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KÖTVÉNYEKNEK AZ EGÉSZSÉGFEJLESZTÉS ÉS A
BETEGSÉGMEGELŐZÉS TERÜLETÉN?**

**WHAT ARE THE BENEFITS AND LIMITS OF OUTCOME-BASED
FINANCING AND SOCIAL IMPACT BONDS IN THE FIELD OF
HEALTH PROMOTION AND DISEASE PREVENTION?**

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1. Introduction

The COVID-19 pandemic has not only been a global health emergency but also a reminder of the ongoing challenges posed by chronic diseases. As detailed by Hacker et al. (2021), the worsened outcomes of COVID-19 among individuals with chronic conditions such as obesity and diabetes underscore the urgent need for resilient healthcare systems that can effectively manage such diseases (Hacker et al., 2021). Furthermore, the pandemic has emphasized the importance of prevention programs and highlighted socioeconomic disparities, advocating for a holistic approach to health equity and disease prevention (CDC, 2021). From another direction, but World Bank (2022) came to the similar conclusion. According to the World Bank (2022) healthcare systems in the post-Covid era, confront the challenge of pandemic preparedness. The pandemic unveiled global healthcare vulnerabilities, emphasizing the imperative of robust healthcare governance as the cornerstone for resilience (World Bank, 2022). Resilience, extending beyond the health sector, necessitates cross-sectoral collaborations involving civil society and private entities (World Bank, 2022). Prioritizing investments in fortifying upstream interventions, health promotion, and disease prevention emerges as a crucial strategy (World Bank, 2022).

While advancements in medical care and preventive measures have been notable according to some, disparities in health persist and may even escalate, particularly concerning chronic conditions such as obesity, cardiovascular disease, and cancer (Ogden et al., 2014 and Petrelli et al., 2009 cited by Thornton et al., 2016). It has been shown by scholars that economically disadvantaged racial and ethnic minorities, as well as populations characterized by low socioeconomic status across all racial groups, consistently encounter significant health disparities (Thornton et al., 2016; Jack, 2021). An increasing acknowledgment underscores the influential role of factors such as housing, education, labour, faith, and engagement in recreational activities in shaping health outcomes and exacerbating these disparities. Addressing health disparities requires a sustained and comprehensive strategy involving long-term investments. This effort requires enduring commitments to fostering cultural change, maintaining community initiatives, and promoting healthy lifestyle choices as the default option. (Thornton et al., 2016)

Moreover the contemporary healthcare systems of OECD countries face a versatile burden shaped by other various factors and megatrends, including demographic shifts and the prevalence of non-communicable diseases (NCDs) (Barış et al., 2021). Unlike their

counterparts in the developing world, high-income countries face ageing population, leading to a notable decline in the ratio of working-age individuals, thereby intensifying pressures on healthcare systems (Bariş et al., 2021). Emphasizing the importance of health promotion and disease prevention within public healthcare, Barış et al. (2021) argue that these strategies offer an effective approach to mitigate long-term treatment costs and ensure the sustainability of healthcare systems (p. 29). Furthermore, the burden of NCDs is on the rise in developed nations, with a significant increase in NCD-related mortality worldwide from 2007 to 2017, accounting for a substantial proportion of global deaths (IHME, 2017, as cited in Barış et al., 2021, p. 31). Specifically, in 2017, NCDs contributed to 73.4% of all deaths, in contrast to 18.6% attributed to communicable diseases and maternal, neonatal, and nutritional causes, and 8% due to injuries (Barış et al., 2021, p. 31). These trends underscore the imperative for healthcare systems to address the evolving landscape of health challenges, prioritizing proactive measures to mitigate the impact of demographic shifts and the rising prevalence of NCDs.

In response to global trends, the European Commission introduced the Healthier Together initiative in 2022 to combat major NCDs within the EU (OECD, 2022). Effectively addressing NCD-related conditions necessitates a dual approach encompassing enhanced prevention efforts and improved disease management strategies. However, historical under-investment in prevention has been evident, as illustrated by OECD data indicating that, on average, only approximately 3% of health spending in EU and OECD countries was allocated to prevention activities prior to the pandemic (OECD, 2022, p. 4). This underscores the imperative for increased focus and investment in preventive measures to effectively address the growing burden of NCDs within healthcare systems.

On the contrary, in 2020, the European Union member states average predominantly allocated its healthcare budget to curative and rehabilitative care, with retail medical goods and health-related long-term care following suit in expenditure prioritization, thereby reflecting the prevailing emphasis on remedial healthcare within the healthcare subsystem hierarchy (OECD, 2022, 134.p.). A small fraction went towards prevention, public health, and healthcare system administration. Despite a temporary surge in preventive spending during the COVID-19 crisis, it remains modest, constituting only about 3% of total health expenditure across the EU (OECD, 2022, p. 136). This allocation, although varying among member states, is generally perceived as insufficient (OECD, 2022). In the European Union, over 80% of healthcare spending comes from public sources, posing concerns about ongoing budgetary challenges (OECD, 2022, p. 210). The public budgetary challenges highlighted by Adrian et al. (2024) also claim that higher

long-term real interest rates have increased the cost of servicing public debt, placing considerable fiscal pressure on governments and posing risks to financial stability. This is further exacerbated by slow medium-term economic growth predictions (Adrian et al., 2024). Adrian et al. (2024) posit that there is an immediate need for fiscal measures to reduce global debt levels. Adrian et al. (2024) argue that these measures should be implemented gradually, as the combination of high debt, higher interest rates and lower growth creates a precarious situation that requires careful policy management. The existing financial difficulties mentioned above are compounded by ageing populations and declining working-age demographics strain healthcare finances, while technological advancements further influence expenditure trends (OECD, 2022).

Tackling the budgetary challenges, the government must navigate well within the fiscal space which is defined as the government's ability to allocate additional budgetary resources while maintaining the sustainability of its financial position (Heller, 2006 cited by Gheorghe, 2016, p. 2). Advocating for the creation of fiscal space, particularly for health investments, Gheorghe et al. (2016) contends that expenditure in this sector yields productive assets, contributing to long-term economic stability and productivity enhancement. Gheorghe et al. (2016, p.2.) emphasizes four avenues for increasing fiscal space: domestic revenue mobilization, external grants for health, efficiency improvements within the health sector, and borrowing. Furthermore, within scholarly discourse, there is a prevailing recommendation suggesting that governmental entities striving for universal health coverage and beyond can effectively pursue their objective by either expanding fiscal space or exploring alternative financing solutions.

Wang and Wang (2021) posit that prevention, supported by government funding, plays a crucial role in ensuring sustainable economic growth and managing escalating healthcare costs resulting from various factors, such as an ageing population. They advocate for a specific percentage allocation of prevention costs from total healthcare spending to achieve these objectives. The authors contend that demographic shifts will drive increased demand for prevention, and an optimal rate of preventative healthcare will effectively mitigate illness prevalence and enhance population productivity. Based on their analysis of OECD countries' data, they recommend an optimal share of prevention health expenditure to GDP at 1.175% when the illness prevalence rate stands at 6.13%; deviations from this percentage are associated with higher illness prevalence rates (Wang & Wang, 2021, p. 1). Additionally, they contend that with the appropriate allocation of medical resources, the economic growth rate can offset increases in healthcare spending for the elderly and expenses required for overall population

health improvement.

Bariş et al. (2021) advocate for the utilization of general government revenue as the primary financing source for public healthcare, promoting equitable access and financial security. They stress the importance of prioritizing high-impact health services within budget limitations to ensure comprehensive coverage across the population. Additionally, they emphasize the establishment of an accountability framework linking resources to outcomes and emphasize the need for transparent practices in public health financing endeavours. (Bariş et al., 2021)

Other scholars and policymakers also acknowledge the significance of allocating resources to primary health care and have introduced novel approaches to its delivery. These approaches involve awarding and incentivizing healthcare providers through "value-based" payment models, aimed at fostering innovation and ensuring the provision of high-quality care while simultaneously reducing costs, incentivizing quality, and enhancing accountability (World Bank Group, 2021). However, while the authors of the World Bank's At a Glance report advocate for financial backing from donors to support these changes, alternative sources of financing are advocated by others. (World Bank Group, 2021)

In addition to "value-based" payments, the concept of Social Return on Investment (SROI) has emerged as a relatively unrecognized term, predominantly within the civil sector (Banke-Thomas et al., 2015). Nevertheless, SROI presents a promising approach within health promotion and disease prevention investment strategies, as it offers a structured framework for assessing the wider outcomes of interventions and their cost-effectiveness. Unlike traditional metrics that emphasize output, SROI signifies a paradigm shift by prioritizing impact assessment (Banke-Thomas et al., 2015). This shift underscores the importance of evaluating interventions based on their tangible benefits rather than purely on the resources invested.

The aforementioned trends, assumptions, empirical evidence, and policy prescriptions collectively underscore the imperative for increased funding in preventative healthcare. However, a critical inquiry arises: amidst the considerable fiscal pressures confronting governments post-pandemic, can they singularly accommodate this escalation in expenditure? This question emerges against the backdrop of significant downturn in public finances exacerbated by existing tensions arising from long-term structural challenges (OECD, 2021). Austerity measures, augmented government expenditures, and diminished tax revenues have precipitated a rise in the budget deficit and public debt, reaching its highest proportion relative to GDP in decades (OECD, 2021).

A Horizon Europe project, Invest4Health (invest4health.eu, 2024), aims to explore novel financing instruments that help minimise public budget difficulties and promote the funding of health promotion and disease prevention. As the Invest4Health Grant Agreement describes, it aims to find models that enable distributing risks and pooling resources to facilitate large-scale investment at various levels within health ecosystems, thereby producing sustainable returns and benefits that are realized locally (invest4health.eu, 2024). These initiatives suggest that there may be a variety of novel financing models that utilise external investors' money in financing health prevention programmes. Furthermore, the OECD (2021b) recommends in its report that governments should attempt to address the issue in the manner previously outlined, which encompasses the utilisation of external resources, specifically the adjustment of the boundaries between private and public spending and the pursuit of efficiency gains and the minimisation of inefficient programmes and spending. Hence, the focus of this thesis is to assess the advantages and disadvantages of using social impact bonds, one of these novel financing schemes, in the field of public health and health prevention. The subject in question, namely the social impact bond, is pertinent to the matter under discussion in a number of ways, and the characteristics of the subject align with the set of potential solutions (Dear et al., 2016).

Hence, the primary research inquiry of this thesis entails: Within which domains and contexts can outcome-based financing mechanisms (such as Pay for Success, Social Impact Bonds and outcome-based approaches) demonstrate optimal effectiveness and additionally, what are the perceived and actual advantages associated with this mode of financing model?

The framework of this study, aimed at addressing the research question, is outlined as follows. The initial chapter is devoted to the context of social impact bonds, defining the model, including the main stakeholders and the investment model. The background literature chapter also includes a description of the areas in which the social impact bond model has been used so far, the process of setting up and running a SIB, and finally the characterisation of the characteristics of implementing a SIB. This chapter is essential for the subsequent analysis of the SIB model, which will be conducted in a later chapter. Subsequently, the methodology chapter of this study outlines the research methodology employed, with particular focus on the two research strands: the expert interviews and the systematic literature search. The aim of these two strands is to help evaluate the social impact bond model in the context of public health and health prevention domains. The methodology is presented in a detailed manner, outlining the conditions and circumstances under which each strand was conducted and the data extraction process. The results chapter can be divided into two branches of research, with two more

branches within each, by analysing the advantages and disadvantages of social impact bonds according to different logic. Ultimately, the thesis is concluded with a comprehensive discussion, that compares the results of the interviews and the systematic literature research, compares the results with those of other research, reflects on the potential of the social impact bond in health prevention and outlines future directions for the development of SIB. It also reports on the limitations of the research. In the conclusion section of the thesis, the principal objectives, findings and the structure of the study are presented.

This thesis was developed in collaboration with the Invest4Health Horizon Europe project (grant number: 101095522), utilizing data obtained from interviews conducted with experts as part of the project's research efforts. The interview guide, developed by the project, can be found in Annex 2.

2. Background literature

This chapter examines the concept of social impact bonds (SIBs) and defines the model, highlighting its differences from conventional bonds. It delineates the roles, activities, and responsibilities of various stakeholders, including governments, investors, and service providers. It also assesses the objective of SIBs and their suitability for public policy initiatives. Additionally, it describes the various global adaptations of the model and outlines the operational structure of SIBs, emphasizing their potential to address social challenges efficiently by aligning private investment with public interest.

