outcomes from a special purpose vehicle was formed specifically for the delivery of this SIB in 5 years' time, for a maximum price of GBP 9,368,475. In order to deliver these social outcomes a specialist intervention programme was identified which would reduce the number of family breakdowns and children placed in the foster care system in New South Wales. The programme was designed using international evidence-based programs such as 'Homebuilders' from the United States and the Benevolent Society's own programme for working with at-risk families called the 'Resilient Families Service' (Social Finance, 2020). The Program address a range of issues such as parental mental health issues, domestic and family violence, substance misuse, and neglect of their children (GO Lab, 2020).

As elaborated in chapter six, the above agreement can be said to share structural characteristics with a forward contract in a number of ways. The Department of Family & Community Services New South Wales alongside the State of New South Wales Treasury is looking to hedge their position with regards to incarceration and employment rates. With the SIB providing a private agreement between the Department of Family & Community Services New South Wales alongside the State of New South Wales Treasury and the Trust set up as intermediary, about a future transaction of an asset, the asset here being the behavioural change of the

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⁸⁸ The figure of AUD 38,000 per child per annum as reported by Social Finance (2020) was converted to GBP using the purchasing power parity rate (OECD, 2022) as per the capital raised.

programme participants. Thus the SIB simultaneously obligates the buyer to purchase an asset, and the seller to sell the asset, at a specified price on a fixed future date, with the price of the asset also fixed at the time the contract is executed (Oosterlinck, 2017). Thus, the forward price for the hedging forward-like contract is explained as follows.

The outcomes payer buys long a bundle of social outcomes that will keep young children out of care for a forward price of GBP 9,368,475 with maturity in 5 years. The outcomes payer is hedging their risk because without the social service programme and subsequent social outcomes, out of home care costs are likely to be significant. A quick calculation using the average cost of out-of-home care figures quoted above shows that in 2012/3 the out of home care costs were approximately GBP 158 million.

So here, the valuation at initiation date represents the price the Department of Family and Community Services New South Wales and the State of New South Wales Treasury are willing to pay for the bundle of social outcomes that will keep young people out of care. Because this is welfare expenditure there is no risk-free or cost to carry. Thus, the forward price at initiation is:

$$F_{\circ}(T) = S_{\circ}$$

As there is no cash exchange at the beginning of the contract, the value of the contract at initiation is zero:

$$V_0(T) = 0$$

The intervention needs to be successful at delivering the required social outcomes at the right level of quality for the short position to be paid. Should the intervention fail to meet the pre-determined metrics, which is less than 5 percent performance improvement in the weighted average of the bundle of three metrics above baseline, there should be no payment due meaning the value of the contract at expiration would still be zero:

$$V_{5}(T) = 0$$

If at expiration T the bundle of social outcomes are delivered to a high-quality, the value of the forward contract is:

$$V_{\scriptscriptstyle 5}(T) = S - F_{\scriptscriptstyle 0}(T)$$

If at expiration T the bundle of social outcomes delivered are any other level of quality, the value of the forward contract is:

$$V_{5}(T) = S_{5}$$

Where:

- F_o is the forward price
- S_t is the spot price
- T is the length of the contract in years
- V is the value of the contract

The Benevolent Society SIB has evidenced the same relinquishment of high levels of control to non-state providers, and commodification of a formerly public social service, as the Massachusetts Juvenile Justice SIB and Essex Edge of Care SIBs.

10.3 The interests of financial institutions: speculating on the value of social outcomes for financial profit

This section will examine the financial system in place, the financial institutions involved, how they profited. Before taking a closer look at the role of pension funds and insurance companies in the SIB market. Australia is the only country which has direct speculation by pension companies.

i. Financial systems and financial institutions

As has been well established throughout the case studies, due to their nature as financial instruments, SIBs require a financial system to intermediate their use. Hence, theories of financial systems are a key component of understanding SIBs. As with both the United Kingdom and the United States, Under Amable's (2003) concept of 'decentralised finance', the Australia is deemed to have a financial sector marked by

a profitable banking sector, a well-developed venture-capital system, and a strong presence of institutional investors and particularly pension funds.

Phase one of this research indicates that from the 10 SIBs implemented 100 percent of SIBs in Australia have investment from at least one financial institution, totalling GBP 34,085,673 of speculative capital. Of the total number of individual investments disclosed, 63 percent are from financial institutions, comprised of 40 percent from pension funds or insurance companies, 13 percent by specialist fund managers, and 10 percent by banks. In most Australian SIBs the majority of transactions go through financial intermediaries. ⁸⁹ Australia clearly has a different SIB market to both the United Kingdom and the United States, with clear involvement of financial institutions in every SIB.

In the Benevolent Society SIB there are three financial institutions which are known to have intermediated speculative capital on behalf of their clients, the end-speculators. These are two banks and a specialist fund manager, Westpac Institutional Bank, Commonwealth Bank of Australia and Australian Ethical Investments, respectively (GO Lab, 2020).

Westpac Banking Corp is one of the four 'pillars' of the Australian banking system, and was just outside the top 50 largest banks by value of assets (S&P, 2020). Westpac Banking Corp also offers a wide range of over-the-counter derivatives products including foreign exchange, interest rate, commodities, and consider environmental, social and governance risks in lending and investment (Westpac, 2021a, 2021b). Westpac Institutional Bank which invested in two SIBs in Australia and a single SIB in New Zealand.

Commonwealth Bank of Australia is another of the four 'pillars' of the Australian banking system, sitting within the top 50 largest banks by value of assets (S&P, 2020). They provide a wide range of over-the-counter derivatives products such as foreign exchange, interest rate, commodities, but also invest using sustainable finance with

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⁸⁹ With the exception of the 'OnTRACC' SIB which is the only privately funded SIB in Australia (GO Lab, 2020; Tomkinson, 2017).

environmental, social and governance strategies (Commonwealth Bank of Australia, 2021a, 2021b). Aiming to be a frontrunner for the expected mainstreaming of social impact metrics (Peacock, 2020).

Australian Ethical Investments is an ethical wealth management which positively and negatively screens companies for social and environmental impacts (Australian Ethical, 2021). Established in 1986 it has USD 5.4 billion in funds under management and over 66,000 clients as at 31 March 2021, with its flagship Australian Shares Fund reportedly outperforming the average large-cap fund over the medium to long term (Australian Ethical, 2021). Australian Ethical Investments was the first investment fund to raise capital outside of the United Kingdom, and this was their only investment in SIBs.

<u>ii. Speculating on the value of social outcomes through a forward-like contract:</u> Benevolent Society SIB

The above section discussed how and why the state has hedged their risk, now this section turns its attention to the speculators who wish to bet on the direction of those same social outcomes.

The Benevolent Society SIB has 44 speculators in total, although the majority have not been disclosed publicly. Alongside the three financial institutions already discussed are the service provider Benevolent Society, NRMA Motoring & Services, and the Westpac Foundation (GO Lab, 2020; Westpac, 2013a). Together the speculative capital raised by all speculators was GBP 4,804,346 (GO Lab, 2020). Phase one indicates this is higher than the mean average value of GBP 3,803,576 raised by speculators for SIBs in the policy area of child & family welfare in Australia. In fact, this is highest value of all SIBs in terms of speculative capital raised in Australia during the first decade.

The speculators speculate on the directional movement of the value of the underlying asset. The underlying asset is the approximately 400 children from families with at least one child less than six years old who is living at home and has been assessed by the New South Wales Department of Family and Community Services as at Risk of

Significant Harm but 'Safe with Plan' (GO Lab, 2020; Gustafsson-Wright et al., 2015). Child & family welfare is the most prevalent policy area for SIBs in Australia, alongside housing & homelessness, with 30 percent of SIBs implemented in this area. Phase one of the research indicates that in excess of 1,600 very young children, who have been in care, or at risk of serious harm, or whose family needs support to prevent deterioration have been participants in these SIBs. These children have been the underlying asset for 33 percent of all the speculative capital raised in Australia.

As discussed in chapters four and six such developments have been met with criticism that vulnerable people are being packaged up as commodities and SIBs lead to a reframing of the welfare relationship (Chiapello and Knoll, 2020; Cooper et al., 2016). Further evidence that the ethics, morality and mindset of finance have penetrated both social and individual life (Lapavitsas, 2009).

Thus the quantification and commodification of previously socialised risk facilitates the transfer of the social value to investors, resulting in the introduction of market discipline into social domains not previously evaluated by using financial logic (Berndt and Wirth, 2018; Chiapello and Knoll, 2020; Cooper et al., 2016; Sinclair et al., 2014) The forward price for the speculating forward-like contract is explained as follows.

The speculator believes the value of the bundle of social outcomes that will keep young children out of care is going to rise from its current spot price of GBP 4,804,346. Therefore, the speculator buys long at GBP 4,804,346 with a maturity date the same as the hedger, in 5 years.

The forward price is calculated using the spot price:

$$F_{\circ}(T) = S_{\circ}$$

Whilst in a standard forward contract there is no cash exchange at the beginning of the contract, hence the value of the contract at initiation is zero, the same is not true for the speculator in a SIB. They pay the current spot price, which are the funds that are used to finance the social service programme:

$$V_{o}(T) = S_{o}$$

Changes in the price of the bundle of social outcomes will cause the forward to take on a positive or negative value. However, the terms of this SIB are different from most other SIBs. In a manner similar to the Massachusetts Juvenile Justice SIB, this SIB is divided into two tranches. Three quarters of total investment comprised of senior Class P Bonds, with the remaining quarter as subordinate Class E Bonds (KPMG, 2014). However, in a departure from the standard SIB model adopted in this thesis, Class P holders are offered one hundred percent capital protection by the outcomes payer.

This means that at expiration T, the value of the forward contract for Class E holders is:

$$V_{5}(T) = S_{5} - F_{0}(T)$$

As the forward can never take on a negative value for Class P holders due to the 100 percent capital protection, at expiration T the value of the forward contract is at a minimum:

$$V_5(T) = F_0(T)$$

and at a maximum:

$$V_5(T) = S_5$$

Where:

- F_o is the forward price
- S_t is the spot price
- T is the length of the contract in years
- V is the value of the contract

Whereas speculators are considered to be larger risk takers than other investors, this intervention makes the investment by Class P holders completely risk free. They would break even at this point as they are not actually speculating. This no longer allows the

state to hedge its exposure to outcomes volatility, which is the risk of delivery of lowquality social outcomes, as the outcomes payer still has to repay investors regardless of the quality of social outcomes.

This SIB completed in July 2018 after 5 years of service delivery (Benevolent Society, 2020). ⁹⁰It was deemed that whilst the social outcomes were delivered they were not to the highest quality but they were above the baseline. This resulted in the current spot price being lower than the forward price.

For Class E holders the Department of Family and Community Services New South Wales and the State of New South Wales Treasury settled the contract by paying:

$$V_{5}(T) = S_{5} - F_{0}(T)$$

For Class P holders the contract was settled by paying whichever was of higher value, the current spot price or the forward price (the actual value of payment is undisclosed):

$$V_5(T) = S_5$$

or

$$V_5(T) = F_0(T)$$

<u>iii. Financial profits earned through the speculating forward-like contract: Benevolent Society SIB</u>

The narrow definition of financial profit, used by Lapavitsas and Mendieta-Muñoz (2016), focuses on profit earned by banks and near-bank financial institutions. In this SIB financial profits are due to three financial institutions, Commonwealth Bank of Australia, Westpac Institutional Bank and Australian Ethical Investments.

The two banks, Westpac Institutional Bank and Commonwealth Bank of Australia

⁹⁰ There is a single payment event for investors in this SIB, although investors were provided with interim results calculated annually for their reference (Gustafsson-Wright et al., 2015).

raised funds from investors, including self-managed super funds, institutions, trusts, small foundations, and high net worth individuals (GO Lab, 2020; Rizzello and Carè, 2016). ⁹¹ There is no information publicly available regarding the end-investors of the Australian Ethical Investments fund.

