

Innovative Finance Inclusion

Teaching Notes

Social Impact Bond: Rehabilitation of Prisoners Case

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Authors:

**Ms. Michal Engelberg, Dr. Rachel Azurel Calipha,
Prof. Vered Holzmann**

Affiliation:

The Academic College of Tel Aviv-Yaffo

**In collaboration with Social Finance Israel (SFI) and
IBI Capital**



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Synopsis

This Case Study focuses on a Social Impact Bond for Rehabilitation of Prisoners that was developed in Israel by Social Finance Israel (SFI) Ltd during the years 2014-2018.

The case provides a detailed description of the Bond's development stages alongside the course of events that led to the prevention of its' actual launching.

Target Audience

This Case Study can be taught to a wide audience of students and may be used in several courses. It can be used in courses on investments where a comparison can be made between Social Impact Bonds and other financial investments. It can also be taught in a course on social subjects, dealing with the topic of financing social problems. In addition, it can be taught in a course of decision makers for the purpose of determining a financing strategy.

Case Study Objectives

1. To present an innovative tool for financing social problems
2. To teach the development stages of a Social Impact Bond
3. To examine challenges involved in realizing a Social Impact Bond

Recommended Lesson Structure

A task for students, pre-discussion in class

In this project you are asked to write a proposal for the development of a Social Impact Bond designed to solve a social problem.

Please Note: Clearly information is not always accessible to all, try to make assessments. Please specify when you are unable to quantify the data.

Your proposal should present the following development stages:

1. **A description of the social problem.** What is the problem? Define terms that are being used. Who is the target audience? What is the current solution for this problem? Why does it not address the problem sufficiently (if it all)?



2. **A description of the Field of Action.** Understanding the process requiring treatment, mapping involved players, areas of responsibility and their mode of operation.

3. **a. The Measurement Model.** What are the costs of the problem, according to which the savings rate may be determined? Suggest a multi-variable regression problem prediction model. Please note that in order to determine a model, one must define the explanatory variables, as well as the explained variable and determine the period of time to be measured.

b. Effective Intervention. What are the dynamic/static factors? Impact will be realized on changeable dynamic factors. What is the effective intervention model that may be proposed? (Explain based on professional literature findings). What intervention programs were employed in the past, in Israel and worldwide (if any)?

4. **a. The Social value versus economic value.** Estimate the total cost of the program. Estimate government benefit/ savings (please note that it is only an approximation).

b. Interested stakeholders. Interested parties in Bonds vary respective of the Field of Action and include public leadership, service providers, investors, and the target audience. All interested parties should be identified, their main motivation for promoting the Social Impact Bond should be analyzed and ways of maintaining contact with them in each one of the Bond's stages should be planned.

5. **Intervention Program Operation Model.** Outline the intervention program and the operation model. To the extent possible, specify preliminary criteria, pre-launch program construction costs, defining measurement period and program integration with other existing public services. At the same time, we recommend referring to the need to conduct due diligence for potential service providers including past successes and experience in carrying out similar programs, the ability to assimilate the scope of work required by the Bond in the organization, and the economic stability of the organization.

6. **Preparing a contract outline.** We recommend making reference to key paragraphs in the contract, such as between what parties is the agreement being signed, the responsibility of each body, the intervention program, how shall success be measured, program financing by investors, State financing.



Lesson Structure

The recommended lesson structure includes five parts: defining a Social Impact Bond, discussion regarding the description of Social Impact Bonds developed around the world.

Focusing on Israel: a description of SFI, the only company in Israel producing Social Impact Bonds; description of Social Impact Bonds developed in Israel; discussion regarding the specific Case Study.

Part A: What is a Social Impact Bond?¹

An SIB can be defined as “a contract with the public sector or governing authority, whereby it pays for better social outcomes in certain areas and passes on part of the savings achieved to the investors”². Brookings Institution in a major study of SIBs (Gustafsson-Wright et al., 2015) defines SIBs as: “a mechanism that harnesses private capital for social services and encourages outcome achievement by making repayment contingent upon success”.