2.1. Brief description of the essence of a social impact bond (definition, stakeholders, investment model)

According to scholars specialized in this domain (Fischer and Richter, 2016; Fitzgerald, 2013; Lantz et al., 2016) the term social impact bonds (SIB) describes a financing instrument where a commissioner, usually a public body mandates service providers to deliver their proven social outcome improving interventions government will repay – in theory from the realised substantial cost savings generated by the intervention - the contracted amount to the investor with an additional premium based on the outcome of the intervention. If target outcome is not achieved, the investor is left without a payout as the early model suggest, however in later examples some mechanisms ensure that investors may receive back some of their investment (Katz et al., 2018). Additionally, SIBs lend themselves to interventions aimed at improving welfare in areas of high social need, and have measurable impacts in prevention (Fitzgerald, 2013). What is special about social impact bonds that are established in the domain of health is

that “health impact bonds generate income streams that are linked to reduced future uptake of health and welfare services, as well as anticipated increases in productivity” (Mitropoulos and Bryan, 2013 cited by Rowe and Stephenson, 2016, p. 1205.).

The financial instrument is named differently across the globe, in the UK they are called “social impact bonds”, while in Australia they are “social benefit bonds”, same meaning in the USA with the name “pay for success” bonds or contracts (Rowe and Stephenson, 2016.; Fischer and Richter, 2016), while in a state of Australia they are titled with the term “social benefit bonds” (Senate Economics References Committee, 2011 cited by Fitzgerald, 2013, p.200.) These financial instruments are under the umbrella term of social impact investing or impact investing, however extend the pay-by-results foundation to allow the outcome payer to pay after the intervention is executed (Rowe and Stephenson, 2016)

According to Gustaffson-Wright et al. (2015) the investment model of social impact bonds takes advantage of the market investors’ willingness to risk and the government relies on private capital to fund promising social services. It combines the strengths of public-private partnerships and performance-based financing and switch these model’s original focus from infrastructural investments to more human resource intensive services. Furthermore, the structures of the SIB can also vary in the investment model, established in a single transaction social impact bond for a single outcome agreement or a fund of social impact bonds for several outcome agreements on the same social issue. Unlike government bonds, which have a fixed return, social impact bonds are designed to have a variable rate of return, depending on the outcomes of the programme (Rowe and Stephenson, 2016). The potential investors in a SIB include banks, foundations (Galloway, 2014), non-profit organisations (Katz et al.,2018), philanthropies and in some case cash heavy self-funding service providers (Lantz et al, 2016), high-net-worth individuals or institutional investors e.g., pension funds (Nicholls and Tomkinson, 2013). If the agreed results are not reached, the investor loses their money, although in some cases there is a guarantee that they will get back some of their investment (Katz et al.,2018). On the other hand, in case of success, the service providers can also get rewarded for successfully delivering the programme (Galloway, 2014). Furthermore, a feature of the investment model is that, while in 2013 it was only assumed that SIBs will pay out based on short-term outcomes that proxy longer-term results (Azemati et al., 2013), now it became the reality (Gustaffson-Wright et al., 2015).

Besides investors there are other key stakeholders with diverse backgrounds and

responsibilities. The commissioners, i.e. those who pay for the results, usually come from all levels of the public sector, in the American context from the city level to the federal level (Lantz et al., 2016). Service providers are essential players in the outcome-based contracting model, usually coming from the social enterprise and non-profit sector (Rowe and Stephenson, 2016). For service providers, a long-term investment contract removes the pressure of operating costs, allowing them to employ a stable workforce and encourage them to continually innovate their service to achieve the highest probability of outcomes (Nicholls and Tomkinson, 2013). An essential characteristic of the social impact bond model is that compared to standard government contracts, SIB contracts do not limit the way how service providers achieve the target measures which demonstrate a high level of flexibility that promotes original solutions and continuous recalibration based on performance data (Nicholls and Tomkinson, 2013). As Azemati et al. (2013) also described, an intermediary is usually the fourth party - after commissioner/public agency, investor and service provider - is responsible for coordinating the whole process from designing the outcome-based contract, gives support to the stakeholders during the payment negotiations and supervise the service provision. Moreover the intermediary might be in charge of raising capital to fund operations and risk, assembling a team of providers and managing the team to ensure performance targets are met. Occasionally, the intermediary also assistance with making out a design for outcome measuring (Golden, 2014). Often the intermediary is an independent actor and performs the tasks listed above, sometimes however the government directly performs the task, coordinates the SIB with the leading provider and sometimes a foundation who is interested in solving a particular social issue takes the lead and connects the stakeholders and manage the project, recruit the providers (Azemati et al., 2013). At the end of the contract an impartial evaluator, which can be a standalone stakeholder in the process or the same entity as the government or intermediary, occasionally the investor itself (Azemati et al., 2013) decides if the expected result exists (Galloway, 2014).

2.2. What programmes have been financed by SIB / What should SIBs be used for?

Social impact bonds as a subset of social impact investing are long-term capital-based investments that tackle social problems through funding organisations in the human service and social enterprise sector (Goldberg, 2017). Additionally based on Gustaffson-Wright et al.'s (2015) observations, these investments are regularly established with non-governmental organisations that government already have experience with, in areas where the service is complex to provide, but the outcome measurement is straightforward in addition to preferring

interventions which are out of the expertise of government service provision. The social impact bond financing instrument have been used in many areas of social programmes, which include interventions in homelessness, unemployment, reducing recidivism and criminal activities among formerly arrested individuals, tackle inequalities in different levels of education, promoting programmes targeted at marginalized groups along with interventions that address chronic health issues, and encourage different prevention and public health programmes (Gustaffson-Wright et al., 2015; Goldberg, 2017; Katz et al., 2018).

In order to answer the question of what social impact bonds should be used for, we need to look closely at the universal objective of the financial instrument under discussion and the circumstances in which it thrives or suffers. Social impact bonds aim to collect resources for innovative interventions tackling social issues, therefore they focus on impact variables that are easy to gauge and results that can be achieved in a short period of time to be attractive to investors. All parties to the contract must agree to the terms of the agreement for it to be valid, which might have the effect of limiting the outcome targets. Furthermore, as one actor is usually the commissioner, SIBs seek interventions and impacts in the commissioner's sector, regardless of whether there are multisectoral impacts. If other sectors also benefit of the impact generated by the intervention, it all just cause trouble, because then the payer can claim that all other benefitting parties should share the costs of it. (Fischer and Richter, 2016)

The instrument cannot be understood correctly without stating a few trends and contextual background information. Firstly, social impact bonds fit into the framework of a number of governance approaches based on real-time, data-driven government performance improvement initiatives and the encouragement of public-private-partnerships (PPP) to solve community problems (Azemati et al., 2013). Since, in PPPs collaborative arrangements between public authorities and private companies are made, in which the expertise and resources of both parties are combined to develop and manage public services or infrastructure and they are typically oriented towards the achievement of long-term objectives about the enhancement and sustainability of public services (Asian Development Bank, 2020; World Bank, 2022), which characteristics can be recognized in SIBs too.

What is more, it is not possible for SIBs to take over present programmes as many SIBs are and will be implemented under legislation that protects existing government initiatives (Howard, 2018 cited by Iovan and Lantz, 2018, p.1.).

2.3. The process of establishing and implementing a SIB

The process of establishing social impact bonds requires commitment, because these are usually long, complex and costly investment journeys (Nicholls and Tomkinson, 2013). Many steps lead to the birth of the instrument and many more steps lead to its successful implementation. Gustaffson-Wright et al. (2015, p.7.) identified several steps which include: “the identification of a social challenge; an assessment of feasibility for developing an impact bond based on a set of criteria; the raising of capital from senior and/or subordinate lenders or grant makers; the defining of the intervention, outcomes metrics, and evaluation methodology; the procurement of a service provider (which can occur through various different processes); the negotiation of contracts between stakeholders; the provision of the services; performance management (in some cases); and evaluation”. Iovan and Lantz (2018) point out that process evaluation is also part of the overall evaluation process to collect experiences based on the lived experience of service participants and to improve future service provision and scan if unintended effects have been created. Furthermore given the high fixed costs to coordinate the SIB structure as the project grows, the fixed costs will become proportionally more worthwhile, according to Azemati et al. (2013, p.27.) the cost of a SIB launch should worth above \$20m. In addition, the size of the target group also matters, while small sample sizes promise marginal cost savings, greater sample sizes reserve average cost savings potential (Azemati et al., 2013).

2.4. Characteristics of implementing a SIB

Gustaffson-Wright et al. (2015) argue that the implementation of a social impact bond poses several challenges due to the outcome-based nature of the financing, in particular the tasks related to outcome measurement. Firstly, an essential but complicated part of the implementation is the determination of the right outcome measures and related payables. This step indicates and predetermines what type of interventions and service providers are suitable for SIB-like financing structure. In deciding on the final outcome metrics, the attitudes of both commissioners and investors are represented. However, the availability, quality and external validity of evidence of the potential intervention is greatly varying and also their necessity before investors committing to financing one. As Gustaffson-Wright et al. (2015, p. 29.) state: "Often there is evidence on individual components of interventions or evidence of the intervention with a similar target population, but no evidence of the impact of combined programs with the exact target population of the SIB."

Regarding the scalability of successful social impact bonds, there are a few observations that

must be mentioned. The initial contract should not and cannot anticipate what scale-up is realistic, but it is worth setting targets at the outset for what will happen at the end of the contract (Azemati et al., 2013). One solution might be to include deadlines in the contract for deciding on scale-up, so that lessons learned from the programme can be incorporated (Azemati et al., 2013). Despite the obstacles, structures and especially what social impact bond structure promises with bringing in private capital can help overcome shortcomings of the service providers side which side is the closest to the population who is in great need on the intervention. Non-profit organisations could help fill gaps in government functions, but they have financial difficulties, are dependent on volatile external sources, are not equipped to serve large groups, and find it difficult to scale up on their own (Gustaffson-Wright et al., 2015). Moreover, based on US experience, it is difficult to scale up or replicate a successful intervention elsewhere because provider capacity is limited and geographically specific - it is very much up to provider supply to scale up (Azemati et al., 2013). However, from investors' there are less obstacles to scaling social impact bonds, according to a study investors often make a commitment to reinvest in interventions (Goldberg, 2018 cited by Iovan and Lantz, 2018, p.1.).

Among others, Gustaffson-Wright et al. (2015) reported several feasibility criteria for a successful SIB implementation. They claim, that finding simple, relevant and easy-to-measure outcomes that serve as surrogates for long-term results and also align with market and/or political interests are essential. Moreover the demonstration of achieving the outcome targets, possibly with results that can be understood in terms of public savings, which were suggested by Fitzgerald (2013) also stating that a preventive intervention is reasonable if it leads to a real cash saving for the government. Nevertheless, Gustaffson-Wright et al. (2015) argue that impact measurement and repayment decisions did not require rigorous evaluation in practice. On the other hand, adequate legal and political attention and support in real life are the backbone of strong and sustainable SIB-funded prevention programmes which can be monitored and evaluated with real-time data (Gustaffson-Wright et al., 2015). Azemati et al. (2013) also highlight the importance of legislative support, but from another perspective, addressing that rules must ensure that changes in government administration do not sabotage previous SIB initiatives. Governments' dedication were pointed out by many (Fitzgerald, 2013; Azemati et al., 2013; Gustaffson-Wright et al., 2015) however collaboration of other stakeholders was less emphasized (Gustaffson-Wright et al., 2015). What is unique about health impact bonds is confidence in knowing how population health works and be ability to estimate service uptake

and risk profiles within the target group (Rowe and Stephenson, 2016). What is the real challenge regardless of the domain of the SIB is to find the sweet spot between programmes that are innovative but traditionally difficult to fund, and programmes that are promising enough to attract private-sector investment despite the risk involved (Azemati et al., 2013).

These criteria also suggest specific circumstances in which SIBs thrive. Azemati et al. (2013) address the question of when it is worth setting up a SIB. They argue that the most important consideration when deciding whether to undertake a SIB is whether it is capable of achieving large-scale social impact. For SIBs to be worthwhile, there needs to be either a large initial scale, or a realistic vision of scaling up an initial successful SIB into a larger (e.g. country-wide) initiative. Or they need to be aligned with a broader performance or reform agenda, so that a successful SIB has spill-over benefits into an important area of existing spending.