As financial institutions acting as fund managers, Commonwealth Bank of Australia, Westpac Institutional Bank and Australian Ethical Investments will have earned secondary financial profits through commission or fees. These will be due regardless of the SIB outcome, as for financial institutions SIBs are a zero sum game. However, there may be layers of financial profit. When financial institutions are earning financial profit and their client is another financial institution they will also earn financial profits from their underlying clients who are the ultimate end-speculators.

This means for the financial institutions earning secondary profits, the two banks and the specialist fund manager, the advance was recouped, and the financial profit was paid from tax revenue. In addition, if the subordinate investment from Commonwealth Bank of Australia was made from their own loanable capital, then this portion of their investment would have been paid directly from tax revenue.

Given that there are some full capital protection measures in place as discussed above, not all profits in this SIB are speculative, as Class P holders have guaranteed returns. This feature makes Class P holders characteristically similar to a traditional bond. Whilst Class E holders have 100 percent of their capital at risk, in the same manner as the speculators in the Essex Edge of Care and Massachusetts Juvenile Justice SIBs.

In total 34.7 percent of the total capital invested in Tranche P was from financial institutions, whilst they invested 26.0 percent of Tranche E (KPMG, 2014). 92

However, the different design of this SIB with no capital at risk does not affect the

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⁹¹ There is no further information as to what type of 'institutions' they are referring to (GO Lab, 2020). ⁹² The value in GBP of the capital raised by financial institutions for both classes are calculated by myself as follows. Class P: GBP 4,804,346 x 75 percent x 34.7 percent = GBP 1,250,331; Class E: GBP 4,804,346 x 25 percent x 26.0 percent = GBP 312,283

profits of financial institutions as these are zero sum, but it may affect their level of financial profits if linked to the investment, or their ability to attract clients (thus inadvertently affecting financial profits).

With regards to profits to non-profit institutions, there is senior investment from the Benevolent Society, and subordinate investment also from the Benevolent Society, but also from the Westpac Foundation, and the Commonwealth Bank of Australia. Given that Westpac Institutional Bank also acted as subordinate investor but via their foundation, given the lack of publicly available details it is possible the subordinate investment from Commonwealth Bank of Australia was also made via a foundation or part of a corporate social responsibility scheme.

For the others earning primary profits, they were paid directly from tax revenue. This was the service provider Benevolent Society; private investors in the form of NRMA Motoring & Services and individuals either as high net worth individuals or through the investment of pensions.

In addition to the investors which have invested via the banks and specialist fund manager, there is also profit due to the service provider Benevolent Society which acted as both senior and subordinate investor; and a corporation NRMA Motoring & Services. Such investments by local businesses and corporations may be motivated by non-pecuniary considerations based on corporate social responsibility concerns (Pauly and Swanson, 2017; Wong et al., 2016). With a strong focus on the social impact.

iv. Pension funds, insurance companies and social impact bond markets

Banks were discussed in detail the in United States case study, as specialist fund managers were in the United Kingdom case study. Here the focus is on the final category of financial institutions that invest in SIBs, namely pension funds and insurance companies.

The financial liberalisation and financial market reforms discussed throughout (Lapavitsas, 2013, 2011, 2009) which have seen banks adopting investment banking practices have been coupled with institutional investors, such as pension funds and

insurance companies, becoming large collectors of savings and suppliers of funds to financial markets.

Phase one of this research indicates that in advanced countries 13 pension funds and insurance companies operate across 6 of the 17 SIB markets, making a total of 22 investments across 15 SIBs. As institutional investors like pension funds and insurance companies can also have their assets managed by specialist fund managers and so it possible that investments have also been made this way, but remain undisclosed.

There are 8 insurance companies, 3 in France, 2 in the United States, 1 each in Canada, the Netherlands, and New Zealand. France is one of the three largest insurance markets in Europe, alongside the United Kingdom and Germany (Ernst & Young, 2019). Whilst the United Kingdom and Germany both have SIB markets they do not have any insurance companies as speculators. Three of the insurance companies in the SIB market, Aviva, AG2R, and CZ, all rate in the top 50 European insurers and reinsurers (Atlas Magazine, 2019).

Insurance companies are also a feature in the wider impact investing ecosystem. In the GIIN's 2020 Annual Impact Investor Survey, insurance companies accounted for 1 percent of the total sample by number of respondents, managing 10 percent of all assets in the sample by volume of capital invested, which was 1 percent of the value of investments made (GIIN, 2020, p. 18). Of the insurance companies noted in the SIB market, Prudential Financial Inc has membership as an asset owner in the Global Impact Investing Network (GIIN, 2021a).

The first insurance companies did not enter the market until 2015, when the Accident Compensation Corporation made a single investment in New Zealand. In 2016 in the United States two insurance companies made four investments, with Prudential Financial Inc investing in a single SIB, whilst QBE Insurance Group Limited invested in three. ⁹³ QBE also invested in a single SIB in Canada in 2016, as did AG2R La

⁹³ Prudential Financial Inc. is a company based in the United States and is not affiliated with Prudential Plc in the United Kingdom

Mondiale over in France (AG2R, 2020; GO Lab, 2020). In 2017 the healthcare insurer CZ made a single investment in the Netherlands (CZ, 2020; GO Lab, 2020). In 2019 Aviva Impact Investing France invested in a single SIB, along with MAIF Investissement social et solidaire, a subsidiary of MAIF mutual insurance company which favours projects with social and environmental impacts (GO Lab, 2020; MAIF, 2020).

The amount of investment made by insurance companies in SIB markets remains unknown, but it will be dwarfed by their overall involvement in the impact investment market more widely. Where during 2020 a total of 133 investments were made, with a total volume of capital invested of USD 4,811m (GIIN, 2020, p. 18). By comparison, the total value of all investment made by all categories of investor into all SIBs during the first decade of their implementation was GBP 268 million (authors own data, 2022).

Turning to pension funds next. There are 5 pension funds, which have made a minimum of ten investments which have been disclosed, with other 'superannuation funds' mentioned but do not name the institution. These have all taken place in Australian SIBs.

Pensions Funds started acting as capital provider in 2013, when Australia implemented its first SIB. These funds predominantly report a strong commitment to environmental and social principles, or follow an ethical investment charter, and were mostly established in the 1980s. In 2013 the first of the known superannuation funds started investing in Australia, in the first SIB, they were NGS Super and Christian Super. NGS Super is dedicated to people who work in education and community-focussed organisations, and has raised capital for four SIBs (GO Lab, 2020; NGSsuper, 2021). Christian Super is for members employed within the Christian community, as single investment (Christian Super, 2021; GO Lab, 2020). In 2017 three additional superannuation funds entered the Australian market. HESTA was established for members employed within the health and community services, raised capital for two SIBs in 2017 (GO Lab, 2020; HESTA, 2021). Future Super was the first fossil fuel free super fund in Australia, and invested in a single SIB (Future Super, 2021; GO Lab, 2020). As did Grosvenor Pirie Super, although this appears to not be a socially responsible fund (GO Lab, 2020; Grosvenor Pirie, 2021).

The Bridges Social Impact Bond Fund, launched in 2013 it has raised GBP 25 million, including investments from the Great Manchester Pension Fund and Merseyside Pension Fund (Ainsworth, 2014). In the United Kingdom the Greater Manchester Pension Fund and Merseyside Pension Fund are reported to invest in the Bridges Fund Management Social Impact Bond Fund and Social Entrepreneurs Fund (Gustafsson-Wright et al., 2015). SIBs have been proposed as investable social investment assets for pensions in the UK (Rowell, 2016). The recommendation came from a government appointed Advisory Group, comprised of senior representatives from across the mainstream financial services industry. The government is currently considering changes to regulation that will allow this (DCMS, n.d.).

The profits made through these local authority pension funds would differ from a superannuation fund for example. This is because they are not financial institutions, it is more akin to proprietary trading, where they are investing their own money, which will be dispersed to retired employees. Rather than investing on behalf of individuals and earning commission or fees. The financial institution they speculate through make the commission of fee. The same is true of the self-managed pension funds that speculated through the banks in the SIB in this case study. They would have earned primary profits, whilst the banks earned commission and fees.

Like insurance companies, pension funds are also feature in the wider impact investing ecosystem. In the GIIN's 2020 Annual Impact Investor Survey pension funds disclosed 35 investments with a total volume of capital invested of USD 2,433M (GIIN, 2020, p. 18). Of all of the pension funds investing in the Australian SIB market, Christian Super and MAIF have membership as asset owners in the Global Impact Investing Network (GIIN, 2021a).

The 2019 Global Pensions Asset Study found that by asset value the world's largest pension markets include the United States, Japan, the United Kingdom, Australia, the Netherlands, and France (Thinking Ahead Institute, 2019, p. 18). ⁹⁴ Whilst these all of

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⁹⁴ The 2019 Global Pensions Asset Study found that by asset value, the United States remains the world's largest pension market, accounting for 61.5 percent of the world total, followed by Japan at 7.7 percent, the United Kingdom with 7.1 percent, and Australia with 4.6 percent, whilst the Netherlands is 6th and France 20th (Thinking Ahead Institute, 2019, p. 18).

these countries have SIB markets, only Australia has seen direct investment by pension funds.

This corresponds to the absence to pension funds in derivatives markets, with only banks, investment firms, and insurance companies noted as the main participants (Lindo, 2013). Institutional investment has a peculiarity that it should satisfy the prudence criterion (Badrinath et al., 1989). This could be part of the reason pension funds are also not common as participants in SIB markets. In the Benevolent Society SIB the potential for regulatory constraints was raised as 'fiduciary duties' were said to constrain investment from superannuation funds, seeking to maximise risk-adjusted return (KPMG, 2014).

It has also been raised that in general SIBs do not provide investors with the necessary risk-management tools they require for undertaking investments (Del Giudice and Migliavacca, 2019). In fact, in the Benevolent Society SIB certain features such as 100 percent capital protection was required to make it attractive to large scale institutional investors (KPMG, 2014). Thus removing the speculative nature of the financial instrument entirely for the 75 percent of investors holding Class P bonds. The participation of the local authority pension funds in the Bridges Social Impact Bond Fund discussed above, is said to have been made possible due to Bridges Fund Management "de-risking" this investment through their other funds (Williams, 2019).

10.4 The principal-agent problem and the complexity of transferring risk: setting, pricing and evaluating social outcomes: Benevolent Society SIB

Returning to the specificities of the Benevolent Society SIB. Sections two and three discussed how this SIB represents financialised concepts of social value. This section focuses on the second contention of this research, that the very structure of SIBs are prone to inefficiency issues stemming from the principal-agent problem. It does this by establishing the complexity within the Massachusetts Juvenile Justice SIB in order for the social outcomes to be set, priced and evaluated.

i. Agents involved in the pricing, transfer and evaluation of risk

The transfer of risk in this SIB is a very complex process, involving the support of

multiple agents. As principal, the outcomes payer hires a series of agents to exert effort in performing a series of tasks related to the design, implementation and evaluation of the SIB. These agents are selected individually, depending on the task they are undertaking for the principal, and exert varying amounts of effort, and have differing interests, goals, expectations, risk attitudes and perceptions (Alijani and Karyotis, 2018; Del Giudice and Migliavacca, 2019; Hajer, 2018).

In order to discuss the principal-agent problem and the complexity of the interactions between the various agents in relation to the pricing and transfer of risk through social outcomes, it is first necessary to state who these agents are. The outcomes payer as principal, and the special purpose vehicle and speculators acting as agents of the principal were discussed in sections two and three. However, additional agents include the Benevolent Society as service provider, the Trust acting as special purpose vehicle, and Deloitte as validator.

The financial ecosystem (see *figure 10.1*) shows the various roles the principal and agents play in the Benevolent Society SIB, and the renumeration received in return.

Capital Provider Outcomes Payer Other Costs Profit Senior: Department of Family & Australian Ethical Community Services Principal £ Principal £ Investments. NSW, State of New Westpac Bank, South Wales Treasury Commonwealth Bank of Service Australia, **Service Provider** Investment Investment Benevolent Society, Fees The Benevolent Society Target: NRMA Motoring & Service BS SBB Services, Coordinator Other Unknown Fees Trust Subordinate: Benevolent Society, Technical Assistance Westpac Foundation, **Specialists** the Commonwealth **ARTD Consultants** Bank of Australia Fees Westpac Institutional Bank, Commonwealth SIB Contract Costs Bank of Australia Market Building Gifts Returns & Fees

Figure 10.1 - Social impact bond financial ecosystem: Benevolent Society SIB

Source: authors own, data (GO Lab, 2020)

In the Benevolent Society SIB the outcomes payers, the Department of Family & Community Services New South Wales alongside the State of New South Wales Treasury, has delegated the management of the SIB to the Trust, which has been set up as a special purpose vehicle supported by the service provider the Benevolent Society. In turn the special purpose vehicle has delegated the delivery of the social service programme to the service provider the Benevolent Society. Separately, the special purpose vehicle has raised money from investors which it uses to finance the delivery of the social service programme by the service provider. In order for investors to be repaid, the social outcomes of the service are required to be monitored and evaluated. Only successful social outcomes will trigger a payment from the outcomes payer. These are paid to the special purpose vehicle, which in turn pays the disclosed investors of Australian Ethical Investments, Benevolent Society, Commonwealth Bank of Australia, NRMA Motoring & Services, Westpac Bank, and the Westpac Foundation, plus others unknown (GO Lab, 2020).

Further details of the key agents from the Benevolent Society SIB financial ecosystem whose actions will be discussed throughout this case study are provided here for the intermediary, special purpose vehicle, service provider and validator.

The intermediary is the only direct relationship and line of communication between the outcomes payer and the various agents, and as such the only agent whose effort the outcomes payer can directly monitor. The intermediary can act as the performance management expert reporting on the performance of the SIB, monitoring and supporting the delivery of social outcomes against targets and contractual key performance indicators, ensuring effective data analysis, may have its own data collection system, providing an independent source of information and scrutiny to investors and the outcomes payer, to facilitate informed decision-making (Barajas et al., 2014; GO Lab, 2019; So and Jagelewski, 2013).

There is no formal intermediary in this SIB, in the same way as the other two SIBs, with the state undertaking some aspects, such as the selection of the service provider (Loxley, 2017). A special purpose vehicle was formed specifically for the delivery of this SIB. It is a Trust, its name is undisclosed, but the Benevolent Society is reported as the sole member (KPMG, 2014; Loxley, 2017). Unlike most SIBs, in this SIB the

Trust has a complex suite of contracts consisting of separate agreements with government, investors and the service provider (KPMG, 2014).

The service provider manages the day-to-day operating decisions of the programme implementation, bound by the standard of quality and other obligations agreed within the contract (GO Lab, 2019). They are also responsible for reporting back data on all aspects of the programme's success. However, SIBs are said to be very resource intensive, and service providers may not have the requisite time or skills to engage with the data at level of intensity a SIB requires (Hawkins et al., 2017a).

The service provider was the Benevolent Society, which is a non-profit firm, and experienced in delivering social service programme such as this. Unusually for a SIB the outcomes payer and the service provider are reported to have their own direct contract (KPMG, 2014). Whilst, rather unusually, the state selected the service provider (Loxley, 2017), thereby reducing the possibility of adverse selection *ex-ante*, reducing the chance of purchasing a service of inferior quality. As a non-profit firm the Benevolent Society is also more inclined to share the goal of the outcomes payer which makes them a more reliable service provider for the provision of social service programmes (Hansmann, 1987; Salamon, 1995). The Benevolent Society also acted as both senior and subordinate investor.

An evaluator or validator would normally act on behalf of the outcomes payer to provide technical assistance and expertise to the SIB. Deloitte certified the performance calculations, which is the metric for investor payments (Gustafsson-Wright et al., 2015). ⁹⁵

ii. Setting social outcomes

As public social policy is not a marketable commodity, there is no natural underlying asset in this SIB. But as discussed in chapter six, an underlying asset is required to be able to set, price and evaluate the social outcomes. I argue that the underlying

⁹⁵ Deloitte also acted as an independent assessor in the 2013 'Buzinezzclub Rotterdam' SIB and a coordinator for the 2015 'Workplace Rotterdam South' SIB (GO Lab, 2020; KPMG, n.d.).

asset in the Benevolent Society SIB is the families who are receiving the Resilient Families Service. It is their behavioural change that the outcome payers hope to achieve. It is only through this change the state departments can make their savings in children's residential care in the longer term. Of course, this also means that it is families with young children at risk of significant harm that ultimately result in financial reward for investors.

In order for the risk to be hedged by the outcomes payer the underlying asset needs to be converted into a metric that can be monitored and its quality ascertained. The outcomes payer sets outcomes as a signalling device in order to mitigate their contractual hazard, by reducing their financial risk. Thus, the quantification and measurement of social outcomes plays a key role by determining returns to investors. Here three metrics were used. The 'number of entries into out of home care', the 'number of Helpline reports' recorded, and the 'number of safety and risk assessments' undertaken. These metrics are measured on the experiences of the youngest child in the family, with the counterfactual being a quasi-experimental matched control group (GO Lab, 2020; Leahy et al., 2017).

The metric calculation was based on a performance percentage of the weighted average of improvement of the three measures relative to the control group. Weighted as 66 percent for 'number of entries into out of home care' entries, 17 percent for 'number of Helpline reports', and 17 percent for the 'number of safety and risk assessments' (GO Lab, 2020). With a performance percentage improvement of less than 5 percent classed as a 'fail' and no payment made, whilst an improvement of 5 to 15 percent is considered the 'baseline' (KPMG, 2014).

iii. Pricing social outcomes

The return of principal amount plus interest is considered the optimum incentive relationship between an outcomes payer and an investor in SIBs. The Benevolent Society SIB has the largest number of investors of all three SIBs, many of whom are undisclosed, but also a broader type of investors which include private investors too through corporates and individuals. Whilst the preferences of financial institutions will lie closer to financial value, and non-profit institutions to social value, the motivations

of private investors (see chapter three) such as corporations are less well known.

Similarly, to the Massachusetts Juvenile Justice SIB a senior/subordinate financial structure was employed for this SIB. Here it is also divided into two tranches of investment, with three quarters of total investment comprised of senior Class P Bonds with the remaining quarter as subordinate Class E Bonds. Senior investors include Australian Ethical Investments, Benevolent Society, Commonwealth Bank of Australia, NRMA Motoring & Services and Westpac Bank. Whilst subordinate investors were comprised of the Benevolent Society, Commonwealth Bank of Australia, and the Westpac Foundation (GO Lab, 2020). The marginal rate of substitution in value for investors is shown in *figure 10.2*.

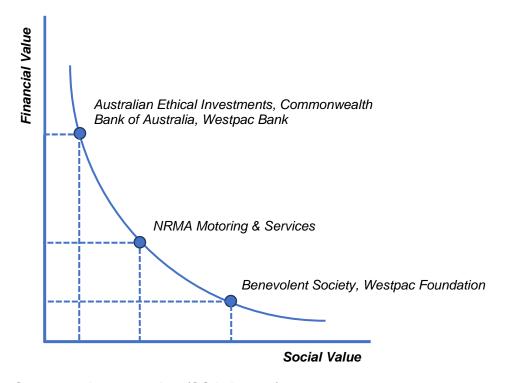


Figure 10.2 - Investor value preferences for Benevolent Society SIB

Source: authors own, data (GO Lab, 2020)

Interest payments are different for investors in each tranche. Class P Bonds have 100 percent principal protection, with a maximum return of 10 percent. Class E Bonds have all of the capital at risk and returns reflect this level of risk, with a maximum return of 30 percent. The repayment of principal for Class P Bonds ranks ahead of Class E Bonds, therefore Class E Bonds provide 'first loss' protection (Social Finance, 2020). Financial institutions accounted for 34.7 percent of investment in tranche P, and

26.0 percent of tranche E (KPMG, 2014).

In the Massachusetts Juvenile Justice SIB, the two subordinate investors, which took on greater risk, were paid a lower rate of return that the senior investor. Here the Class E investors are taking on a higher level of risk, but the potential returns are likewise much higher than the Class P investors with the capital protection. A possible explanation could be that due to the design of the Massachusetts Juvenile Justice SIB, as senior investor Goldman Sachs was able to influence the setting of rates of return. Whereas in the Benevolent Society SIB the rates of return were already set before the SIB was marketed to investors.

As just described, rather unusually this SIB has full capital protection measures in place for Class P Bond holders, which means there is no transfer of risk from the outcomes payer to investors. This means that regardless of how low the quality of the social outcomes might be the outcomes payer is still committed to paying for them, at least to the level of their principal amount invested. The 'standing charge' used is similar to a coupon in a standard bond. ⁹⁶ The capital protected element was deemed as critical to encourage interest in the asset class beyond the philanthropic market, done to attract superannuation funds which seek capital guaranteed investment products (KPMG, 2014; Westpac, 2013b). ⁹⁷ Pricing considerations include the need to attract investors and fit their risk-return profiles, as well as making financial sense in terms of cashable savings for the outcomes payer. However, this could be seen as an example of the misalignment of public social policy delivery and the profit motive. Here the investors will be repaid their capital even if the SIB produces low-quality social outcomes.

iv. Evaluating social outcomes

The performance of the social service programme is assessed through a comparison

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⁹⁶ When the standing charge was agreed there was an expectation that they would not be required in later bonds, once the market had matured and SIBs became embedded with investors as a sound financial instrument (KPMG, 2014).

⁹⁷ This has been attributed to 'fiduciary duties' that constrain investment from those that maximise risk-adjusted return (KPMG, 2014).

of the social outcomes achieved for those families receiving the service against a control group of families not receiving the service. The performance percentage is calculated as described above. The evaluation process utilised in the Benevolent Society SIB is different again to the other two SIBs. In the Essex Edge of Care SIB, the outcomes payer validated the social outcomes against their own historical data. In the Massachusetts Juvenile Justice SIB there was a rigorous evaluation process using a randomised control trial and three external evaluators and validators. In this SIB there is no external evaluator, the outcome metrics are calculated by the service provider, the Benevolent Society, and validated by Deloitte (Gustafsson-Wright et al., 2015).

10.5 Potential agency costs stemming from the inefficiencies of delivering welfare services through this type of arrangement: Benevolent Society SIB

The preceding sections have analysed the Benevolent Society SIB as a pair of forward-like contracts, examined the key agents involved and their differing motivations, as well as the profits which have been made from this SIB. The problems arising from an agency relationship impose agency costs for the principal, so the principal-agent relationship should reflect an efficient organisation of information and risk-bearing costs (Eisenhardt, 1989a).

The section outlines an example of the agency costs which have been generated by welfare services being contracted in this way. Agency costs arise when there is a misalignment in the principal-agent relationship, leading to inefficiencies attributable to the varying levels of outcome uncertainty, risk aversion, information, and other variables (Eisenhardt, 1989a). There is no evaluation available on the SIB as a process itself, only on the service delivery, hence the agency costs identified here come from the official evaluation of the development phase of the New South Wales SIB trial. ⁹⁸

The agency costs discussed here are by no means exhaustive, but provide a discussion point of some of the agency costs related to the transfer of risk in the

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⁹⁸ The trial involved the design and planning of three SIBs, two of which went on to be implemented.

Benevolent Society SIB.

i. Differing motivations between financial institutions and non-profit firms

In agency theory the principal may restrict interests that are divergent from their own through the coalignment of incentives (Eisenhardt, 1989a; Jensen and Meckling, 1976). As SIBs have multiple agents there is also scope for divergent interests and differing motivations between agents, in addition to between principal and agent. This has occurred in the Benevolent Society SIB with regards to the banks which were acting as financial intermediaries, and the outcomes payer and the non-profit firm as service provider, which have similar interests but interest which differ substantially from those of a bank.