3. Methodology

The study utilises various methodological tools that fit within the qualitative research approach. Since Syreon Research Institute is the leader of Invest for Health (Invest4Health) Work Package 4 (Finance modelling for smart capacitating investment), the author of this thesis had the opportunity to participate in the Invest4Health project under the supervision of Syreon. The key methodology employed in this thesis focuses on the analysis of the expert interviews. Sixteen expert interviews were undertaken within the framework of the Invest4Health Horizon Europe project, but only fifteen has authorised the audio recording. However, the materials, claims and literature provided and sent by the one interviewee who did not authorise the recording were also considered and reviewed for analysis. The fifteen interviews were the result of the following process. The potential interviewees in figures 66 professionals were identified and categorised by the author according to their institutions and areas of expertise. The group of potential experts consisted of bank managers, investors, researchers, public officials, and heads of supranational institutions such as the European Investment Bank (EIB). One-hour long online interviews were arranged with them via Microsoft Teams, which were recorded and transcribed using Buzz offline audio transcription (Github.com, 2024). All participants in the interview signed an informed consent form (attached in the Appendix_1) in which they agreed to the recording, transcription and analysis of the audio recording. An interview guide that is attached in the Appendix 2 was prepared for the semi-structured interviews to provide structure. The interviews were conducted for the project milestone Mapping of health financing models potentially applicable to Smart Capacitating Investment (SCI) and criteria for selecting among

them, and accordingly aimed to map several types of possible innovative public health financing models. The interview guide included a brief introduction and description of the purpose of the interview and the Invest4Health project, followed by the exploration phase. During this phase, we aimed to explore the experts' experiences with each outcome-based financing method, including the knowledge about stakeholders involved in the example, the investment and business models, the size and duration of the investments, the return on investments, and the potential for scaling up the narrated projects. We investigated how the interviewees perceive the financing solutions based on social impact and got familiar with their suggestions for model development.

Subsequently, on the basis of the 3 selected interviews, 3 researchers of the project, including the author of this thesis, read through the transcripts of the interviews and each of them created an empirical, data-driven initial codebook. In a second step, the codebook was refined through consensus by the three researchers and other members of the project working group. In a deductive approach, identified codes were grouped along the main topics of the interview guide, with a view to comprehensively describing possible investment models. The resulting consensus-based codebook served as a backbone for the further interviews.

The thematic analysis method was utilized to explore and interpret the data collected from these expert interviews. Thematic analysis involves identifying patterns and themes within qualitative data, enabling a comprehensive understanding of the underlying phenomena (Bradley et al., 2007). The coding process, integral to thematic analysis, facilitated the systematic categorization of interview responses based on recurring themes and concepts (Saldaña, 2016). A list of the different investment models mentioned in the interviews (broader than the focus of this paper, in line with the objectives of the project task) was compiled and the codebook elements were then fitted to these. After the codebook (attached in Appendix 3) was created the rest of the interviews were analysed using codes with letters referring to the different financial instruments the social outcome based investment might proceed in and numbers implying the key features of these investment models. Additionally, a matrix was constructed to systematically organize and analyse the most relevant features of the outcome-based financing instrument discussed during the interviews.

During the course of this project, I analysed seven interviews, the results of which are utilised in this research paper. The included interviews were conducted with academic and investors mainly during the autumn months of 2023. The following table summarises the professional

and geographical background of the seven interviewees.

Interviewee ID	Position	Geographical background
Interviewee1	University researcher	UK
Interviewee2	University researcher	France
Interviewee3	University researcher	UK
Interviewee4	University researcher/consultant	Spain
Interviewee5	Researcher	UK
Interviewee6	Investor - Social banking	Austria
Interviewee7	Investor - Impact investing	Belgium

Table 1: Relevant information of the interviewees, source: own elaboration, 2024

The second phase of data extraction and structuring of the interview data was necessary due to the fact that the previous phase (during the Invest4Health project) had a different objective and research question driving it. In this research, I conducted a second review of the coding matrix in search of evaluation statements related to social impact bonds. Firstly, the statements were collected according to their category from the coding matrix. The potential categories were as follows: stakeholders, investment incentives, context, business model, investment model, investment size, timeframe, returns, impact measurement, scale-up, advantages, disadvantages. Subsequently, each statement within each category was evaluated to ascertain whether the claim in question relates to the advantages or disadvantages of SIBs. The statements were then linked to a theme, which sought to represent the patterns of the common aspects that were mentioned by the interviewees. After the themes were identified, statement have been collected for each theme. The final step was to group the themes according to which stakeholder is most affected by the benefit or drawback.

Meanwhile, as a supplement to the analysis of the interviews, a systematic literature search was

conducted using the MEDLINE (PubMed) database, which covers papers published in scientific journals on biomedical and life sciences topics (PubMed, 2024). The system also incorporates MeSH (Medical Subject Headings) terms, a controlled and hierarchically organized vocabulary created by the National Library of Medicine (NIH, 2024). The search terms were derived from the 2016 OECD working paper by Peter Ramsden and the interviews, with particular care taken to ensure that the search strategy was sufficiently specific and focused. The search terms can be divided into two baskets, one of which is public health terms, where I first considered including the terms health promotion and disease prevention, but then filtered the articles with only the term public health (MeSH term) to avoid irrelevant hits. I also used Boolean operators to add the search terms from the other set to the filter requirement. The other group included results-based financing methods, including social and health impact bonds, payment-by-result, social outcomes contracting, outcome based financing and results-based contracts. The specific search term which was applied to the PubMed interface on the 16th of February, 2024 looked as the following:

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((((((("healthcare impact bond*" AND (english[Filter])))) OR ("payment by result" AND (english[Filter])))) OR ("payment by result*" AND "contract*")) OR ("payment by result*")) OR ("social outcome*" AND "contract*")) OR ("outcome based financ*" AND (e - Search Results - PubMed (nih.gov))
```

The PubMed search yielded 667 results, of which 7 were selected for full text screening after title/abstract screening. Three exclusion criteria were applied to the title/abstract screening: **1.** article not related to the financial instrument of interest (which is the social outcome based financing schemes) **2.** article not related to public health, health promotion or disease prevention, **3.** article not from the OECD countries, **4.** article does not include the valuation of the financial instrument of interest. As the systematic literature search yielded so few results, namely 3 hits, I also used the snowball method recommended by Wohlin et al. (2022) to filter the bibliography of the 5 selected articles by author, title and year. During the snowballing process, 11 articles were included after title/abstract screening, of which 8 resulted in the final pool of included studies. Finally, a hand search was conducted by reviewing the content of the articles sent by the interviewees and manually searching electronic resources for evidence on social impact bond evaluation, which resulted in 5 more recent publications that met the requirements. The systematic literature search yielded 16 results from both academic journal articles and grey literature, all of which were used in the literature review analysis. The process of the systematic literature search is illustrated in the PRISMA flowchart below.

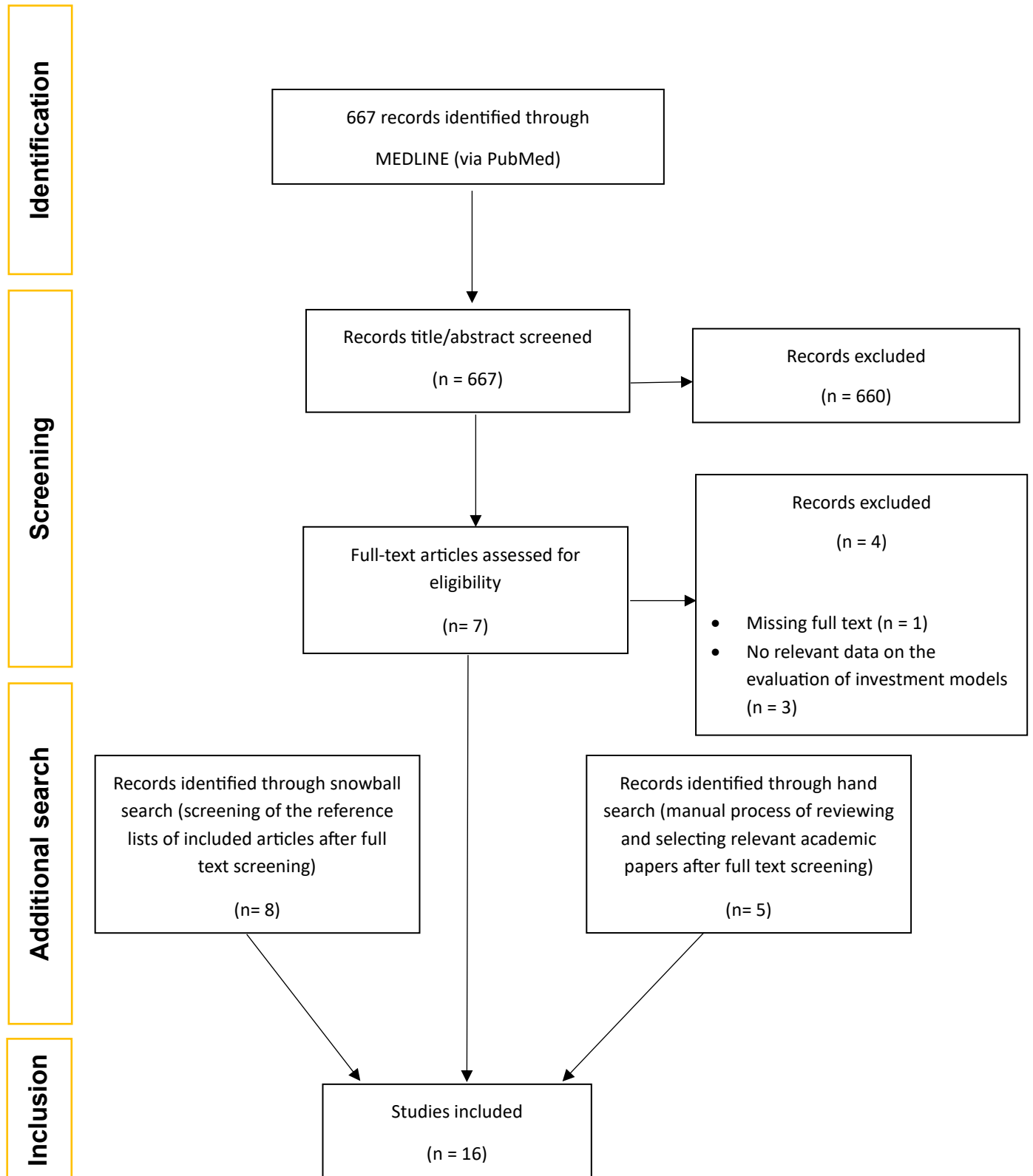


Table 2: Flow diagram of screening of articles

Own elaboration, based on Page, MJ, McKenzie, JE, Bossuyt, PM, Boutron, I. et al. (2021) The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021; 372:n71 doi:10.1136/bmj.n71

In the case of the systematic literature search, the data extraction was carried out by collecting the articles in a Microsoft Excel spreadsheet, listing separately the type of article (report or journal article), the geographical focus of the article, the financial instrument discussed in the article, advantages, disadvantages, direct quotes and interpretation. I then grouped the statements according to whether they were more about the advantages or disadvantages of SIBs, and then grouped statements that were similar or related to a theme, again creating themes that rhymed with the themes identified in the interview. Finally, I distributed all the identified patterns (themes) into three broad clusters based on common character taxonomies, which I have named the outcome-related aspect, the financial aspect and the system-level aspect. These clusters were defined intuitively, but they are representative of the broad themes around which the advantages and disadvantages are concentrated. Some themes could not be assigned to just one cluster, so they were assigned to a combination of the clusters.

By employing these methodological techniques, this study aims to provide a nuanced exploration of the perspectives and insights offered by experts within the context of outcome-based financing in healthcare.

4. Results

4.1. Literature review analysis

4.1.1. Advantages

Outcome-related aspects

1. SIBs encourage flexibility for providers

Compared to traditional contracts, SIBs do not specify how the outcome should be achieved, which gives the provider great flexibility (Nicholls and Tomkinson, 2013; Katz et al., 2018). This model allows the service provider to adapt to the service taker, reflect on the experience and change the service delivery or the back-up processes of service delivery based on adaptability (Nicholls and Tomkinson, 2013). Service provider staff can also experience greater autonomy and, where appropriate, co-produce with service users to address personal root causes (Fox et al., 2022). The outcome-focused contract also allows the data-gathering service provider to learn as they go, continually iterating and innovating on how to better serve the population (Fox et al., 2022; Economy et al., 2023).

2. SIBs build a culture of monitoring, performance management and evaluation

Gustaffson-Wright et al. (2015) highlight that these conditions provide a good breeding ground

for a culture of monitoring through intensive collaboration, outcome-based funding and continuous evaluation of performance. The conditions also force service providers to allocate resources to data collection and analysis in relation to the target population (Gustaffson-Wright et al., 2015). One study also highlights that SIBs create the opportunity for service providers to invest in data management over the long term (Corporation for National and Community Service, 2016). Theory also suggests that one of the benefits of SIBs is the development of service providers' data handling skills, which is supported by empirical evidence (Fraser et al., 2020). However, Economy et al. (2023) nuance the picture somewhat by detailing the reality of the benefits of developed data handling skills. Economy et al. (2023) found that while US SIBs use robust impact assessments, in the UK payments are based on outputs rather than outcomes, which are less likely to reflect the true impact of the intervention and are derived from superficial measurement. Performance management, which is driven by the SIB model, is supported by the involvement of private sector parties who have expertise in this area (Gustaffson-Wright et al., 2015). Usually, service providers (social enterprises) do not have the capacity to carry out proper performance management themselves (Gustaffson-Wright et al., 2015), which is why performance management is often carried out by an intermediary (Azemati et al., 2013).

Financial aspects

1. SIBs bring new streams of finance

Some have argued that the added value of the social impact bond model is that it brings new resources into the social sector to address social problems (Fischer and Richter, 2016; Katz et al., 2018). The premise is often that government lacks the money, resources or flexibility to solve persistent problems and therefore new resources need to be brought in to address them (Katz et al., 2018). These resources can be both philanthropic and market-based (Lantz et al., 2016). The channelling of new resources can also increase programme efficiency and allow larger groups to benefit (Nicholls and Tomkinson, 2013). Gustaffson-Wright et al (2015) argue that new resources are also good for investors, not just service providers, as the SIB model can support not only asset-based infrastructure investments but also human capital-based social services, and resources from non-conventional investors, e.g. high net worth individuals, institutional investors (pension funds), can be channelled into the model, which also diversifies the investor portfolio.

2. SIBs generate sustainable funding that sustain impact

Stable financing is related to the previous point about new streams of resources. A key finding

in the literature is that longer-term contracts (Nicholls and Tomkinson, 2013) allow providers to focus on what they are good at, worry less about budgets and have more energy for capacity building (Corporation for National and Community Service, 2016) and innovation (Caré et al., 2020). The funding structure offered by SIBs also allows them to provide services to individuals over a longer period and potentially in a more personalised way than they could with uncertain short-term funding (Fox et al, 2022). Sustainable funding also favours public initiatives of a preventive nature, with Fitzgerald (2013) quoting Bernet (2012: 203), stating that "Linking funding to outcomes is one mechanism to ensure a sustainable funding base for preventive health". Finally, Gustaffson-Wright et al (2015) argue that the social outcomes contract ensures sustainable service delivery that delivers sustainable outcomes, which is very different from the impact of one-year contracts. Furthermore, they state that if SIBs demonstrate positive impact, success can lead to long-term government commitment, which is the basis for sustainable impact.

3. SIBs transfer risks from government

Governments tend to be hesitant to take risks, results in minimal innovation in public services financed by the conventional procedure (Gustaffson-Wright et al., 2015). The SIB model implies that an external investor advances the expenditure, so the government does not risk its money by investing, as it only has to pay the investor if the programme is successful, increasing efficiency (Nicholls and Tomkinson, 2013; Gustaffson-Wright et al., 2015). This design, which removes the risk from the sponsor, can be a positive motivator for participation in SIBs (Dowling, 2017; Caré et al, 2020; Economy et al., 2023). The structure is particularly beneficial in difficult economic times when governments need to introduce austerity measures rather than investments (Fraser et al., 2020). As having only the investor taking the risk alone can lead to conflict, Economy et al. (2023) describe how risk sharing occurs in practice and contrasting the UK with the US. According to their findings, in the US, service providers take minimal or no risk in the success of SIBs and are always paid regardless of their performance, whereas in the UK, if there is risk taking by service providers, it is explicit.

4. SIBs provide cost saving and prevention prioritization

The standard SIB promise is that the government will realise cashable cost savings, in part by funding prevention programmes that pay off in the long term (Corporation for National and Community Service, 2016; Katz et al., 2018; Caré et al., 2020). Nicholls and Tomkinson (2013) highlight the efficiency gains when SIBs invest in early intervention prevention programmes that will deliver high social value in the more distant future.

System level aspects

1. SIBs endorse evidence-based policymaking and enhance accountability

Embedded in a cost-effective government policy where scarce resources have to be decided, SIBs can set a good precedent for government to structure some of its spending and support evidence-based projects (Goldberg, 2017). Introducing regulation into the measurement of outcomes and developing new data and performance benchmarks for social programmes increases effectiveness (Nicholls and Tomkinson, 2013). In addition, SIBs can be used to strengthen the evidence base for existing programmes, such as social prescribing (Fraser et al., 2020). Economy et al. (2023) also mention the theoretical advantage of SIBs, stating that when payments are made based on rigorously measured impact, government agencies are more likely to be trusted to spend money well. Fraser et al. (2020) also list two theoretical advantages related to evidence-based policymaking and compare them to practice. The first is that SIBs support programmes that have already been tested and found to be successful. However, the reality is that SIBs also introduce both proven and unproven interventions, either because of the commissioner's confidence or commitment to experimentation (Fraser et al., 2020). In addition, the theory is that SIBs improve local data collection to promote evidence-based practice, which is supported by empirical evidence (Fraser et al., 2020). In terms of accountability, SIBs increase the accountability of programmes as they are regularly evaluated (Katz et al., 2018). As mentioned as a theoretical advantage, the collection and use of more data increases the transparency and accountability of SIB-funded programmes (Stoesz, 2014 cited by Fraser et al., 2020, p. 202).

2. SIBs can give opportunity to scale

Nicholls and Tomkinson (2013) and Gustaffson-Wright et al. (2015) argue that the scalability of successful interventions is partly true. While small non-governmental organisations can only produce services to a limited number of people, SIB financing makes it possible to scale it to the wider population. Evidence suggests that SIBs can also endorse the government to take over successful programmes and scale them to nationwide programmes. The authors also suggest, that impact bonds might be used to extend services to a larger number of people than are with mainstream financing. (Gustaffson-Wright et al., 2015)

3. SIBs articulate social problems

There are places where SIBs can have a positive impact in the short term because they pick up on problems and improve them minimally, which would not be possible with simple government funding (Katz et al, 2018). In the domain of health, Lantz et al (2016) argue, that

SIBs draw attention to the social determinants of people's health, rather than the medical determinants of health, which has also a positive effect on the population.

Combination of the clusters

1. SIBs promote innovation

According to the original theory of the SIB model, the focus on outcomes has an innovation-enhancing effect on service delivery that increases efficiency (Nicholls and Tomkinson, 2013; Corporation for National and Community Service, 2016; Fox et al., 2022; Economy et al., 2023). This is firstly because it directs service providers towards impact targets (Rowe and Stephenson, 2016); secondly, Katz et al. (2018) believe that the inclusion of market-based incentives is key to innovation within the SIB framework. In addition, other reasons for innovation may be that the model increases collaboration between stakeholders; thirdly, more innovative programmes are funded under SIB that would otherwise be considered too risky; and fourthly, because the service provider is not told how to achieve the target, the autonomy and freedom of the service provider to respond to the dynamically changing environment is increased (Fox et al., 2022). However, the real world experience shows otherwise, with Gustafsson-Wright et al. (2015), describing from a global report that SIBs do not have a strong track record of supporting highly innovative programmes. Moreover, it was also observed from the UK SIBs that while innovation affected the commissioning of programmes, it did not affect the novelty of the actual service delivery (Albertson et al. 2018 cited by Fox et al., 2022). On the other hand, Gustafsson-Wright et al. (2015) report that innovation through SIBs occurs through the introduction of programmes to new target groups or new settings. According to some scholars, real innovation occurs when SIBs introduce elements of co-creation and strengths-based approaches to service delivery (Albertson et al. 2020 cited by Fox et al., 2022). A newer way of measuring impact - the rate card approach - which is popular in the UK, also creates opportunities for innovation in service delivery due to the high flexibility of target outcomes (Fox et al., 2022). All these claims illustrate the richness of this particular advantage and show that enhanced innovation can be linked to mezo level benefits, such as financial or outcome-related aspects, and also to the system level when an innovative invention is discovered that performs better than older ones.

2. SIBs enable governments to test with innovative interventions

This point is closely linked to the previous one through the innovation factor, which is common to both benefits. The ability of SIBs to help pilot innovative interventions and thereby gather evidence can be categorised both in terms of the outcome-related aspect and the system-level

cluster, since a key feature of social impact bonds that governments can experiment with different innovative interventions without the financial risk of failure (Corporation for National and Community Service, 2016; Goldberg, 2017; Katz et al., 2018). The experiment can be the introduction of an intervention or the scaling up of an existing programme (Corporation for National and Community Service, 2016; Katz et al., 2018) or, as real life data shows, piloting can be used to test new partnerships in a targeted way (Fox et al., 2022). It is also recommended that prevention programmes should be tested within the SIB framework (Mulgan et al., 2011 cited by Fraser et al., 2020, p202). The advantage of the model is that by testing specific interventions, data can also be collected to support future policy decisions (Fraser et al., 2020; Fox et al., 2022). Economy et al. (2023) also recognise that the possibility of piloting narratives is more dominant in the US, where data collection is actually recognised as a tool for evidence building.

3. SIBs encourage collaboration