The two banks were able to provide market-based skills such as commercial due diligence and an understanding of investors, and used the SIB to strengthen their knowledge of the social context. Whilst noting that the outcomes payer and service provider paid less attention to the commerciality of the bonds, and more specifically the terms of the transaction such as outcomes measurement, investor payments, and the principal guarantee (KPMG, 2014). These differences in skills set, and misaligned interests, in a key area such as the outcomes mechanism, could lead to serious agency costs should misunderstanding occur. Not just between principal and agent, but between the agents themselves.

ii. Determining social outcomes and measuring savings

Social outcomes are notoriously difficult to quantify and measure and there is a lack of clarity and standardisation (Berndt and Wirth, 2018; Sinclair et al., 2014). Determining the social outcomes for the Benevolent Society SIB took a long time and were seen as particularly challenging. This was acerbated due to the nature of the data, as existing data for the Resilient Families programme is designed for standard casework and administrative purposes and not for measuring outcomes (KPMG, 2014).

There were conflicting agendas between the different agents when deciding on outcome metrics, with a difference in understanding between the New South Wales

Treasury, the Benevolent Society and investors. The Treasury initially opted for simple social outcomes for the benefit of investor understanding. Investors requested a binary rather than multidimensional outcome measure. Then finally, the service provider requested a detailed outcome measure (KPMG, 2014). The complexity appears to be partly attributable to the fact that behavioural changes are, by their very nature, inherently difficult to measure and translate into quantifiable social outcomes. Also, whilst the outcomes payer and non-profit firm service provider are deemed likely to have similar goals and motivations for the delivery of social service programmes, social outcome measures are so difficult to agree it can still lead to agency costs.

There were also differing views on how savings should be calculated (KPMG, 2014). With the rate of return to investors decided by a 'performance percentage' of the difference in the improvement between children receiving the service, and matched children in a comparison group (KPMG, 2014). This was calculated by the Benevolent Society but verified independently by Deloitte (Gustafsson-Wright et al., 2015). However, Westpac Institutional Bank were required to assist the Benevolent Society to 'develop a more mathematical understanding of success' (Gustafsson-Wright et al., 2015, p. 121). There is clearly a risk to the outcomes payer if the agent calculating outcomes performance metrics is not specialised in this area. It is not a typical task required of a service provider when contracting services on behalf of the government. As the overall experiences of the outcomes payer, service provider, and investor shows, it is not only a complex process attempting to reach consensus, the limited experience due to SIB markets being at a nascent stage of development makes this task even more challenging (Gustafsson-Wright et al., 2015).

iii. Potential for moral hazard

The financial motivation may lead to moral hazard *ex-ante* or *ex-post*. There is empirical evidence regarding investors pressurising service providers in other SIBs to select the beneficiaries with the highest chances of meeting a target whilst leaving out those likely to miss the target (Edmiston and Nicholls, 2017; Gustafsson-Wright et al., 2015; Loxley, 2017; McHugh et al., 2013; Tse and Warner, 2018; Williams, 2018). There was acknowledgment for potential moral hazards in the Benevolent Society SIB through the 'cherry-picking' of the families most likely to provide high-quality social

outcomes, to counteract this they used an 'intention to treat' evaluation design (KPMG, 2014).

10.6 Concluding remarks

This case study has sought to explore the notion that SIBs are an efficient instrument for public social policy delivery. An in-depth examination of three separate SIB markets each with an example SIB. The Massachusetts Juvenile Justice SIB in the United States, and the Essex Edge of Care SIB in the United Kingdom the Benevolent Society SIB in Australia were undertaken to demonstrate support for the two key contentions of this research. First, that SIBs represent a particularly problematic aspect of financialisation, as through this innovative financial vehicle the state has supported financial markets for the SIB investment to be developed in the public social policy sphere. Second, that SIBs are susceptible to a multitude of inefficiencies stemming from the principal-agent problem, in particular due to the transfer of risk and its role in setting, pricing and evaluating social outcomes. In doing so, this research raises valuable questions on the necessity, viability, as well as future trajectory of SIB growth. This in turn may help to stimulate further empirical and theoretical research in what still remains a nascent but ever growing body of literature.

Chapter Eleven: conclusion

11.1 Introduction

This research contributes to the growing body of scholarship on the emerging mechanism of financing social service delivery through SIBs. This goes some way to closing the gap which exists in empirical insight and theoretical understanding. My thesis has made several original contributions both to the study of SIBs in and of themselves, their perceived efficiency, and to the ongoing debate regarding financialisation in general and its incursion into the realm of social policy making in particular.

More specifically I have made several new contributions. I proposed a new *Social Impact Bond Financial Ecosystem* (fig 3.1) and an amended *Social Impact Bond Operational Model* (fig 3.3) to enhance understanding of the principal and multiple agents in a SIB, their working relationships and roles in delivering the SIB. Both of which focus specifically on the capital flows through the SIB mechanism, including contract costs, market building gifts, investment, financial returns and fees.

Additionally, I theoretically revised and developed the existing categorisation of investors through my *SIB Investor Typology* (fig 3.2), focussing on the approach of the various types of investors to profit distribution. Thus aiding the understanding of SIB investor motivations and attitude towards risk, whilst also lending additional empirical support to reported investor types during the research period.

As a first, I have introduced the concept of a *Marginal Rate of Substitution in Value for Social Impact Bond Investors* (fig 6.1) which theoretically examines investor preferences for financial and social value and its effect on incentives, whilst exploring these empirically though the three case studies.

Most importantly, this thesis has presented a theoretical elaboration of the underlying structural similarities between SIBs and forward contracts, and the principal-agent problems associated with the setting, pricing and transfer of risk. Additionally exploring these empirically though the three case studies. Thus expanding the underresearched area of the links between SIBs and derivatives.

This final chapter presents my concluding remarks following this critical analysis of the concept of SIBs, their application, efficiency and how the activities of finance have permeated into the social sphere through SIBs. Before suggesting avenues for future research and finally policy recommendations.

11.2 Historical arc and legacy

i. SIBs: current context

There can be little argument that the provision of welfare services requires innovative financing mechanisms if the state is to continue contracting non-profit firms to deliver services through payments-by results style contracts. The question however that this thesis has grappled with is whether SIBs as a financial innovation are an appropriate mechanism through which to deliver the much needed financing where investors, not the state, assume the risk of failed social interventions.

In other words, are SIBs purely a technical solution, devoid of ethical and political morality, which create savings for the public sector - or are they a financial vehicle, primarily providing new profitable investment opportunities for the financial sector, consequently framing welfare as a problem of private underinvestment from which private returns can be deduced?

The answer to this question, as the thesis have attempted to demonstrate, is far from straightforward. Whilst the conception of SIBs as the imposition of the market economy onto society is not uniform, there is implication, as this research has attempted to demonstrate, amongst SIB proponents that the solution to fund social welfare lies in the design of investor relations.

The proponent group tends to draw criticism, which could arguably be deemed justified as empirically demonstrated in each of the case studies of deepening financialisation in the social services sector to navigate the politics of public fiscal constraint. SIBs are by design complex with multiple stakeholder involvement as the SIB ecosystem I propose in chapter three demonstrated, whilst transaction costs are expensive and may overly focus on meeting a quantifiable result. In terms of placing this phenomenon within the overall gamut of financialisation of social policy, the linking of intervention to

pay-out in turn narrows the scope of social investment to low-cost programs with short-term returns, when more comprehensive and direct interventions by the state are needed.

Situating SIBs within the context of financialisation thus generates the helpful understanding of the interconnections with neoliberalism's rationality that insists upon the reduction of government social policies and their replacement with market mechanisms. Viewed through this prism of neoliberalism and financialisation SIBs are interpreted then not less of a morality free financial innovation but more of an economic incursion, by placing monetary values into domains that has hitherto been of the state. The market mechanisms at play in SIBs are financial market mechanisms. The value of an individual unit of human capital becomes their potential profit, effacing their humanity and replacing it with extreme rationality and quantification.

However, this is not to say that all SIBs are fundamentally neoliberal. The interactions between social policies and the financial, institutional legal, cultural and political specificities that influence financial innovation and enactment at state or national scales are too diverse for a policy monoculture to perpetuate. That said, the case studies evidenced the monetisation of social policy objectives where vulnerable individuals such as the young children and adolescents in the Essex Edge of Care, Benevolent Society and Massachusetts Juvenile Justice SIBs, all of whom were considered to be at-risk by the authorities, formed the underlying asset of the SIB and thus the base of its financial returns. Drawing similarities to physical social infrastructure projects such as hospitals and schools being designed to attract private investment through public private partnerships, and as such also attract criticisms of market logic dominating overshadowing social rights and social goals. One can add to this aspect of neoliberal logic, as the privilege of financial gain through SIBs in turn reconceptualises the role of the state by undermining its collective social objective.

The heterogenous development and prolific manifestation of SIBs have taken place within contemporary economic, political and legal conditions which have enabled them to evolve at this rapid rate, as this research has demonstrated.

ii. SIBs: what the future holds?

When considering the legacy of SIBs the perspective is also important. I think it is fair to say that the multi-faceted nature of SIBs mean different things to different parties – whether it be as a social policy tool or as a financial instrument. That is, whether the interested parties are seeking ways to implement payments-by-results contracts, or whether they are striving to evolve financial markets through new products, or whether there is a lofty ambition to achieve both. Equally as pertinent is why the state desires to hedge its financial risk through a SIB, especially as existing payments-by-result contracts already enable this risk to be hedged.

I argue the answer lies in the interests of financial institutions. Indeed this research has demonstrated how SIBs were designed by the financial sector, for the financial sector, and have derivative-like characteristics. Evidence has been presented throughout that SIBs are based on financial practices and motives, and that they enable financial institutions to speculate on the value of social outcomes for financial profit.

That said, overall I believe the high transaction costs and inefficiencies of the SIB model will dissuade financial institutions from pursuing them as an impact investing strategy, even accounting for the seemingly guaranteed pay-outs SIB investors have enjoyed thus far. I further stress that their inability to be standardised and effectively morphed into futures-style contracts will also limit their attractiveness as a financial product.

Looking more widely, given the heterogeneity of SIB markets and the lack of empirical evidence available, it is very difficult to forecast with any degree of certainty the future of SIB markets in advanced countries. As the provision of welfare services delivered by SIBs belong to the social protection measures of the state, in order for SIBs to be developed in the public social policy sphere it is necessary they occur within an institutional context that is directly influenced by state policy making, not just in welfare but also in finance. Therefore the future of SIBs is in many ways lies in the hands of the state first and foremost, which would need to create an environment conducive enough for the state-private finance nexus to prosper.

In the case of the United Kingdom I believe it is predominantly the use of SIB Funds, plus the close connections between state and prominent investors, which is driving this market. Should the government continue to develop SIB funds then these key investors are likely to continue to invest. However, should the rate and value of SIB pay-outs decline then investor interest might also eventually wane.

There is evidence this is already happening in the United States where the initial interest by the big investment banks appears to be in decline. Although interest from retail banks is still present to a degree. This could be due to individuals choosing to invest in a social product via their bank, rather than SIBs presenting the type of investment opportunity that a derivative would. Given the discussions throughout this thesis it appears likely that the American government may continue to implement SIB contracts, however which types of investors would want to be involved is more difficult to predict.

In Australia the evidence indicates the government is keen to make SIBs a platform for pension investment, and have been willing to make adjustments to the SIB model to enable this. However, the consequence has been to dismantle the element of speculation, essentially removing the payments-by-results component. I would go as far to argue that unless they can make the SIB model work for the superannuation funds then SIBs might not continue in Australia.

France, who joined the group of advanced countries implementing SIBs significantly later, have a fast growing market which appears to be driven by not only state policy but also substantial interest from across the financial sector including banks, specialist fund managers, pension funds and insurance companies. It will be interesting to discover whether the level of activity by financial institutions remains high, or if it decreases as their market matures and earlier SIBs complete.

Portugal on the other hand has a noteworthy SIB market for different reasons. It has a reasonably high volume of SIBs implemented (grouped with Australia and the Netherlands) and is the third fastest growing market. This is in spite of minimal involvement by the financial sector. Its SIB market seems prominently driven by corporate social responsibility with large national corporations investing heavily. Whilst

this appears to be an arrangement that is working for Portugal, it could be argued that this could be due to the preferences of businesses for financial and social value do not require high returns for minimal risk (as per my model of the Marginal Rate of Substitution in Value for SIB Investors).

iii. SIBs: a brief introspection into their legacy

The empirical evidence presented through the case studies indicates that aligning the motivations of the state, the non-profit sector, and financial institutions is seemingly an impossible task. This raises the crucial question whether states should continue to implement SIBs in their current form.

Ultimately, I believe that were key stakeholders to undertake a purely technical and objective assessment of SIBs, without any underpinning ideological agenda, the conclusion could very well be that SIBs are a failed experiment and that an alternative must be sought. They are not an efficient utilisation of taxpayer's money, neither are they a particularly efficient financial instrument. This begs the question of why they have in the past, and continue to be in some cases, deployed as an overly complicated, expensive and inefficient public service delivery model, which appears to be of little benefit to anyone but private investors.

Ultimately SIBs have been an experiment, with both the state and financial services answerable for their design and inception. It could be argued that their adoption in some countries has been a misguided attempt at navigating the problem of financing payments-by-results contracts. Others were a deliberate attempt by the financial services industry to find a new product for the impact investing asset class.

Rather than blazing the trail as a new financial instrument, I believe the legacy of SIBs will be further highlighting the problem in funding payments-by-results contracts. Ironically, this is a well-known problem that was instrumental in the design of SIBs in the first place.

11.3 Avenues for Future Research

As this research has already highlighted, the way to deliver public service provision

through SIBs still remains a novel idea, only a decade old. As argued throughout, SIBs offer an exceptional analytical insight into the role of market-driven financial techniques in the realm of public social policy. As such, as a concept SIBs would benefit from a more robust examination, accompanied by a public debate. It is worthwhile to mention here that these are only broad-based inferences and to test their validity further empirical research would be necessary. Especially given the limited empirical evidence that has been made public to date and the nascent nature of the phenomenon.

SIBs exhibit considerable variety depending on the institutional and political characteristics of each country. So to better understand the motivation of SIBs, the reason for their proliferation and continued trajectory, the country specific financial, political, legal, and social environments in which the SIBs are situated needs to be explored in depth as well.

Because SIBs are almost entirely funded by public money the government has an accountability to the electorate to ensure transparency on how taxpayer money is spent. That is why this research calls for greater transparency for governments to publish data on SIBs to not only aid further empirical research but also to ensure transparency and efficiency in the use of tax funded resources, particularly where public funds are used to induce the private market. That will also allow independent evaluation and highlight any procedural inconsistencies or deficiencies, and allowing the chance to remedy those.

This analytical insight could be enhanced by further research from both angles, with both the state and the financial sector. Given the sensitive nature of SIB contracts, both would need a level of authority that would fall below an early career piece of research. The mandate for such would need to be more formal.

i. The role of the state

The wider motivations of the state for their involvement in SIB markets remains less clear. Whilst the motivation of the state in the development of SIBs with regards to social public policy has been discussed widely across the SIB literature, a more in-

depth exploration of the motivation of the state with regards to the development of SIBs within the financial sector would greatly benefit our understanding of the emergence and proliferation of SIBs across different countries. Furthering our understanding of the drivers behind the pressure for the expansion of SIB markets in many advanced countries.

ii. The role of the financial sector

The role of financial institutions in the SIB market, as is often their role in impact investment more generally, is opaque. Qualitative in-depth interviews with financial institutions to understand better their involvement has methodological merit, albeit commercial sensitivity is likely to be a constraining factor on what information could be exchanged. This could form the basis of a larger piece of work examining the profits of SIBs more generally. This particular avenue deserves more scholarly attention given the ultimate source of profit in a SIB is tax revenue.

11.4 Policy Recommendations

Whilst it should not be doubted that there are well intentioned individuals trying to find the best way to resolve some of society's most pressing problems, and assist the vulnerable into better situations, SIBs are not the most efficient mechanism to achieve those noble aims. Not only are they expensive, they are inefficient too, as the empirical evidence presented in this research has amply highlighted. What is required is not a problem of private underinvestment from which private returns can be deduced, but rather a solution to the funding gap that arises for the non-profit firms delivering welfare services on behalf of the state, due to the way that payment-by-results contracts operate.

To summarise, at the crux of a SIBs existence is the desire to contract on a pay-forsuccess basis which hedges the risk of low-quality outcomes being delivered and therefore paid for by the state. The problem with traditional outcomes-based contracting is that the non-profit firm that delivers the programme has to fund the programme costs out of its own money as outcomes are paid retrospectively. Thus a SIB provides the money to run the programme directly to the non-profit firm upfront. If this temporary funding paradigm can be resolved then surely SIBs are no longer required.

This policy recommendation removes the necessity for financial sector involvement, and is based on the service providers being non-profit firms. ⁹⁹ This is a loan fund, set up with granted money, which loans the upfront costs of running a programme to a non-profit firm, at 0 percent (or nominal) interest, with the seed money recycled through the loan fund to keep lending (minus any defaults). This means the non-profit firm borrows at 0 percent interest (or at a nominal rate), and starts to repay the loan as the outcomes payments are received from the state via their contract. Loan repayments can be scheduled to align with outcomes payments.

This means the state hedges the risk of low-quality outcomes, whilst the non-profit firm remains incentivised to deliver a high-quality programme, but does not have to bare the financial strain as a consequence of payments in arrears.

The grant makers effectively shoulder any defaults, and the loan fund can be topped up from time to time with additional grants to ensure the pot remains large enough to keep lending.

There will be an administrative cost to run the loan fund, but just cursory consideration suggests this would be significantly lower than the government currently spends on a SIB team. It is also possible that the cost of administering the loan fund could be paid from grants. To lower administration necessities and costs for the non-profit firm, the loan could be applied for using the same supporting documents that have been submitted to win the outcomes-based contract from the state. Therefore, there is no unnecessary administrative burden, and associated expenses, to the non-profit firm.

From my extensive professional experience in the non-profit sector and social investment in particular, I believe such a scheme could work. Given that non-profit

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⁹⁹ As discussed earlier, for-profit firms also deliver services under SIB contracts, although at its core SIBs were designed for non-profit firms to deliver social services on behalf of the state. A for-profit firm should not require the upfront finance that this policy recommendation is meant to provide.

institutions have been willing to take on the riskier end of investments, or make outright grants (which have not been discussed within the capital raised figures) there is clearly an interest from these institutions in providing grants or near-grants to support this type of work. Such a scheme for example could also have been funded by some of the money from the merlin banks which went into Big Society Capital.

The state needs to reassess how taxpayers money is spent on this type of social welfare provision. The above scheme keeps the hedging contract but removes the speculation. Resulting in the programmes still receiving upfront funding so they can be run, but without tax revenue transferring to financial institutions and others. Such a proposal would reduce the principal-agent problems associated with the transfer of risk arising from the complex process of setting, pricing and evaluating social outcomes. Also no longer requiring risk-return calculations to be made on vulnerable individuals.

The criticism with this suggestion of course, is that it does not require financial institutions. Therefore, it is not a conduit for the funds of capital accumulation and does not seek to help resolve its crisis. It brings the delivery of social services programmes firmly back into the control of the state and non-profit sector, which is where it should be.

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 D_BwE:G:s&s_kwcid=AL!410!3!495075887471!b!!g!!%2Bsustainable%20%2
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Appendix

The following table captures some of the data collected and analysed for this thesis. It includes the investment capital raised in local currency and its amount converted to GBP using PPP rates from the OECD. It also includes the investors from each SIB, grouped by category as researched and designated by myself using my SIB Investor Typology.

		4	nder		ne		ider	Inv me Cap Rais	nt ital				Investo	rs		
<u> </u>	State	Start Date	Outcomes Funder	Category	Project Name	Location	Service Provider	[ocal	dBP	Bank	Private Investment Fund	Pension & Insurance	Business	Non-Profit Investment Fund	Charity & Social Enterprise	Foundation
	T REPORT OF THE PROPERTY OF TH	Mar-10	Ministry of Justice Big Lottery Fund	Criminal Justice	ONE Service	Peterborough	The One Service (St. Giles Trust, Ormiston Children and Families Trust, SOVA, YMCA, Through the Gate Training CIC, Peterborou gh and Fenland Mind)	000'000' 2485	5,000,000							Barrow Cadbury Trust Esmée Fairbairn Foundation Friends Provident Foundation The Henry Smith Charity Johansson Family Foundation LankellyChase Foundation The Monument Trust Panaphur Charitable Trust Paul Hamlyn

												Foundation Tudor Trust
 GBR	Dec-11	Department for Communities and Local Government Greater London Authority	Housing & Street Impact	London	St. Mungo's Broadway	GBP 1,200,000	1,200,000			CAF Ventur esome	St. Mungo 's Broad way	Orp Foundation

4 3	R GBR	2 Jan-12	Departme Communiti Goveri Greater Lu	e Housing &	Thai	n London	Thames Reach	GBP 1,200,000	1,200,000	Duidage		Big Issue Invest	Thame s Reach	
	GBR	Apr-12	Department for Work and Pensions	Workforce	Links for Life	East London	Community Links	GBP 370,000	370,000	Bridges Fund Manag ement			Stratfo rd Develo pment Partne rships	
5	GBR	Apr-12	Department for Work and Pensions	Workforce	Think Forward	East London	Tomorrow's People	GBP 900,000	000'006			Big Societ Y Capital	·	Impetus-PEF
9	GBR	Apr-12	Department for Work and Pensions	Workforce	Triodos New	Greater Merseyside	Greater Merseyside Connexions Partnership	GBP 1,500,000	1,500,000	Bridges Fund Manag ement		Big Societ Y Capital		
7	GBR	Apr-12	Department for Work and Pensions	Workforce	Living Balance	Scotland	Perth YMCA	GBP 500,000	200,000		local business es		Aberfel dy Church of Scotlan d	

8	GBR	Apr-12	Department for Work and Pe	Workforce Development	Advance Programme (Innovation Fund	West Midlands	BEST Network 11 non- profit organizatio ns as part of the Birmingham Employmen t, Skills and Training Network (BEST Network)	GBP 3,000,000	3,000,000			Advance Personn el Manage ment (APM) UK Ltd			
6	USA	Aug-12	The City of New York Department of Corrections	Criminal Justice	NYC ABLE Project for	New York City	The Osborne Association & Friends of Island Academy	USD 9,600,000	6,735,686	Goldma n Sachs (Urban Investm ent Group)					
10	GBR	Nov-12	Department for Work and Pensions	Workforce	Capitalise	Cardiff & Newport	Dyslexia Action & Include	GBP 400,000	400,000				Big Societ Y Capital	3SC	

12 11	GBR GBR	.12 Nov-12	ork Department for ons Work and Pensions	ce Workforce	181	leyGreater Manchester	Teens and Toddlers Adviza	GBP 800,000	800,000		Bridges Fund Manag ement		CAF Ventur esome	Brackn	Barrow Cadbury Trus Esmée Fairbairn Foundation Impetus-PEF Barrow
		Nov-12	Department for Work and Pensions	Workforce	Energise Innovation	Thames Valley		GBP 900,000	000′006				Societ y Capital	ell Forest Homes	Cadbury TrustBerkshir Community FoundationEs mée Fairbair Foundation
13	GBR	Nov-12	Department for Work and Pensions	Workforce	Prevista (Innovation	West London	Catalyst Gateway, Fit for Sport, Twist, Positive Arts, Arrival Education	GBP 1,222,600	1,222,600			Prevista			
14	OIN	Mar-13	Rotterdam Municipality	Workforce	Buzinezzclub	Rotterdam	Buzinezzclu b	EUR 720,000	627,161	ABN AMRO (Social Impact Fund)					Start Foundation