Many scholars argue that social impact bonds support collaboration between different levels of government agencies, non-profit organisations and private sector parties, which supports service delivery, catalyses closer partnerships with local organisations and enables novel policies that incorporate original perspectives (Gustaffson-Wright et al., 2015; Corporation for National and Community Service, 2016; Katz et al., 2018; Fox et al., 2022; Economy et al., 2023). However, there are two acknowledged difficulties with the increased intensity of collaboration. One is that, according to Gustaffson-Wright et al. (2015), the multiplicity of actors makes it difficult to agree on the terms of contact. Another issue was raised by Azemati et al. (2013), which rhymes with the previous issue, but from a slightly different angle, stating that what is the disadvantage of the SIB model can also be an advantage, because the wrong pocket problem can also be interpreted as a framework that supports collaboration between different government letters, which also complicates who pays and who realises cost savings. All of this leads to the conclusion that increased collaboration has an impact on outcomes, system-level dynamics and potentially financial considerations.

Complementary aspects for the pro-SIB assessment

Overall, the beneficial features of SIB listed above lead to improved service delivery (Corporation for National and Community Service, 2016; Katz et al., 2018; Economy et al., 2023) and increased efficiency (Nicholls and Tomkinson, 2013; Dowling, 2017; Katz et al., 2018; Economy et al., 2023). Both of these advantages have been cited in a number of articles as inherent to, and a consequence of, the SIB model. And almost all of these benefits can be

attributed to the outcome-based focus and multi-stakeholder financing context. The literature also describes the spillover effect, whereby as more SIBs are created, the social finance market, which is on the public policy agenda in several developed countries, also develops (Nicholls and Tomkinson, 2013). According to the Corporation for National and Community Service (2016), the universal promotion of social impact investing appears to be a win-win for society, as it can have a positive social impact while also generating a profit when outcomes are achieved. Finally, the prevention focus of SIBs can also have an impact on the public health scene, assuming that the long-term effect of establishing SIBs is to create a new market that values health, not just healthcare (Lantz et al., 2016).

4.1.2. Disadvantages

Outcome-related aspects

1. Adverse effects of outcome-based financing and gaming

A disadvantage of performance-based regulation is that everything depends on the right target outcome, and it is notoriously difficult to set a relevant outcome that is closer to the desired social objective (Sugarman and Sandman, 2008; Fox et al., 2022). Contrary to the theory and marketing of SIBs, outcome-based funding can create perverse incentives that can damage collaboration and partnership between stakeholders and place unnecessary pressure on service provider staff (Fraser et al., 2020). Dowling (2017) highlights that an obsession with outcome targets can lead to the intentional or unintentional misinterpretation of the outcomes of interventions. In addition, scholars argue that the urgency of the profit motive can influence service delivery and service scope to favour easily measurable outcomes and the services that produce them (Economy et al., 2023). This problem leads to the phenomenon of gaming. Gaming or creaming can take many forms, one of which is that only well-performing, low-risk service providers or service users are selected for intervention (Caré et al., 2020). Several studies have highlighted the phenomenon of gaming (Sugarman and Sandman, 2008; Corporation for National and Community Service, 2016) and its negative effects, which include weakening the validity of data (Fraser et al., 2020). One response from performance-based regulation to gaming is that companies must transparently communicate their strategy to an agency about how they intend to achieve the target outcome (Sugarman and Sandman, 2008). On the other hand, Fitzgerald (2013) argues that the alleged disadvantage is unfounded and that there is no evidence that the fairness of service provision has been compromised.

Lastly, an issue evoked from outcome-based financing is the conflict of interest between

commissioners and investors. Caré et al. (2020) claims that interest must be aligned before a SIB is established, however the principal-agent problem creates difficulties even in a SIB framework. Investors want to see returns as soon as possible, while commissioners aim to realise long-term impact, both of which influence the type of outcome targets that need to be negotiated before a social impact bond contract is finalised (Lantz et al., 2016; Fox et al., 2022).

2. Ignoring lack of evidence or disregarding evidence

Contrary to expectations the evidence base of interventions their validity is also questionable. Fraser et al. (2020) report that SIBs implement both proven and unproven interventions, so whether an intervention is implemented does not depend on the strength of the evidence. In general, there are few rigorously measured impacts comparing the effectiveness and cost-effectiveness of services in the SIB funding environment with other funding solutions (Lantz et al., 2016), with the UK noting a lack of reliable cost-effectiveness data (Fraser et al., 2020). In fact, in the majority of cases, they argue that all the results can be attributed to the SIB intervention according to Fraser et al. (2020). This is completely contrary to what the theoretical model suggests, which is that an independent evaluation must be carried out before deciding on the effectiveness and impact of the SIB and paying the investor (Fraser et al., 2020). In reality, impact is typically measured on a 'before and after' basis (Fraser et al., 2020) or based on indicators (Economy et al., 2023) rather than on a counterfactual basis. However there is a geographical fragmentation regarding the impact measuring, in the UK validating is not considered robust, which eventually decrease the risk of the investment, while in the USA they link payment to rigorous impact evaluation (Economy et al., 2023). It is suspicious when all investments are paid off. According to a study, the following is true, saying that „48 out of 50 completed impact bonds (96%), outcomes were achieved and investors were repaid." (Gustafsson-Wright et al., 2020 cited by Economy et al., 2023, p.428.) What is also found by Economy et al., is that in most cases, there was no impact evaluation and payment decisions were influenced by politics (Hevenstone and von Bergen, 2020 cited by Economy et al., 2023, p.428). Moreover, it was found that regarding the two epicentres of SIBs (US and UK), investors were seldom left out of the payment, and the premiums were more generous than expected (Painter, 2020 cited by Economy et al., 2023, p.428.) An interesting addition to the understanding of low-quality evidence is the introduction of rate card impact measuring because it makes the target outcomes very fluid and flexible which also means that the commissioner is not paying for proper impact, however, the rate-card model decreases the high transaction costs (Economy et al., 2023). This example illustrates that sometimes a positive

attribute of the model can cause trouble from another point of view. It should be noted, however, that measuring impact properly is a complex and difficult task (Fox et al., 2022).

3. Adverse effects of data collection and monitoring

Fraser et al. (2020) outline in detail the potential negative consequences of data monitoring and observe 2 different trends. Firstly, the increased process and outcome monitoring became a stress factor for staff working at service providers, because they felt highly pressured to meet the targets set. Some workers mentioned the conflict between their personal professional goals and the financial goals made by the SIB contract. Moreover the outcome focus shifted the workers attention from the service provision and process mindset (which could endorse continuous learning for the organisation) to achieving the outcome-related rewards for their employee. The other trend related to the data collecting and monitoring practice is that data became politized due to the fact that data determined the payout. Some claimed that heated debates were common to understand and interpret data regarding the evidence of an intervention. (Fraser et al., 2020)

4. Difficulties with impact measuring and its restricting effect on the programme scope

In addition to the trends mentioned above, a different perspective has been taken by some academics who argue that better process learning and outcomes would be achieved if impact measurement was not limited to quantitative outcomes and more qualitative evidence was used in the evaluation of social impact bonds (Fraser et al., 2020; Fox et al., 2022). They argue that over-emphasis on quantitative outcomes reduces the potential for learning and innovation and provides a good breeding ground for creaming (Fraser et al., 2020). Another scholar also emphasises that using only pre-defined metrics to assess success, the model does not provide an incentive to improve the service, and if unsuccessful, the process of service delivery is not addressed, illustrating this with an example where the outcomes were achieved but the service users perceived the entire process negatively (Katz et al., 2018). Fox et al. (2022) highlight the importance of incorporating the experience of service users in the evaluation of SIBs.

Financial aspects

1. High transaction costs

Many academics argue that it would be cheaper for the government to self-finance than to fund the same programmes in a SIB structure (Sugarman and Sandman, 2008; Katz et al., 2018). SIB contracts are complex documents (Nicholls and Tomkinson, 2013) and there are also difficulties with a potential scale-up perspective (Dowling, 2017). According to Goldberg (2017), setting

up a social impact bond is very time-consuming and resource-intensive, let alone operating one. Setting up a SIB can take up to 3 months to 3 years and is therefore very costly, although the preparation time decreases as the market matures (Gustaffson-Wright et al., 2015). The high transaction costs can come from several sources, the source is that external expertise is needed to operate a SIB, as it is a rather complex structure (Azemati et al., 2013). The source of additional costs is the hiring of an intermediary, as well as a premium for the investor, the cost of valuation, and technical and legal support (Nicholls and Tomkinson, 2013; Gustaffson-Wright et al., 2015). In some cases, these additional costs are structured within or outside the social impact bond contract (Gustaffson-Wright et al., 2015). Early SIBs were very expensive, but now that the market is maturing, there are more sustainable models (Gustaffson-Wright et al., 2015). The source of the puzzle is the contradiction: if there is evidence that an intervention works, why should it be funded in a complicated and more expensive way than conventional funding (Maier et al., 2018 cited by Fraser et al., 2020, p. 196). However, Economy et al. (2023) believe that high transaction costs are an inevitable appendage of the model.

2. Wrong pocket problem

It refers to a situation where the commissioning government agency pays for the successful social impact bond, but the cost savings are realised at another level or silo of the government agency, or between many levels (Lantz et al., 2016). Gustaffson-Wright et al. (2015) make a distinction between vertical and horizontal wrong pocket problems, referring to the dynamics of opposing entities. In addition to the wrong-pocket problem, it can also be noted that governments are currently unable to capture cross-sectoral effects, which can also be interpreted as a wrong-pocket problem (Nicholls and Tomkinson, 2013). SIBs often do not take into account increased costs in other areas and focus on specific areas of cost avoidance, leading to a misjudgement of the cost-effectiveness of an intervention (Fischer and Richter., 2016).

3. Lack of public cost-saving

Based on the background literature and the dominant narrative describing SIBs, it was expected that public cost savings would be widely discussed in the literature. However, the results of the systematic literature review and synthesis did not meet expectations. The scholars who mentioned this aspect of SIBs briefly commented on both the pros and cons. However, those who do not believe in the possibility of public cost savings had unanimous reasons for this. While Goldberg (2017) simply stated that SIBs do not deliver savings, Nicholls and Tomkinson (2013) went a step further and argued that the cost-saving effect is a myth because it requires special circumstances (e.g. scaling a programme system-wide). Dowling (2017) added that even

if savings were possible, they would never be realised in the public purse by promoting another social programme because the premiums paid by the commissioner to the investor cover any savings from success.

System level aspects

1. SIBs do not solve structural, system-wide problems

A concern is that the SIB does not address the structural deficiencies, it introduces treatments at the individual level rather than the state level, which does not address the root cause of many social problems, only mischaracterizes the root causes and tries to change the behaviour of the individual (Fitzgerald, 2013; Katz et al., 2018). Another critique is that SIB supporters assume that there are and will be cuts in the public sector, therefore we need SIB funding to prevent social problems, but this will entrench austerity and there will be no central-level policy change to make social problems go away, which eventually undermines that public sector services (Katz et al., 2018). Moreover, by taking a market-based approach, SIBs generate profits for investors who address individual-level problems acutely, not systemically and thus SIBs essentially postpone and magnify the structural flaws in society that cause problems at the individual level (Katz et al., 2018). Corporation for National and Community Service (2016), Goldberg (2017), Fox et al. (2022) and others also share concerns about the negative side effects of SIBs, which distract from the fact that it is the inequalities in society that create the problems that SIBs cannot solve.

Combination of the clusters

1. Investor's dominance on the contract

Firstly investor dominance can cause fragmented policymaking (Katz et al., 2018). To understand that we have to accept that the interests and logic of market actors can conflict with other policy objectives. According to Katz et al. (2018) however, the dominance of investors can result in restrictive thinking of policymakers which takes social objectives a back seat, while investors' preference will decide which innovative interventions will be financed. This all leads to a state where the private sector has a strong influence on the public policy agenda (Katz et al., 2018). Secondly, the dominance of investors can also appear in the light of seeing SIBs as the privatization of public duties which can weaken the legitimacy of the government even (Nicholls and Tomkinson, 2013). Thirdly, the timeframe in which target outcomes can be understood also favours the appetite of the investor, encouraging assessment of early outcomes rather than long-term progress (Corporation for National and Community Service, 2016; Lantz et al., 2016; Fox et al., 2022). The dominance of the investor can be seen as misaligned with the

interests of the community too. The following quote illustrates how the interests of the community can also be in conflict with those of the investor: *"Restricts the number and types of people benefiting from the intervention. Focus on public savings also creates perverse incentives in the structuring of a PFS deal, e.g.: incentive to target interventions to the highest-risk or highest-need subpopulation for whom cost savings are more easily attained instead of to a broader population who could benefit from primary or secondary prevention efforts"* (Lantz et al., 2016, p.2058) In terms of healthcare, the immediate profit negatively affect health focused SIBs (Corporation for National and Community Service, 2016). Hence, the dominance of investors may affect the assessment of both the outcomes and the system-level performance of the establishment and operation of SIBs, which is based on the arguments listed.

2. Additional drawbacks of the model

Besides the previously outlined difficulties attributed to social impact bonds, other challenges were also mentioned in the literature with less emphasis. Firstly, political support is a must for the establishment of SIBs, but the continuity of the intervention is also important and changes in public administration may jeopardise this (Nicholls and Tomkinson, 2013). Governments find it difficult to pay attention, time and resources to complex social problems over several years, especially without dedicated staff (Azemati et al., 2013; Goldberg, 2017). Another issue inherent of SIBs is the critique that investors privatize the social and public sector with private capital, making impact investment an asset class which degrades the original ethos of social impact bonds, in addition to investors profit from productivity of underpaid civilian workers (Dowling, 2017). A valid but symbolic question was raised about the rightness of giving investors a premium for investing in evidence-based, low-risk interventions (Corporation for National and Community Service, 2016). All these arguments can be linked to the system level cluster due to the abstraction level of the claims.