16 15	USA GBR	Ap	salt Essex County Council († 1)	ars Child & Family Welfare	ool Essex Family Therapy	UT Essex	Action for Children	GBP 3,135,000	3,135,000	Goldma	Bridges Ventur es Ananda Social Ventur e Fund		Big Societ Y Capital Chariti es Aid Found ation		The King Baudouin Foundation Trust Barrow Cadbury Trust Esmée Fairbairn Foundation The J.B. and
		Jur	United Way of Salt Lake and Salt Lake County (cohort 1) State of Utah (cohorts 2 to 5)	Education & Early Years	Utah High Quality Preschool	Salt Lake County, UT	School District Park City School District Guadalupe School Lit'l Scholars Smart Kids and YMCA	USD 7,000,000	4,866,736	n Sachs					M.K. Pritzker Family Foundation
17	AUS	Jul-13	New South Wales Department of Family and Community Services	Child & Family Welfare	Benevolent Society	New South Wales	The Benevolent Society	AUD 10,000,000	4,804,346	Westpa c Instituti onal Bank Commo nwealt h Bank of Australi a	Australi an Ethical Investm ents	NRMA Motorin g & Services		Benev olent Society	Westpac Foundation

18	AUS	Aug-13	New South Wales Department of Family and Community Services	Child	Newpin NSW SBB New South Wales	UnitingCare Burnside	AUD 7,000,000	3,363,042			NG Super Christia n Super supera nnuatio n funds		Uniting Care Burnsi de The Benev olent Society	family foundations
19	DEU	Sep-13	Bavarian State Ministry of Labour and Social Affairs and Family and Integration	Workforce Development	Eleven Augsburg - Youth with	Multiple service providers	EUR 300,000	269,203						BHF-BANK FoundationBo nVentureBM W Foundation Herbert QuandtEberha rd von Kuenheim Foundation (BMW AG)
20	GBR	Sep-13	11 Local Authorities Cabinet Office Social Outcomes Fund		It's All About Me	Consortium of Voluntary Adoption Agencies	GBP 2,000,000	2,000,000		Bridges Fund Manag ement		Big Societ Y Capital		
21	USA	Oct-13	State of New York US Department of Labor	Criminal Justice	Increasing New York City and	Center for Employmen t Opportuniti es	USD 13,500,000	9,385,848	Bank of Americ a Merrill Lynch					The Robin Hood Foundation

23 22	USA BEL	Jan-14 Jan-14		wealth Employment usetts Agency		ustice Workforce	ustice Duo For A Job	usetts Brussels	Duo for Job Roca	· a	0,000 EUR 234,000	28 204,240	Goldma n Sachs	Kois Invest		Living Cities		Degroof Petercam Foundation The Kresge Foundation
		,	(Commonwealth of Massachusetts		Criminal Justice	Juvenile Justice	Massachusetts			USD 12,000,000	8,381,328	(Social Impact Fund)					
24	GBR	Feb-14	Manchester City	Council Cabinet Office Social Outcomes	Fund	Child & Family	Manchester CC	Manchester	Action Children	for	GBP 1,200,000	1,200,000		Bridges Fund Manag ement				
25	CAN	May-14	Province of	Saskatchewan Ministry of Social Services		Child & Family	Sweet Dreams	Saskatoon	EGADZ		CAD 1,000,000	567,675					Conex us Credit Union	

26	GBR	Aug-14	Birmingham City CouncilBig Lottery Fund Commissioning Better Outcomes FundCabinet Office Social Outcomes Fund	Child & Family Welfare Outcomes For Children	Birmingham	Core Assets	GBP 1,000,000	1,000,000	Bridges Fund Manag ement		
27	PRT	Sep-14	Municipality of Lisbon	Education & Junior Code	Lisbon	Lisbon primary schools	EUR 94,000	113,417			Calouste Gulbenkian Foundation
28	USA	Oct-14	Cuyahoga County Ohio	Child & Family Welfare Partnering for Family	Cuyahoga County, Ohio	FrontLine Service	USD 3,850,000	2,689,009		The Reinve stmen t Fund Nonpr ofit Financ e Fund	The George Gund Foundation The Cleveland Foundation Sisters of Charity Foundation of Cleveland

96	NSA	Dec-14	The Commonwealth of Massachusetts	Housing & Homelessness	Chronic Individua	Massachusetts	MHSA	USD 2,500,000	1,746,110	Santan der Bank N.A				The Corpor ation of Suppor tive Housin g (CSH) United Way of Massac husetts Bay and Merri mack	
08	GBR	Jan-15	Department for Communities and Local Government Cabinet Office Social Outcomes Fund	Housing & Homelessness	Rewriting Futures (Fair	Birmingham	St. Basil's	GBP 1,030,000	1,030,000		Bridges Fund Manag ement		Big Issue Invest CAF Ventur esome The Key Fund	Valley	Barrow Cadbury Trust
31	GBR	Jan-15	Department for Communities and Local Government Cabinet Office Social Outcomes Fund	Housing &	Aspire	Gloucestershire	P3 and CCP	GBP 310,000	310,000				CAF Ventur esome	P3 CCP	

78	55	37
GBR	5	5
Jan-15	Jar	Jar
Department for Communities and Local Government Cabinet Office Social Outcomes Fund	Department for Commi and Local Goveri Cabinet Office Outcome	Departme Communiti GovernmentC Office Outcome
Housing & Homelessness	Housing & Homelessness	Housing &
Your Chance (Fair Chance Fund)	Γοι	Ambition East
Manchester, Oldham, Rochdale, and Greenwich	Liverpool	Leicestershire
Depaul UK	Local Solutions	YMCA Derbyshire and P3
GBP 620,000	GBP 550,000	GBP 600,000
620,000	550,000	600,000
Bridges Fund Manag ement (Bridge s Social Impact Bond Fund & Bridges Social Entrepr eneurs Fund)		
Big Issue Invest	Big Issue Invest Big Societ Y Capital The Key Fund	Big Issue Invest The Key Fund
		YMCA Derbys hire P3 The Y (Leices ter)
Montpelier Foundation		

36 35	GBR GBR	15 Jan-15		Communit	nt Gabinet Office Social		& Housing &	Home G	re Northumberland, South	Home Group Fusion	GBP 498,000	498,000	Northst ar Ventur es Bridges		The	Home Group	
		Jan-15	Department for	Communities and	Local Government Cahinet Office Social		Housing &	Fusion Ho	West Yorkshire	Housing	GBP 840,000	840,000	Fund Manag ement		Key Fund		
37	GBR	Feb-15	Big Lottery Commissioning Better	Outcomes FundCabinet Office Social	Outcomes FundNewcastle West Clinical Commissioning Groun		Health	Ways To Wellness (Commissioning	Newcastle	Ways Wellness	GBP 1,650,000	1,650,000	Bridges Fund Manag ement				

38	GBR		Cabinet Office	Wo	Ministry of Justice	Workforce	Teens And Toddlers	Greater Merseyside Greater Manchester	Teens and Toddlers	GBP 500,000	500,000	Bridges Fund Manag ement			Esmée Fairbairn Impetus-PEF
39	GBR	Apr-15	Cabinet Office	Work and Pensions	Ministry of Justice Wirral Council	Workforce	Unlocking Potential		Career Connect	GBP 1,125,000	1,125,000	Bridges Fund Manag ement			
40	GBR	Apr-15	Cabinet Office	Work and	Pensions Ministry of Justice	Workforce	Prevista London	London	Prevista Ltd	GBP 1,222,600	1,222,600				
41	GBR		Cabinet Office		Pensions Pensions Ministry of Justice	Workforce	Futureshapers	Sheffield	Futureshap ers Sheffield	GBP 1,125,000	1,125,000			The Key Fund	
42	NLD	Apr-15	Municipality of	Gemeente	Utrecht)	Workforce	Colour Kitchen	Utrecht	The Colour Kitchen	EUR 734,000	627,588				Rabobank Foundation Start Foundation

45	44	43
USA	NZI	GBR
Jun-15	May-15	May-15
County of Santa Clara	NZ Gove Oranga T	Cabinet Office Social Outcomes FundRedditch & Bromsgrove CCGSouth Worcestershire CCGWorcestershire County CouncilWyre Forest CCG
Housing &	Criminal Justice	Health
Welcome Home	Auckland South Cor	Reconnections Worcestershire
Santa Clara County, CA	Auckland	Worcestershire
Adobe Services	G-Ops Limited (owned by Genesis Youth Trust	Age UK
USD 3,500,000	NZD 6,000,000	GBP 850,000
2,423,929	2,811,412	850,000
	Bank of New Zealand Australi a and New Zealand Banking Group Ltd Westpa c Bank	
	InfraRe d Capital Partner s Limited	
	The Acciden t Compe nsation Corpor ation	
The Reinve stmen t Fund		Nesta Impact Invest ments
Corpor ation for Suppor tive Housin		Age UK
The Sobrato Family Foundation The California Endowment		Care and Wellbeing Fund (Big Society Capital & Macmillan Cancer Support)

46	CHE	Jul-15	Department of Health and Welfare	Workforce Fokus Bern Bern	Caritas Bern	CHF 2,700,000	1,513,114	national corporat ions (Social Impact Bond AG)	national philanthropic funders (Social Impact Bond AG)
47	AUT	Sep-15	Federal Ministry of Labour & Social Affairs & Consumer Protection	Workforce Development Upper Austria SIB Upper Austria	Gewaltschu tzzentrum Upper Austria Frauenhaus Linz	EUR 800,000	693,580		ERSTE Foundation HIL Foundation Scheuch Family Private Foundation Schweighofer Private Foundation Juvat gemeinnützig e GmbH
48	NLD	Sep-15	Municipality of Rotterdam	Workforce Workplace	Workplace Rotterdam South (WRZ)	EUR 3,000,000	2,565,073		Fonds DBL

49	FIN	Nov-15	Public sector employers:	Magistrate	Savo Consortium for Education Municipality of Nurmijavi Aleksia	Workforce Development	Finland Occupational	Helsinki	Aino Health Manageme nt Tietiotaito Group Trainers' House Headsted	EUR 700,000	534,053					Me-säätiö We Foundation
50	NLD	Nov-15	Municipality of	Utrecht)		Workforce	Utrecht Buzinezz	Utrecht	Buzinezzclu b	EUR 2,100,000	1,795,551	ABN AMRO (Social Impact Fund)				Oranje Fonds
51	GBR	Jan-16	Lambeth Council		Better Outcomes Fund	Education & Early	HCT Travel	Lambeth	HCT Group	GBP 420,000	420,000		Bridges Fund Manag ement			

53 52	A GBR	.6 Jan-16	Cabinet Office Social Out Haringey Council an Tower Hamlet Staffordshire County Coun	h	Wental Health and Employment	na Haringey, Staffordshire & Tower Hamlets	Partnership	GBP 400,000	400,000			Big Issue Invest	Groony	BlueCross
5	USA	Jan-16	Government of South Carolina	Health	South Carolina Nurse-Family	South Carolina	Nurse- Family Partnership	USD 17,490,000	12,043,666				Greenv ille County SC First Steps	BlueShield of South Carolina FoundationTh e Boeing FoundationTh e Duke EndowmentLa ura and John Arnold Foundation
54	USA	Jan-16	Connecticut Department of Children and Families	Child & Family Welfare	Connecticut Family Stability	Connecticut	Family- Based Recovery	USD 11,200,000	7,712,354	BNP Paribas	QBE Insuran ce Group Limited	Reinve stmen t Fund Nonpr ofit Financ e Fund		Doris Duke Charitable Foundation Laura and John Arnold Foundation Two unknown family foundations

55	USA		State of Michigan	Health	Strong Beginnings	Grand Rapids, Michigan	Spectrum Health Arbor Circle Cherry Health Grand Rapids Kent County Health Department	USD 8,500,000	5,853,126				Spectr um Health	W.K. Kellogg Foundation Michigan Health Endowment Fund
99	USA		City and County of Denver	Housing & Homelessness	Housing To Health	Denver	Colorado Coalition for the Homeless	USD 8,650,000	5,946,087	Norther n Trust		Living Cities Nonpr ofit Financ e Fund		Walton Family Foundation The Colorado Health Foundation The Denver Foundation Laura and John Arnold Foundation Piton Foundation
57	DIN	Jun-16	Ministry of Security and Justice	Criminal Justice	Work After Prison	Netherlands	Work-Wise Direct Consortium	EUR 1,200,000	1,038,815	ABN AMRO (Social Impact Fund)				Oranje Fords The Start Foundation

58	NLD	Jun-1 <u>6</u>	Municipality of Eindhoven	Workforce	Buzinezzclub	Buzinezzclu b	EUR 1,700,000	1,471,655	ABN AMRO (Social Impact Fund)			Buzine zzclub	Start Foundation
59	AUS	Jul-16	New South Wales Department of Corrective Services	Criminal Justice	OnTRACC New South Wales	arbias and ACSO	AUD 7,275,000	3,454,516	Nationa I Australi a Bank			Austral ian Comm unity Suppor t Organi sation	
09	SWE	Jul-16	Municipality of Norrköping	Education & Early	Norrkoping SIB Norrköping	SKL Mission Mental Health and Health Navigator	SEK 10,000,000	780,500		Leksell Social Ventur es			
61	KOR	Aug-16	Seoul Metropolitan Government	Education & Early Years	Education and care	Daekyo Consortium	KRW 1,110,000,000	890,010	UBS Seoul		Merry Year Social Compan Y	People and Peace Link	

62 CAN	Sep-16 Government of	Saskatchewan	Education & Early School	Saskatchewan	Mother Teresa Middle School	CAD 1,000,000	570,487							The Mosaic Company Foundation	
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69	GBR	Sep-16 London Borough of Hammersmith and Fulham SchoolsPrivate philanthropyCommissioning Better Outcomes Fund (BLF)	Education & Early Years	Collective Impact Bond (Commissioning Better Outcomes Fund)	West London Zone	West London Zone(Londo n Sports TrustThe Clement James CentrePlayf ul Foundation sTomorrow' s People Trust LimitedAlbe rt & Friends Instant CircusActio n TutoringBea nstalkReal ActionFun PactMove LDNTherapy & Nurture Connection Real ActionTeam	GBP 700,000	200,000	Bridges Fund Manag ement			Stepping Stones Fund (City Bridge Trust and UBS)
		London Borough of Hamme		0		LDNTherapy & Nurture Connection						

Westminste	
rPlace2Be)	

64	NLD	Sep-16	Municipality of Enschede	Workforce	Working in	Enschede	BOAS Werkt	EUR 1,100,000	952,247	ABN- AMRO (Social Impact Fund)				BOAS Werkt	Start Foundation
9	VSU	Sep-16	Commonwealth of Massachusetts	Workforce Development	Pathways to Economic Advancement	Massachusetts	Jewish Vocational Service	USD 12,430,000	8,559,335		Mayco mb Capital (Comm unity Outcom es Fund)	Pruden tial Financi al Inc.	Impact Assets Living Cities	The Boston Impact Initiati ve	Combined Jewish Philanthropies ' (Donor Advised Funds)The Barbara Bush Foundation for Family LiteracyThe Boston FoundationTh e Inherent FoundationTh e Kresge FoundationTh e Shapiro FoundationTh e Sorenson Impact Foundation

99 29	'O	00	Public Health Agency of (Workforce		olumbia, loronto & Vancouver Ontario,	Heart and Stroke Foundation Canadian colleges	.50 CAD 2,900,000	1,654,411	Royal Bank of Canada (RBC Genera tor)	TELUS Ventur es	QBE Insuran ce Group		Conex	Max Bell Foundation Mindset Social Innovation Foundation The Catherine Donnelly Foundation The J.W. McConnell Family Foundation The Catherine Donnelly
		0	Government of Canada: Employment and Social Development Canada	Wor		British C		CAD 250,250	142,764					Credit Union	Foundation
89	USA	Nov-16		Criminal Justice	Illinois Dually-Involved Youth	Illinois	Conscience Community Network, LLC (One Hope United, Maryville Academic, OMNI Youth Services, SGA Youth and Family Services, UCAN, and	USD 16,400,000	11,293,089						

								Youth Outreach Services)							
69	FRA	Nov-16	The Ministry of	Economy and Finance	Workforce	ADIE	Ariège, Allier, Saone-et-Loire,	L'Associatio n pour le Droit à l'Initiative Economiqu e (ADIE)	EUR 1,200,000	1,059,329	BNP Paribas		AG2R La Mondia le		Renault Mobiliz Invest Fondation Avril
70	FRA	Nov-16	The Ministry of	Economy and Finance	Workforce	IMPACT Académie	Quartiers prioritaires de la Politique de la	IMPACT Académie	EUR 1,000,000	882,775		Impact Partena ires			

72 71	A USA	.6 Dec-16	ty Salt Lake County		ails REACH Initiative	First Step House	USD 4,600,000	3,167,574	Norther n Trust Ally Bank		QBE Insuran ce	Living Cities	Sorenson Impact Foundation Sorenson Family Foundation Sorenson
	YSN	Dec-16	Salt Lake County		Homes Not J: Salt Lake County,	Home	USD 4,400,000	3,029,853	n Trust Ally Bank		Insuran ce	stmen t Fund	Impact Foundation Sorenson Family Foundation
73	GBR	Jan-17	The National Lottery Community FundSurrey County Council	Education & Early	HCT Independent	HCT Group	GBP 615,000	615,000		Bridges Fund Manag ement			
74	NLD	Jan-17	Municipality of The Hague	Child & Family	Sociaal Hospitaal	Sociaal Hospitaal	EUR 1,333,778	1,167,430			CZ		

75 75	GBR NZL	Feb-17 Feb-17	Lottery New Zealand g Better Ministry of Social es Fund Development merset Council	amily Health	Mental hea	erset Auckland	APM Workcare	0 NZD 1,500,000	717,632	Prospec t Investm ent Manag ement Limited Bridges Fund		APM Workcar e Janssen	Wilberforce Foundation
		Fe	Government of South Australia Commissioning Better Outcomes Fund North Somerset	Child & Family	Turning the Tide	North Somerset		GBP 1,222,600	1,222,600	Manag ement			
77	AUS	Mar-17	Government of South Australia	Housing &	Aspire Social	Adelaide	Common Ground Adelaide Hutt St Centre	AUD 9,000,000	4,170,009		HESTA Future Super NGS Super		Coopers Brewery Foundation
78	USA	Apr-17	State of Oklahoma	Criminal Justice	Women in	Oklahoma	Women in Recovery	000'000'6	6,161,409				George Kaise Family Foundation

81	80	79
GBR	JPN	AUS
Jun-17	May-17	Apr-17
The National Lottery Community Fund	Hachioji City	The Government of NSW acting through
NHS North East Lincolnshire Clinical Commissioning Group		Administration Corporation (HAC)
Health	Health	Health
Community Owned	Colon cancer	Resolve SBB
Yorkshire and Humber	Hachioji City	New South Wales
Centre4	Cancer Scan Co	Flourish Australia
GBP 1,222,600	JPY 8,874,000	AUD 7,000,000
1,222,600	57,802	3,243,340
	Mizuho Bank	
Bridges Fund Manag ement		
		NGS Super Grosve nor Pirie Super
	Digisear ch and Advertisi ng Inc	
	Social Impact Investment Foundation (SIIF)	foundations

82	GBR	Jun-17		Council, Northamptonshire Healthcare NHS Foundation Trust and the University of Northampton)	Housing & Homelessness	Be the	Northamptonshire	Mayday Trust	GBP 100,000	100,000	Bridges Fund Manag ement				
83	USA	Jun-17	Los Angeles County U.S. Department of Housing & Urban	Development California Board of State and Community Corrections	Criminal Justice	Los Angeles County "Just-in-Reach"	Los Angeles, CA	Amity Foundation The People Concern (formerly LAMP) SSG-HOPICS (Project 180) Volunteers of America Los Angeles and Brilliant Corners	USD 10,000,000	6,846,010			UnitedH ealthcar e		The Conrad N. Hilton Foundation
84	AUS	Jun-17	Queensland Government		Housing &	YouthCONNECT	Queensland	Churches of Christ in Queensland	AUD 5,000,000	2,316,672		QBE Insuran ce Group			

88	88	87	86	85
PRT	PRT	PRT	GBR	AUS
Jul-17	Jul-17	Jul-17	Jul-17	Jul-17
•	•	· -	Norfolk County Council (Local government) The National Lottery Community Fund	Government of Queensland
Workforce	Workforce	Child & Family	Education & Early	Child & Family
Youth	Youth	Children on the	HCT Independent	Newpin
Porto	Fundao	Porto	Norfolk	Queensland
			HCT Group	UnitingCare Queensland
443,132	EUR 723,500	EUR 433,276	GBP 1,000,000	AUD 7,000,000
526,967	860,377	515,246	1,000,000	3,243,340
Deloitte		Montep io Bank		
			Bridges Fund Manag ement	
				NGS Super HESTA
	Consorti um of Fundao business es			
Calouste Gulbenkian Foundation	Calouste Gulbenkian Foundation	Calouste Gulbenkian Foundation		foundations

06	NAC	Jul-17	Municipal government	Health	Chronic kidney	Kobe	Private- sector firm	JPY 26,200,000	170,659	Sumito mo Mitsui Financi al Group				Social Impact Investment Foundation (SIIF)
91	DEU	Sep-17	Landkreis Osnabrück	Child & Family	Prevention in	Osnabrück	Lega S Jugendhilfe	EUR 300,000	275,759					Kreissparkasse Bersenbrück
92	DEU	Sep-17	Stadt Mannheim (Public Authority)	Education & Early Years	The Integrative Campus Pestalozzi School	Mannheim	Pestalozzi SchoolFairc hance Foundation Therapy Centre for Dyscalculia (Zentrum zur Therapie der Rechensch wäche)Teac h First Germany gGmbH and KinderHeld en gGmbH (a mentoring	EUR 300,000	275,759			BASF SE		

		programme)	
GBR GBR	Ministry of Housing, Communities & Local Government (Central government) Lincolnshire County Council (Local government) City of Lincoln Council (Local government) East Lindsey District Council (Local Housing & Homelessness Rough Sleeping SIB Fund	P3 (People Potential Possibilities with charity number: 703163), Addaction (charity number: 1001957)	

94	GBR	Sep-17	Brent Council	Housing &	Single hon	London, Brent	Crisis Thames Reach	GBP 1,400,000	1,400,000	Bridges Fund Manag ement			
95	USA	Sep-17	Alameda County	Criminal Inctice	Alameda County	Alameda County, CA	La Familia	USD 7,817,999	5,352,210				The James Irvine Foundation
96	AUS	Oct-17	Queensland Government	Criminal Instine	Youth Choices	Queensland	Life Without Barriers	AUD 8,200,000	3,799,341		supera nnuatio n funds		private foundations
16	GBR	Oct-17	Ministry of Housing	S BEISING	Rough	Bristol	St Mungos (lead) Second Step and Bristol Drug Project	GBP 273,000	273,000	Resona nce (SITR)		CAF Ventur esome	

98	0ct-17	Ministry of Housing DCLG	Housing & Rough	Gloucestershire	People, Potential, Possibilities (P3)	GBP 1,222,600	1,222,600					
99	0ct-17	Greater London Authority (Local government) Ministry of Housing, Communities & Local Government (Central government)	Housing & Homelessness Entrenched Rough Sleepers	Pan-London	Thames Reach St Mungos	GBP 250,000	250,000			Big Issue Invest CAF Ventur esome		
100	No	Big Lotte	Criminal Justice Education & Early Ventura County Learning disabilities	Bradford	Affinity Trust	GBP 500,000	500,000	Social and Sustain able Capital (SASC)				
101 USA	Nov-17	Ventura County and California Board of State and Community Corrections	Criminal Justice Ventura County	Ventura County, CA	Interface Children and Family Services	USD 2,290,000	1,567,736			Nonpr ofit Financ e Fund Reinve stmen t Fund	The Whitne y Museu m of Americ an Art	