In addition, outcome-related aspects were mentioned sparsely in the literature. For instance optimism bias has also been highlighted as a phenomenon that reduces the success of SIBs in a way that diminishes their potential, in part because service providers tend to overestimate their ability to achieve target outcomes, resulting in their failure to do so (Nicholls and Tomkinson, 2013; Fraser et al., 2020). Lastly opponents of the SIB argue that the practical experience shows that SIBs do not guarantee effective growth at the local level (Fraser et al., 2020), and that scalability of the interventions is particularly difficult (Dowling, 2017).

4.2. Interview analysis

In the following pages, the results of the interviews conducted are presented in a structured way, differentiating the advantages and disadvantages of social impact bonds by grouping the characteristics according to the key stakeholders most affected by each perspective, so the groups include: service providers, government, investors, population. The stakeholders included almost completely cover those involved in a traditional SIB model.

4.2.1. Advantages

Benefits accrued by Service providers

1. Financial stability provided for service providers

According to two interviewees from the academia, social impact bonds have the advantage of providing financial stability in times of austerity, meaning that service providers involved in SIB projects have protected funding even in difficult economic times, as one interviewee said:

“And particularly in the pandemic, when a lot of third sector providers or small providers were being slashed or cut with budget and SIBs and SOCs allowed that funding to be protected.”
(Interviewee3, 2023)

It also provides funding to small providers who wouldn't otherwise receive it. In addition, the financial stability provided by the investment model allows service providers to retain skilled staff for longer to support service delivery. Overall, providers' activities are greatly supported by the longer period of guaranteed funding, which is backed up by the following quote:

„I think what I like about the model is first of all, it gives longer funding to a provider. Yeah. So rather than one year funding and then we reapply, we were looking at three or five or even seven years funding. So it gives stability to the provider organizations, which I think is good.”
(Interviewee1, 2023)

2. Enhancing service quality, efficiency and performance monitoring

The dimensions in which SIB funding improves the performance of service providers were also mentioned by two researchers in the interviews. The scheme encourages stakeholders to deliver better services through close collaboration, and better resourced services implicitly improve service quality. Furthermore, from service providers perspective, being part of a SIB can entail lots of benefits e.g., additional data analytics and performance management. These observations have been formulated in the following way.

“I think a second positive we found is it encourages the commissioners, the investors, the

providers to come together and really focus and think about the service and deliver services which are better considered. So I think that's an advantage” (Interviewee1, 2023)

3. Flexibility and freedom in execution of the intervention

In the case of social impact bonds, the government doesn't care how impact is delivered, they just want to be sure that they are not risking public money without achieving impact. The payment-by-results system is flexible and adaptive to project performance, but much attention is needed to set and monitor outcome indicators. In some cases, the data is used to recalibrate the service or supporting processes during the project. These observations were made by both an academic researcher and an investor from the pool of interviewees.

Benefits accrued by the population

1. Enhancing service quality

The population is also affected by improving the quality of services. Close cooperation is a source of quality improvement. It provides a good platform to showcase the best of what stakeholders can do - highlighted by Interviewee1 from academia.

2. Investment model incentivize better social outcomes

In a traditional social impact bond model, outcomes can be strategically set so that achieving short-term measures results in less financial return, while accomplishing longer-term measures pays off more. Another incentivizing tool for the providers to reach their target outcomes, if they are partly paid according to that. These ways the financing scheme also incentivize the service provider to attain higher targets mentioned by Interviewee3. The described approach optimizes the social outcome which raise social welfare.

3. The model suits prevention programs

Outcome-based contracting models, such as social impact bonds, are good tools for preventive interventions, according to interviewee4. Although the timeframe of prevention programmes is longer than that of SIBs, and preventive interventions deliver their results over a longer timeframe, SIBs, which focus on intermediate impact targets as a proxy for long-term goals, can be implemented in prevention-focused programmes, a choice that may have its own setbacks.

Benefits accrued by the government

1. Collecting evidence of innovative interventions

Both university researchers and an investor raised this aspect of social impact bonds. According to interviewee 6 and interviewee 1, SIBs are effective in showcasing small innovative

programmes to attract the attention and support of the government if the programme is effective. However, interviewee 4 only mentioned this aspect as one of the aims of the model, implying that the aim of SIBs is to develop evidence of impact to support future policy. It was unclear from the interviews whether the generation of evidence was an actual benefit for future policy or more of an expectation of the model.

2. Achieving public saving

An interesting aspect of the SIB, which is a much more pronounced advantage of the model in theory than in reality. Only Interviewee3 said that cashable savings were possible and are realized more by the lead commissioner compared to the local ones. She says:

„And it's because of this assumption that the local commissioner is saving in the long term, but it's not necessarily that that saving is like in a bucket in a lot of the cases. I found the cashable savings attributed to the lead commissioner. And these, I think funnily enough, were calculated from employment research, I think in 2010 from social finance, we actually trying to seek the algorithm of like how they actually calculated this. But in terms of cashable savings attributed to the lead commissioner, that's around 638 thousand. And the savings for the national government is around 860 thousand cashable and then 1.7 in non-cashable savings, according to the life chances fund” (Interviewee3, 2023)

Given that a key argument for setting up SIBs is marketed as public cost savings, for which government budgetary challenges provide the *raison d'être*, it seems rather contradictory that the expert interviewees do not strongly support this argument.

Benefits accrued by the investor

1. SIB are safe, low risk investments

Interestingly, one researcher, Interviewee2, claims that in some countries, such as France, SIBs are not considered risky investments, contrary to intuition and theory. Investors usually get their money back and there is no problem with overestimating the outcome and not being able to achieve it. Another researcher (Interviewee 1) adds a nuance to the global picture. He notes that SIBs suspiciously rarely miss a payment.

4.2.2. Disadvantages

Based on the interviews conducted, it appears that the disadvantages of social impact bonds vary in depth and strength, so they can also be grouped by nuancing their strength dimensions into (1) disadvantages (e.g. transaction costs), (2) uncertainties (e.g. no clear evidence of public

savings) and (3) challenges (e.g. many conditions combined must be met for establishing a SIB, outcomes are difficult to measure, wrong pocket problem). While the challenges and to some extent the uncertainties can be addressed if the context is right and the model is well designed, the disadvantages are more connected to the foundations of the outcome-based contracting method. As with the benefits, the sorting principle was to identify which stakeholders were affected by the weaknesses and shortcomings of the SIB, but the depth of these weaknesses is slightly indicated in the following paragraphs.

Drawbacks accrued by the government

1. Many feasibility criteria for establishing a successful SIB - Challenge

Firstly, regarding SIBs, it is not enough that the public sector believes that a specific interventions will save future expenses, but it must be backed up with some kind of evidence beforehand (Interviewee4), which is expensive and complex to conduct. Secondly, the feasibility of setting up a social impact bond is low outside the countries with strong civil society. As Interviewee5 highlighted the density of civil society is much lower in Central Eastern Europe and in the Nordic countries compared to Western European ones, e.g., Italy or the UK, which backfire the generalisability of the model. Another criteria that must be met to set up SIBs is to have robust government with a competent budget allocation system that is capable of planning long-term expenditure and act accordingly. Interviewee6 claims that in some Eastern European countries, it is more difficult to plan and accrue certain budget positions and act accordingly, because governments in Eastern Europe have a short-sighted mindset; therefore, they are less likely to want to invest in social impact bonds because they only plan until the next election. Furthermore, according to Interviewee 2, it is not specific to Eastern Europe, but it is complex in itself for the government to fund long-term interventions and difficult to include SIB funding in their budget. This dynamic is illustrated by the following quote

„...maybe XY (Anonymized other interviewee) told you on the UK market, because now the outcomes funds in the UK are almost disappeared or almost finished. The public bodies, you know, in the UK are like, in France, we say chicken in front of a knife. We don't know what to do, we don't know how to use our budget rules and financial practices because we don't have a dedicated fund for that” (Interviewee2, 2023)

2. High transaction costs - Disadvantage

Another pain point of establishing SIBs is that the complexity of the model generate high

transaction costs. These costs arise because a lot of time is spent bringing the different parties together and negotiating the desired outcomes. In the UK, for example, social impact bond intermediaries are managing the projects and handling the complexities of co-ordination for a high fee (Interviewee1). Furthermore, Interviewee 1 also points out that not only coordination, but also impact measurement adds significantly to transaction costs. Sometimes the consequence of impact measurement being difficult and expensive is that the monitoring of results is not as good as it should be. Setting up a Social Impact Bond funded intervention is also time consuming, initially taking around 3 years from the idea of a SIB to the establishment of the service - as stated by Interviewee3. The high setup costs are due to the collection of data and the feasibility study to check whether the intervention is appropriate to address the social problem in the context of the country as described by the Interviewee4. This leads to the last statement made by Interviewee5 and Interviewee1, that with all the extra steps, stakeholders, etc., the service becomes more expensive than it would be with conventional funding. Interviewee5 even questioned whether the private sector loop was necessary at all for the establishment of public sector projects e.g., innovative prevention programs, as follows.

„And the question then becomes why do you need to ask the private sector to provide that upfront investment when for example the EIB or even the, in the UK we have a low interest publicly funded model called the Public Works Loan Board which used to pay for housing, used to pay for many public sector projects especially by local government. And if you knew that you were going to get the return then you don't need to be paying private sector investors because you've achieved a saving in the public purse and all you need is a way of liberating money upfront which is what most of these schemes do in order to finance a saving which is later down the track” (Interviewee5, 2023)

On the other hand, according to Interviewee3, SIBs have evolved in the last 15 years to a point where they are able to reduce transaction costs, which is promising taking into consideration the previously listed concerns.

3. No clear public cost saving - Uncertainty

Three of the interviewees questioned explicitly the social impact bond model's capability of generating cashable public saving, which is significant in the light of the theory suggested expectations. Interviewee2 declared that both cost saving objectives and saving itself can differ from region to region. He said *“Because on some side, on some contracts, I would say mostly in Australia or et cetera, they're very cost saving oriented and just does it reduce spending or*

not, public spending or not, just binary vision, which is a bit stupid or a bit too brutal, let's say. And in the UK, contrary to what we can imagine, mostly they're not like that with the outcomes fund, philosophy and use of practice is applied. They mostly just have metrics to reach objective, but it's not very linked with the cost savings, which can be surprising.” (Interviewee2, 2023)

Interviewee2 also noted that 2/3 of the time, public cost savings are a myth in a global context for several reasons. One of them is that the government has to book the cost of the investment in its budget. While Interviewee6 believes that cost savings are possible, they are only realised when the innovation financed in a SIB framework is eventually scaled up. While empirical evidence also suggests an inability to generate cashable savings, for example because detailed data on their costs and benefits are not easily available in the public domain, and the number of SIB launches is on a downward trend, all this leads to the conclusion that SIBs are complicated to measure, difficult to get right and not as cost-effective as hoped – said by Interviewee1.

4. The wrong-pocket problem - Challenge

A challenge with SIBs is that sometimes the entity or department realizing the savings (not necessarily cashable, but through increased tax and labour market activity) differs from the commissioner, leading to conflicting budgets noted by Interviewee3 and Interviewee7. Interviewee5 also noted that due to the 'wrong pocket' problem, the state is facing a much higher cost of capital than it would if the state financed it with e.g., normal taxation. However there are alternatives to the problem. One working solution is that the responsibility for outcome payments is shared between the central government and local commissioners, which in practise means that:

„...so the MHEP, the outcome funders is the local commissioners. So there's Haringey and Barnett Council, there's Shropshire Council, there's Enfield Council. So these are council local authorities that are agreeing to pay the outcomes if they are indeed achieved. And then there's also an additional outcome payer or funder, which is the central government through the Life Chances Fund. So the Life Chances Fund is agreed to top up, so provide 42% of the outcome payments” (Interviewee3, 2023)

5. Impact measurement is difficult and expensive - Challenge

As mentioned earlier, outcomes are not usually measured in detail, but proxy long term outcomes by looking at early measures. They are not monitored as well as they should be because it is difficult, expensive and government perceptions depend on it, according to Interviewee 1. He also provided evidence to show that measuring SIBs in the UK has become

weaker over time. These observations lead to the conclusion that the expected accuracy and reliability of monitoring the cost-effectiveness and success of these innovative interventions funded by SIBs is in question and that evaluation decisions may be biased and misleading.

6. It is a highly politicized sector - Disadvantage

The issues raised by the fact that SIBs operate in a politicised sector are limited, but do exist. Concerns range from governments blocking transparency and influencing impact measurement through a lack of transparency on the cost-effectiveness of the programme, to the implementation or continuation of projects being subject to decisions by subsequent political administrations. These issues were raised by both interviewee 1 and interviewee 4. There are cases where governments do not want their project to be seen as a failure and as a result they block information. However, the lack of transparency also means that cost-benefit analyses cannot be carried out properly due to a lack of data. Finally, the implementation and continuation of SIB-funded interventions depend on the decisions of biased and changing political administrations. This may mean that high-level evaluation and decisions about the future of the instrument are highly political and that SIBs are not as cost-effective as hoped.

7. Gaming and skimming - Challenge

One problem with result-based frameworks is that it creates a good breeding ground for scheming and cheating on the results – noted by Interviewee5. On the one hand, the calculated SIB effect could be positive only because of gaming practices, e.g. subgroups of the target population who are more likely to cooperate with the intervention are brought into the SIB service, on the other hand, due to the high investment (time, political, financial, administrative, etc.) commitment, all stakeholders want the SIB to succeed, which also leads to gaming and activities in the grey area, as interviewee1 commented.

8. Conflict of interest between the interests, focus and time scale of investors and the government - Disadvantage

The issues surrounding the tension between the two parties are significant. The robustness of the chosen impact measurement may be jeopardised by the tension between investors looking for early returns and the government looking for long-term interventions that rely on private funding, as Interviewee1 points out. In addition, as Interviewee7 notes, by measuring short-term outcomes, evaluators may overlook the long-term savings that will be realised. Finally, as Interviewee4 reveals, impact targets set before the intervention may be less ambitious and interesting simply to be easier to measure and achieve, all of which influence the model through

its inception.

9. Not suitable for prevention - Uncertainty

It was only mentioned by one respondent (Interviewee6), but since another respondent stated the contrary, it is necessary to mention this antithesis and highlight the shortcomings of the SIB. According to Interviewee6, in theory, there should always be savings for the state in the case of SIBs, but in the case of prevention, the savings are longer-term than may be suitable for the investment timeframe.

Drawbacks accrued by the investor

1. Unfair risk sharing - Challenge

The problem of unfair risk sharing arises from the investment model itself, because what is advantageous and attractive to one stakeholder (in this case the commissioner) may be detrimental to another. In most social impact bonds, the investors are taking really high risks, while the social organisation delivering the service has secure funding and doesn't risk anything, as Interviewee6 mentions. There is some nuance to this picture from Interviewee 3, who states that service providers are sometimes paid partly on the basis of outcomes. However, as a dissenting opinion, Interviewee 6 outlines the limitations of more balanced risk sharing, pointing out that service providers' funding is not usually linked to the achievement of outcomes because they don't have resources of their own. Therefore, if payment were linked to their performance, they would not be able to start their activities. However, there are some ways of incentivising service providers; sometimes they get a bit more funding if they achieve better results - as Interviewee6 reassures. He acknowledges another encouraging development, which is that the financing of a social impact bond is now more sophisticated, and sometimes investors are guaranteed a certain amount back. Furthermore, Interviewee4 completes the picture with the fact that risk diversification is also possible with the introduction of social impact bond funds, where investors can diversify the risk of SIBs by investing in many SIBs, not just one.

2. No steady returns - Disadvantage

One feature of social impact bonds is that, as an impact-based investment, they cannot provide steady returns, which would also encourage potential institutional investors such as pension funds to scale up successful interventions, notes Interviewee6. In addition, as Interviewee1 points out, long-term results with high risk are not sustainable for commercial investors, so the risk has to be reduced, because so far it has been difficult to attract regular impact investors to SIB programmes due to the high risk.

3. Too complex, time-consuming, low returns - Challenge

Interviewee1 states that commercial investors have withdrawn from the SIB business due to its complexity, time consuming nature and low returns. He also points out that the model is difficult to get right because it is too complex, an observation supported by the declining trend in the number of SIBs launched.

4. Negative impression on certain stakeholders - Disadvantage

A marginal opinion from Interviewee1 is that organisations may resist the SIB framework because they believe it is the commercialisation of a social problem, which is contrary to their ethical convictions.

Drawbacks accrued by the service provider

1. Rigidity of the investment model - Challenge

An often highlighted benefit of SIBs is put into question by Interviewee4 and Interviewee6 by saying that predetermining outcome targets can block innovation. Interviewer6 said that the impact target measures (KPIs) are fixed in the contract; therefore, they are not adjustable to the performance of the project. Interviewee4 depicted the obstacle as follows:

„So, if you have to predetermine everything before you actually launch something, it's very difficult to predict you know unforeseen circumstances and changes and so forth and maybe that sort of rigidity is not, you know, might not actually lend itself so well you know to social innovation. Like when you think about like innovation needs to happen in an environment that is somehow maybe more fluid and has lots of different inputs and so forth and when you're like straight jacketed you know it might be more difficult you know” (Interviewee4, 2023)

However, it can be concluded that there is no consensus on flexibility, with another point highlighting the flexibility of the SIB structure as an advantage.

2. Scaleup difficulties - Challenge

A difficulty that service providers face, is that it is challenging to scaleup their activities in case of a successful pilot programme. According to Interviewee2, there are two very different alternatives: one is that the government takes over the management of the programme, or the other option is that the scale-up happens more organically and remains in the social enterprise sector. In this case, however, scale-up depends on the richness of the ecosystem of social organisations, as Interviewee5 explains. One solution to the scale-up barrier is to promote approaches that aim to increase capacity, which is seen as more feasible than relying solely on the original social enterprise to grow - as noted by interviewee6. He also points out that these

strategies could include forming a larger consortium, involving more actors in service delivery, franchising the model or training additional organisations.

5. Discussion

The following chapter synthesises the research findings by comparing the results of the two strands and reflects on additional literature to analyse whether or not it is consistent with the findings of this research. There is also a brief reflection on the health prevention dimension of the SIB evaluation. The chapter concludes with a discussion of the limitations of this study and the future directions and potential of social impact bonds.

5.1. Comparison of the interviews and literature review

The aim of this study is to explore the advantages and disadvantages of social impact bonds in the field of health prevention. To this end, I will now compare my findings from the systematic literature search and the expert interviews to validate the findings of the thesis and better convey the different perspectives that emerge from the two strands of research.

In terms of the outcome-related aspects of social impact bonds, flexibility and innovation were key points in the study. However, while the literature had a more positive view of this aspect, highlighting the ability of SIBs to provide significant flexibility to service providers, with this flexibility encouraging innovation in service delivery, the interviews presented a less positive view, with the complexity and rigidity of the model in setting outcome targets sometimes inhibiting innovation. The comparison of the two analyses suggests that increased autonomy and flexibility may be constrained by the practical challenges highlighted in the interviews.

Regarding the financial aspect of evaluating social impact bonds, both sources (literature and interviews) suggest that SIBs introduce new funding streams and the literature emphasises that it could be an important factor in sustaining long-term funding and potential social impact, while interviewees had a somewhat more critical opinion, highlighting the high transaction costs and questioning the actual availability of new funding. Taking into account both sources and the approaches involved in the findings, it is suggested to question whether the financial innovation of applying a social impact bond framework is worth the cost, given the sceptical views or highlighted lack of data from the literature and interviews on the overall cost-effectiveness of the programmes.

When analysing the system-level aspect of social impact bonds, the main features are related to the promotion of evidence-based policymaking and increased accountability. The literature

suggests that SIBs support evidence-based policy implementation and enhance accountability, while this was not explicitly discussed in the interviews, only indirectly suggested through the point of gathering evidence on innovative interventions. While both sources highlighted the problem of wrong pockets, the interviews highlight the disadvantage of SIBs being highly politicised and the public authority limiting the transparency of information and the actual performance of SIB-funded programmes, suggesting that they may not be successful enough overall to be sufficient to support policy initiatives and spending. While the system-level benefits identified in the literature may be compromised by real-world governmental and bureaucratic issues.

Finally, focusing on the risks and public cost saving aspect of social impact bond evaluation, it seems that there may be a difference in emphasis on investment risks, with the literature claiming that risks are transferred from government to investors smoothly, and interviews arguing that risks may not be adequately balanced, leading to concerns about risk-sharing and conflict of interest. On the other hand, both analyses led to the belief that public cost savings are rarely a reality, and that although prevention programmes would theoretically fit the SIB model, the dominance of investors and the need for early results and a well-defined target population, i.e. risk groups for rigorous evaluation, make it much more difficult to produce these conditions in a public health prevention programme.

Another interesting point that emerged from the research is the difficulty of scaling up, which was highlighted in the interviews. This is interesting because if we believe in the drawbacks of the SIB model as outlined in the paper, it is clear that this instrument is not worth funding country-level programmes in the long run. Therefore, a solution might be to simply test the SIB again and if successful, the government will take over the management and provision and integrate it into its public services. However, returning to the government resource constraints mentioned in the Introduction and the necessity to increase spending on prevention as a proportion of GDP, the value of the SIB for resource mobilisation appears limited. Even if the intervention is successful, the majority of the SIB-funded programmes, if they are scaled up, are publicly funded. Additionally, the literature acknowledges the potential harms of SIBs, which may be harmful to societies by treating individuals superficially and failing to address the underlying causes, which can also arise from structural flaws in society, such as the social determinants of health (Thornton et al., 2016).

The interviews and literature reveal significant regional differences. The findings of the research indicate that the establishment and operation of SIBs necessitate specific conditions, including the availability of sufficient private capital from social investors, a robust civil society with a diverse range of potential service providers, and a political environment conducive to experimentation. Additionally, the utilisation of SIBs varies depending on the objective and methodology employed. While public cost savings are not a primary objective in some jurisdictions, they are in others, and there is a considerable disparity in the measurement of evidence (see the example of US and UK outcome measurement). These considerations collectively demonstrate that there are numerous feasibility criteria for SIBs that are not evident to meet even in OECD countries. Nevertheless, where these requisite conditions exist, SIBs are still employed in diverse ways and objectives.

5.2. Supporting findings from additional pieces of literature

Gustaffson-Wright et al. (2020) mention a few challenges that arise from the social impact bond model which include the obstacle of deciding how to evaluate the outcome metrics. Another challenge identified is the difficulty of identifying which components of SIB contributed to success and in what proportions is acknowledged by Azemati et al. (2013). Fitzgerald (2013) also raised concerns about service quality and service's unintended negative consequences and highlighted the importance of paying attention to marginalized groups. Fitzgerald (2013) and Gustaffson-Wright and Osborne (2020) also raised concerns about the ability of the SIB to address real major population-level health problems e.g., obesity by funding prevention programmes, when SIB-funded programmes have so far only targeted high-risk specific small groups within populations. Another group of concern pointed out by Gustaffson-Wright et al. (2015) are risks associated with unintended consequences for impact bond beneficiaries which include two specific issues. Firstly, when the provider chooses the beneficiaries of a SIB, they might do the cherry-picking, and select only the low-risk recipients of the service, which guarantees success for the intervention. Secondly, there is also a concern, if the investor has the option to terminate the contract at an early stage. Lastly, Azemati et al. (2013) stress the difference between expectations versus reality when analysing what type of interventions are implemented more often. They argued that, despite the model's aim to establish and replicate evidence-led and proven interventions, working programmes tend to test riskier, more innovative but less evidence-based interventions that fit philanthropy's approach but are less attractive to mainstream investors who want a more balanced distribution of risk (Azemati et al., 2013). The outlined results are in line with what has been found in this research and are

detailed in the sub-sections 4.1.2. and 4.2.2.

5.3. How it all relates to public health and health prevention?

This analysis, which included interviews and a systematic literature search, aimed to evaluate social impact bonds with a health focus, including their linkage to health prevention. One result of the thesis is that there is a lack of literature on the use of social impact bonds in health prevention and gaps in the knowledge of professionals. Consequently, it is challenging to derive insights for health prevention. In one of the few papers that focused on evaluating and investigating SIBs applied to health prevention, Hulse et al. (2021) conducted a scoping review on the use of SIBs for financing health interventions targeting non-communicable diseases (NCDs). A significant issue that emerged was the absence of empirical evidence to confirm the efficacy of SIBs for NCDs, coupled with concerns regarding potential conflicts of interest and the lack of transparency surrounding financial terms (Hulse et al., 2021). A pivotal finding was the limited utilisation of SIBs in financing NCD interventions, indicating that such financing models are not extensively employed for the purpose of achieving a broad health impact (Hulse et al., 2021). While Lantz et al. (2016) claimed that SIBs are not an effective method for primary prevention as it is designed to work with specific target groups.

As evidenced by previous papers, SIBs are well-suited to financing narrowly focused initiatives. However, they are less suitable for financing primary prevention programmes due to the difficulty of defining the target group, measuring the impact of an intervention rigorously, and accounting for confounding variables. Furthermore, the cost savings from a programme may not be realised immediately and may be difficult to attribute to a specific intervention. For screening programmes, as a tool of secondary prevention there are typically no or difficult-to-interpret budget savings. In contrast, for tertiary prevention, there may be a well-identified target group and problems, as well as at least some measurable outcomes with a control group. Therefore, it seems that SIBs can be used for health prevention at the tertiary level.