102	AUS	Dec-17	Government of	Victoria Sacred Heart Mission		Housing &	Journey to social	Victoria	Sacred Heart Mission	AUD 7,275,000	3,370,757					
103	GBR	Dec-17	London Borough of Lewisham	London Borough of Southwark: London Borough of Lambeth The National Lottery	Community Fund	Health	HIV prevention and	London boroughs of Lambeth, Southwark and Lewisham	Voluntary and Community Sector Organisatio ns	GBP 1,000,000	1,000,000	impact investin g funds?			Elton AIDS Foundati (EJAF) other foundation	
104	GBR	Dec-17		Communities and Local Government		Housing &	Rough	Manchesterl	One Manchester Trafford Housing Trust Shelter Great Places The Brick	GBP 1,800,000	1,800,000	Bridges Fund Manag ement		One Manch ester Traffor d Housin g Trust		

106	105
GBR	GBR
Jan-18	Dec-17
Department for Education	Ministry of Housing, Communities &
9	Local Government (Central
London borougn or Lewisham	government) Newcastle City Council (Local
London Borough of Bromley	government) Gateshead Council (Local government)
Royal Borough of	
Child & Family Welfare	Holising & Homelessness
I-Aspire (Care Leavers SIB)	Rough Sleeping SIB Fund
Lewisham, London	Newcastle and Gateshead
Depaul UK	Changing Lives Oasis Aquila Housing
GBP 1,222,600	GBP 400,000
1,222,600	400,000
	Big Issue Invest

108 10	GBR GBR	Jan-18 Jan-18	Hamlets London Borough of Bexley (Local Beyley)	New	goveri	Velfare Child & Family Welfare	of care Positive Families Partnership	Go Lab London	Family Psychology Mutual Family Action UK South West London and St George's Mental Health NHS Trust Positive Family	GBP 4,500,000	4,500,000	Bridges Fund Manag ement Bridges Fund			
			Tower H	Merton Newham and Sutton Councils	Commissioning Better Outcomes Fund	Child & Family Welfare	Children on the edge of care	London - missing from Go Lab	Partnership	GBP 4,500,000	4,500,000	Manag ement			
109	NLD	Jan-18	Municipality of			Workforce	Positive Health /	Venlo	Rendiz	EUR 450,000	398,420				Rabobank Foundation

110	Jar	Portugal Inovacao Social (Portugal Social Innovation)	Education & Early Sapie (Alentejo)	Alentejo	Associacao Tempos Brilhantes	EUR 220,967	266,028	EDUCOA CH S.A Fundaca o Portugal Telecom
111	Jar	Portugal Inovacao Social (Portugal Social Innovation)	Education & Early Sapie (Centro)	Central Portugal	Associacao Tempos Brilhantes	EUR 220,967	266,028	EDUCOA CH S.A Fundaca o Portugal Telecom
112	Jan-18	Portugal Inovacao Social (Portugal Social Innovation)	Education & Earlγ Sapie (Norte)	North Portugal	Associacao Tempos Brilhantes	EUR 272,525	328,099	EDUCOA CH S.A Fundaca o Portugal Telecom
	FRI Feb-18	Portugal Inovacao Social (Portugal Social Innovation)	Education & Early Aprender e	Central Portugal	EDUCOM (Associacao Portuguesa de Telematica Educativa)	EUR 248,356	299,002	Fundaca o Portugal Telecom
114	FRI Feb-18	Portugal Inovacao Social (Portugal Social Innovation)	Education & Early Aprender e	North Portugal	EDUCOM (Associacao Portuguesa de Telematica Educativa)	EUR 279,713	336,753	Fundaca o Portugal Telecom

116	115
GBR	GBR
Mar-18	Mar-18
Ministry of Housing, Communities & Local Government (Central government)	Ealing London Borough Council on behalf of the West London
Brighton & Hove City Council (Local government)	Alliance Department for Digital, Culture,
Hastings Borough Council (Local government)	iviedia and sport (DCMS) (central government)
Eastbourne Borough Council (Local	
Housing & Homelessness	Health
Entrenched Rough Sleepers (Rough	Employment support for people
Brighton	London
St. Mungo's	WDP
GBP 155,000	GBP 590,000
155,000	290,000
Big Issue Invest	Big Issue Invest

119	118	117
GBR		GBR
Aug-18	Jui	Jun-18
North Somerset Council (Local		Cheshire West and Chester
government)	Council (Local	Council
Department for Education	National Lottery	Department for Digital,
Bristol City Council	Community Fund	Culture, Media and Sport (DCMS) (Central government)
South Gloucestershire Council		
Child & Family Welfare	Health	Child & Family Welfare
Reboot West (Care Leavers SIB)	Healthier	Fostering Better Outcomes
Bristol	Devon	Cheshire West and Chester
1625 Independen t People	Westbank Community Health and Care	Core Assets
GBP 1,222,600	GBP 1,047,000	GBP 1,090,000
1,222,600	1,047,000	1,090,000
Bridges Fund Manag ement	Bridges Fund Manag ement	Bridges Fund Manag ement

120	GBR	8 Aug-18	Staffordshire County Council (Local government)	ment for Digital, Media and Sport (DCMS) (Central (DCMS) (Central government) government)		k Intensive Family Support	ار Staffordshire	Addiction Dependenc y Solutions	GBP 470,000	470,000			Big Issue Invest	
121	GBR	Sep-18	DFN Charitable Foundation	Department for Digital, Culture, Media and Sport (DCMS) (Central government)	Workforce Development	DFN Move Forward (Think	London	Think Forward UK	GBP 1,222,600	1,222,600			Big Issue Invest	
122	BEL	Oct-18	Flemish Service for Employment	Training (VDAB)	Workforce	Youth	Antwerp	BeCode	EUR 1,000,000	897,322	Impact Capital			
123	GBR	Oct-18	Department for EducationSheffield		Child & Family	Project Apollo	Sheffield	Sheffield Futures	GBP 1,222,600	1,222,600				

124	GBR	Oct-18	Doncaster Metropolitan Borough Council (DMBC)		Department for Digital, Culture, Media and Sport	(DCMS) (Central government)	Education & Early Years	ě,	Doncaster	Big Picture Learning UK	GBP 450,000	450,000			Big Issue Invest		
125	USA	Oct-18	U.S. Department of Veterans Affairs	Commonwealth of	Massachusetts City of Boston	_	Workforce	Veterans CARE	SU	Tuscaloosa VA Medical Center	USD 5,100,000	3,507,341	BNP Paribas Norther n Trust Deutsc he Bank			The Found The Hood Found	Robir

126		5C	Hiroshima Pre	Tak Onc Fukı	Fuchu City Miyoshi City Shobara City		Health Colon cancer screening	Hiroshima	Cancer Scan	JPY 6,630,000	43,775	Hiroshi ma Bank Mizuho Bank				Social Impa Investment Foundation (SIIF)
127	GBR	Nov-18	Suffolk County Council	Department for Digital, Culture, Media	and Sport (DCMS) (Central government)	1: 0 F 1: 10	Children at Risk of	Suffolk	Family Psychology Mutual	GBP 3,160,000	3,160,000		Bridges Fund Manag ement			

Norther n Trust	7,200,000 USD 1,273,719 US	Denver Collaborativ e Partnership Center for Effective Interventio ns; local providers Family Psychology Mutual	Norfolk Colorado Denver County	E Child Project (Life Multi-Systemic Rapid Response		government) artment for Digital, e, Media and Sport entral government)	Council (Local State of Color ado	Jan-19 Dec-18	Jan-19 Dec-18	CouncilDepartment for Digital, Culture, Media and Sport (DCMS) (Central government) GBP 400,000 A00,000 A00,000
t er	Norther n Truss	7,200,000 USD 1,273,719 USD 894,270 200,000 875,954 615,002	Collaborativ e Partnership Center for Effective Interventio ns; local providers Family Psychology Mutual O00'007 In Truss Northe n Truss 000'007 A 200'519 Northe n Truss 000'007	Operation Center for Effective Intervention ns; local providers Psychology Mutual Norther n Trust Norther n Norther n Trust Norther n Nor	Multi-Systemic Colorado OSD	Criminal Justice Multi-Systemic Colorado USD 1,273,719 USD 2,554 Butter for bridge in the colorado USD 1,273,719 USD 2,954 USD 1,273,719 USD 2,954 USD 1,273,719 USD 2,954 USD 1,273,719 USD 2,954 USD 1,273,719 U	Digital, d Sport Melfare Criminal Justice Child Norfolk Life Multi-Systemic Rapid I Later Colorado Norfolk Later Criminal Justice Child Later Child Lat	Criminal Justice Child Multi-Systemic Rapid B Locado Denve Colorado Locado Denversión De	State of Colorado Criminal Justice Multi-Systemic Rapid B Colorado Colorado Colorado Derver Ettective Interventio us; broniders LOSD 1,273,719 USD 8 875,954 615	er Piton

132	NLD	Jan-19 Municipality of Veldhoven	Workforce Refugee	Social Impact Finance IamNL	EUR 1,000,000	866,084					Foundation Van den Santheuvel- Sobbe
133	FRA	Mar-19 The Ministry of Economy and Finance Ministry of Agriculture and Food Ministry for Ecological and Inclusive Transition Fonds B (philanthropic funds)	Education & Early Years Article 1 CIS	Hauts de France, Occitanie, France Vance V	EUR 870,000	810,397	BNP Paribas				
134	FRA	Mar-19 The Ministry of Economy and FinanceMinistry of Employment and Professional TrainingMinistry for Ecological and Inclusive Transition	Workforce Development La Cravate Solidaire CIS	Ile-de-France region Solidaire	EUR 400,000	372,596		INCO Investis sement	MAIF Investis sement social et solidair e Aviva Impact Investin g France		

135	FRA	Mar-19	The Ministry of Econo	General Directorate for Employment and Professional Training Ministry for Ecological and Inclusive Transition	Workforce Development	Wimoov CIS	Nine Regions	Wimoov	EUR 680,000	633,414	BNP Paribas	Ecofi Investis sement s			
136	AUS	Apr-19	Government of New South Wales		Workforce Development	Sticking Together (missing from Go	New South Wales	SYC Ltd	AUD 5,000,000	2,320,309		Ethinve st Koda Capital Light Warrior Ventur es (impact investm ent fund)	NGS Super		Wyatt Trust
137	GBR	Apr-19	Plymouth City Council	Department for Digital, Culture, Media and Sport (DCMS) (Central government)	Child & Family Welfare	Reducing the	Plymouth	Trevi House Ltd Pause Creating Space for Change	GBP 1,100,000	1,100,000		Bridges Fund Manag ement			

138	May-19	Royal Borough of Kensington and Chelsea and Westminster (Local government)Department for Digital, Culture, Media and Sport (DCMS) (Central government)	Child & Family Welfare Mind the gap: Ensuring all children	Kensington and Chelsea	Family Lives	GBP 170,000	170,000			CAF Ventur esome	
139	May-19	Haringey Clinical Commissioning Group Department for Digital, Culture, Media and Sport (DCMS) (Central government)	Workforce Development Mental Health and	Haringey and Barnet	Mental Health and Employmen t Partnership (MHEP), Twining	GBP 220,000	220,000			Big Issue Invest	
140	May-19		Education & Early Beit Yatziv	Rahat	Beit Yatziv	ILS 14,800,000	2,600,263	Mizrahi Tefahot Bank			Rashi Foundation

142	141
BEL	GBR
Mar-20	Aug-19
Opgroeien	Nottingham City Council
	Nottinghamshire County Council
	Department for Digital, Culture, Media and Sport (DCMS) (Central government)
Housing &	Workforce Development
Back on Track	FutureU (Futures Advice) (Life
East Flanders and West Flanders	Nottinghamshire
Oranjehuis	Futures Advice, Skills and Employmen t Ltd
EUR 1,700,000	GBP 530,000
1,571,143	530,000
BNP Paribas BNP Paribas Fortis	
	Social and Sustain able Capital
Boss Paints	
	s A S a E
	Advice Skills and Employ ment
BESIX Foundation	