5.4. Limitations

A limitation of the research is that only a subset of the interviews conducted in the Invest4Health project were processed through this research and therefore important perspectives (investors or other professionals) are not presented here. In addition, the systematic literature search yielded few results, and therefore snowball and manual searches had to be used for a large proportion of the results. However, in order to reduce the limitations of the literature search, the literature has been thoroughly reviewed and expert recommendations from

interviewees have been taken into account.

5.5. Future directions and potential of the SIB model

In response to the difficulties of setting up a SIB, some tools have been developed over the years, to make establishing a SIB easier for late movers. These include templates for SIB contracts, easy-to-understand documents that translate SIB contractual agreements, frameworks that help assess capabilities and feasibility for participation in a SIB, and tools that help calculate future costs and savings generated by a potential SIB model, matrixes that support the development of outcome measuring. (Corporation for National and Community Service, 2016)

In the USA, the government also has supporting mechanisms to help identify appropriate interventions for SIB funding. They create and use ready-made lists of already proven programmes, brainstorm with industry experts and also collect suggestions from the public, asking for their opinions on what interventions they think are needed in the form of a "request for information" (Azemati et al., 2013, p.28.).

There is also good practice in managing social impact bond systems in the US in providing technical support during the implementation phase, with the Harvard Kennedy School SIB Lab's support model consisting of placing a 'government innovation fellow' in a government agency to promote the state's initiative and assist with coordination and technical analysis of pay for success funded interventions (Azemati et al., 2013), similar to the intermediary's role in the UK.

What is promising is the big variation in the structure of the SIB models regarding stakeholder roles, business and investment structure etc. (Gustaffson-Wright et al., 2015), which indicate that this model is flexible and be able to fill in gaps and adapt to different situations. One example that demonstrates the potential that a flexible SIB model has is that while individual impact bonds may not be able to achieve significant scale, impact bond funds can do more to reach a target population which could point towards a development direction for SIBs (Gustaffson-Wright et al., 2015). Furthermore, SIBs in the future should focus more on service improvement over cost-effectiveness and the effectiveness of a SIB should not be judged solely based on cash savings, but also on its social impact (Corporation for National and Community Service, 2016). Evaluators listed a few aspects which should be weighted more in the evaluation of the SIB, e.g., well-being benefits and the public's willingness to pay besides cashable savings (Kohli, Golden, Coletti & Bo'sher, 2015 cited by Corporation for National and Community Service, 2016, p. 11.). An essential question for the future is whether other public services will

be replaced by SIB funding schemes, or whether SIB will be a way of gathering evidence and helping to decide which interventions should be funded on an ongoing basis by other, more conventional funding schemes (Nicholls and Tomkinson, 2013).

6. Conclusion

This thesis examines the advantages and disadvantages of the social impact bond in the field of health prevention. The question is of interest because many governments are facing an ongoing budgetary challenge due to the public debt caused by the COVID-19 pandemic (OECD, 2020), a fiscal situation that is not sustainable. Furthermore, according to the World Bank (2022), there is a high time for governments to spend more on health prevention. In the context of the Invest4Health project (invest4health.eu, 2024), I was involved in the exploration of different innovative models for financing health prevention under the supervision of Syreon Research Institute. This experience led me to the topic of the social impact bond, and the research question of whether social impact bonds are suitable for financing health prevention programmes and what are the drawbacks and benefits of using it, which I sought to answer by conducting a systematic literature search and utilizing the findings from expert interviews conducted during the Invest4Health project. The introductory chapter of the thesis contextualises the importance of social impact bonds (SIBs), and the background literature chapter provides insight into the most important definitions and the general functioning of SIBs, their main actors and the areas where they have been applied. In the course of the interview analysis, advantages and disadvantages were grouped according to the main stakeholders. The results of the literature research were subsequently organised into three clusters: financial aspects, outcome-related aspects and system-level aspects. In the discussion chapter, the results of the two strands of research were compared and future directions were identified for the development of the social impact bond. During the research, the characteristics of the social impact bond were explored and analysed from multiple perspectives, which led to the conclusion that it may not be the most optimal instrument to address the lack of resources for health prevention programmes.

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8. Appendix

8.1. Annex 1 – Informed consent form for the interviews



Informed Consent Form for Expert Interviews on Finance and Investment Models

Purpose of our research

Invest4Health is a collaborative research project funded by the European Union (Horizon Europe no. 101095522). The aim of the project is to develop and innovative investment models which could help boost prevention and health promotion interventions in Europe, channeling new funds into the improvement of the health and wellbeing of populations. We would like to have a better understanding of the most promising investment structures globally, and on these grounds develop financing and investment models for the project's regional test-beds.

Type of study

To complement the findings of a scoping review of the literature on smart capacitating investment, Syreon Research Institute is conducting semi-structured interviews with experts of impact investment and health financing mechanisms.

Procedures

A semi-structured interview is a slightly directed conversation, which will last around 60 minutes. The interview, if you agree to this, will be audio recorded, and will then be transcribed and analyzed. The

recording will be deleted immediately after the transcript has been made.

Participant selection

You have been identified as a potential participant of this research based on your expertise and/or research activities in the fields of impact-oriented investment and/or health financing systems.

Voluntary participation

Participation is entirely voluntary. You may also stop participating in the interview any time you wish.

Reimbursements

You will not be provided any monetary incentive to take part in the research. We will do our best to respect the value of your time and not to spend more of it than agreed.

Confidentiality

Participation in this research is confidential. Any information you share will be confidential and cannot be traced back to you when results and findings are summarized. The transcript of this interview will be anonymized, and stored at a secure drive of Syreon Research Institute. It will only be accessible to members of the research working group, i.e., employees of Syreon Research Institute and, eventually, some partner organizations of Invest4Health that they give access to, for the strict purposes of the research study. Records and transcripts will be deleted by the end of the project (30 June 2026) latest.

Data protection

Data is collected with reference to and in respect of GDPR Article 9(2)(j). No information from this interview will be shared outside the research team, and nothing will be attributed to you by name. The knowledge that we get from this research will be summarized in a final report, and potential scientific publications about the study results. You may indicate, during or after the interview, and until completion of the research study, if there are parts of the information that you do not want to be used. You also have a right to have any personal data about you corrected or deleted, unless this request would make it impossible or make it very difficult to conduct the research.

Risks

We have not identified any risks associated with taking part in this study. However, if you may feel uncomfortable talking about some of the topics, you do not have to answer any question or take part in the interview if you do not wish to do so. You do not have to give any reason for not responding to any question, or for refusing to take part in the interview.

Contact

Project website: <https://invest4health.eu/>.

Principal investigator of the present interview study: Balázs Babarczy, senior researcher, Syreon Research Institute (Budapest), balazs.babarczy@syreon.eu

Project coordinator: Jolanda van Vilet, healthcare strategist, Region Skåne (Sweden), jolanda.vanvliet@skane.se

Informed consent

I have been invited to participate in a qualitative interview study with the aim to explore social impact-oriented investment models and their applicability in public health. I have read the foregoing information.

I consent to the recording of this conversation. ☐

I consent to the use of the information I provide, for the purposes of the research study, under the conditions of confidentiality detailed above. ☐

Print Name of Participant _____

Signature of Participant _____

Date _____

Day/month/year

8.2. Annex 2 – Interview guide

Invest4Health WP4 interview questions for experts on smart capacitating investment (SCI)-compatible finance and investment structures

Engagement

- **Do you have experience with** or conducted research about **investment models with explicit social and/or health impact?**
- **if yes: Please describe your experience with/research findings** about investment models having social and/or health impact.
 - What was your institution's role in these projects?
 - What was your role in these projects?
 - How would you evaluate the success of these projects?
- **if no:** Did you manage to read the study sent before this interview? **What did you find most interesting about these models?**

Exploration

- Please think about one or more healthcare-related or social investment projects that you have been recently involved in or researched on. **Please describe the intervention.**
 - What were the **main goals** of the intervention (health or non-health related)?
 - What was the **target population**?
 - Who were the **main stakeholders**?
 - What was the **benefit period** of the project?
- **Please describe the investment model** applied.
 - Who were the **investors**?

- Potential types include, but are not limited to: Government; Non-health public sector; Health insurer; Commercial bank; Social bank; Social enterprise; Social impact investor; Venture capital; Venture philanthropist; Accelerator; Third sector; Cooperative / mutual; Foundation; Voluntary / community group; Crowd funding; Charity
 - What were the **assets invested**?
 - e.g., money, know-how, employee time
 - What was the **amount** of resources invested?
 - Was it a **one-time or a recurring** investment?
 - **Did the investor play any other role in the project** (e.g., commissioner, managing/intermediary organisation, service provider)?
 - What was the **investment model**?
 - e.g., social impact bonds, social outcomes contracting, ESG – environmental, social, governance - type investment
 - What was the **timescale** of the investment model?
 - How much was the **return on investment** (in total or per year)?
 - What was the **basis of the returns** (financial savings during the service delivery or specified health/social outcomes reached)?
 - What **other benefits** did the investor realise (e.g., improved public image, gain of local market knowledge, gain of experience in the service area)?
- Please describe the **payment model applied within the project (if applicable)**.
 - Who was the **commissioner** and who were the **service providers**?
 - What was the **basis of payment** between the commissioner and the service provider?
 - e.g., amount of services provided, number of people reached by the intervention, specific outcomes reached in the target population
 - What was the **valuation method** for such indicators?
 - **How much money was involved** in paying for the services (in total or per year)?
 - Did the model channel **extra funds** towards the preventive service, relative to baseline spending before its introduction?
 - **Was the model financially viable** (profitable/sustainable) **to the service provider**? And to the commissioner?
- Please describe **to what extent the investment model was successful**.
 - **Were health/social outcomes defined in advance**
 - To what extent were these reached?
 - **How were these measured, and by whom?** Was there a standardized measurement framework/evaluation criteria used?
 - To what extent **were the investors satisfied** with the project?
 - To what extent **were other stakeholders (e.g., service providers, commissioner) satisfied** with the project?
 - How high were the **transaction costs** of the project?
 - What was the **public/political echo** of the project, if any?
 - What were the main **drivers of the project implementation**?
 - e.g., rate of return, security of the investment, transparency of the project, legal framework, personal leadership
 - What were the main **barriers to project implementation**?
 - e.g., legal, political, financial obstacles
 - In what areas (geographic, sector-specific, stakeholder-specific, etc.) **would you recommend this model to be implemented again**?

- What do you think about the future potential of such projects? How would you describe the **market outlook** of investment in similar projects?
- In general, **what role do you think private investment could play in healthcare and public health?**
- **What criteria investment models should fulfill** in order to be successful in health?
- **What advantages could these models have**, relative to the traditional models of financing healthcare and public health?
 - e.g. arrival of new funds, know-how of the private investor channeled into the model, increased transparency and accountability of actors)
- **What should be done for the outcome/impact of these investment models to be better measured?**
 - Who should measure them?
- How could **transaction costs of these models be minimized?**
- **What other interventions would be necessary for this market to develop?**
 - potential actions: regulation, steering, definitions and labelling, capacity building, creation of new investment funds, networking and market development, etc.)
 - Should these be implemented by the state/EU, or by market actors themselves?

Closing

- Thank you very much for your time and for answering our questions!
- **Do you have any questions** yourself?
- **Could you recommend experts** who we should also interview on these topics?

8.3. Annex 3 – Coding matrix

Instruments	A) Stakeholders	B) Motivation for investor / Investment case / Investment incentives	Context				D) Business model	E) Investing model / Investment structure/technique	F) Investment size	G) Timeframe	H) ROI / Returns	I) Impact measurement	J) Scalup	K) Challenges / Critique		L) Other	Innovation maturity (early stage business or mature)
			Investment ecosystem	Regulatory issues	Geographical spread	Wrong pocket problem								Advantages	Disadvantages		
Funding with no return		1. public money: treasury bonds / state bonds / low interest long term internal financing															
		2. philanthropic investment (no return expectation e.g. grants)															
Funding with preferential return		3. SIBs (including bundle)															
		4. outcome based contracting (SOCs, PwR)															
		5. social banking (subordinate, long term loans)															
		6. social financing (small-scale social venture capital)															
		7. impact investment (large scale, more mature projects, ex. is VC)															
Funding with non-preferential return		8. traditional market-based investment (no social impact required)															
Other models		9. microfinance															
		10. community investment mores (offered by CDFI)															
		11. crowdfunding for impact															
		12. multistakeholder models (Stakeholder/Shareholder, Triple helix model, etc.)															
Basically Non-financial investment		13. incubation, acceleration activities, support (invest equity)															