The essential component of SIBs is a contract in which payment is based on outcomes, known in the USA as "Payment for Success" and in Australia as "Payments for Benefits". Under such contracts, governments, rather than paying for inputs, pay for results at the end of the process or in stages during the course of the contract.

The transition from input-based payment to yield-based payment is important, since payment based on the level of achievement of government objectives, requires clear predefined outcome-based indices.

The three core-partners in the SIBs are: commissioners (known as outcome payers) who outsource the service and pay when pre-determined results are achieved; investors providing funds, usually via a tool designated for a specific purpose; and service providers providing the service to end-users or to customers.

Other interested stakeholders include middlemen constructing the transaction and managing ties between partners, service providers who carry out the activity, assessors examining and testing the results achieved.

¹ Ramsden, P. (2015), Social Impact Bonds: State of Play & Lessons Learnt, OECD. [Local Economic and Employment Development](https://www.oecd.org/cfe/leed/SIBs-State-Play-Lessons-Final.pdf)
<https://www.oecd.org/cfe/leed/SIBs-State-Play-Lessons-Final.pdf>

Gustafsson-Wright, E., Gardiner, S. and V. Putcha (2015), Potential and Limitations of Impact Bonds: Lessons from the First Five Years of Experience Worldwide, Global Economy and Development Program, Brookings Institution,
<http://www.brookings.edu/~media/Research/Files/Reports/2015/07/social-impact-bonds-potentiallimitations/Impact-Bondsweb.pdf?la=en>

²<https://www.investopedia.com/terms/s/social-impact-bond.asp>



Part B: Social Impact Bonds around the world³

The first Social Impact Bond - the Peterborough One Service SIB – was developed in UK in 2007. It was designed to reduce recidivism of prisoners in Peterborough prison over a five-year period. The Bond was implemented on three groups of prisoners serving sentences of less than 12 month. This target population was known for its high crime rates compared to prisoners sentenced for longer terms (over a year) and had also not been provided with existing probation services. In that respect, the SIB supported a new service.

Since then, Social Impact Bonds started developing around the world, particularly in OECD countries. Data from the Social Impact Bonds: State of Play & Lessons Learnt report published following a meeting held in Paris in April 2015⁴ indicate that approximately 43 SIBs were launched during that period, and 30 more were under development. These were carried out enthusiastically in countries where significant parts of the Welfare Policy were privatized, such as the UK, the USA and Australia. On the other hand, countries that maintain a more public sector ethos, such as the other European countries and Canada, the development and implementation of SIBs was more moderate.

A detailed description of Social Impact Bonds dispersal is: In England – 24 Bonds, in the USA 8, in the Netherlands and Australia 2, and in other countries such as Belgium, Canada, Germany, Ireland, Portugal, South Korea and Switzerland, only one Bond was developed (see the table below).

Country	Number	Thematic Scope
Australia	2	Family care & foster care avoidance
Belgium	1	Young migrants employment
Canada	1	Housing for vulnerable single mothers
Germany	1	Youth employment
Ireland	1	Homelessness
Netherlands	2	Youth employment
Portugal	1	School performance
South Korea	1	Child welfare
Switzerland	1	Integration of refugees in the labour market
UK	24	Youth unemployment (11), youth-homelessness-NEETs (6), foster care (2), recidivism (1), adoption (1), homelessness (1), long-term health conditions (1), elderly (1)
US	8	Recidivism (2), early childhood development (2), employment for former incarcerated (1), family & foster care (1), homelessness (1), housing & child welfare (1), asthma management (1)
Total	43	

³ Peter Ramsden, Social Impact Bonds: State of Play & Lessons Learnt, OECD, 2015

⁴ Ramsden,P. (2015), Social Impact Bonds: State of Play & Lessons Learnt, OECD. [Local Economic and Employment Development](#)



The Social Impact Bond's life span ranges between one year to 17, with the median measured at 3. The scope of investment raised ranged between € 0.5-€2 million. The number of service users varies greatly, from twenty-two to many thousands.

See Appendix 1 for trends around the world.

Part C: Social Finance Israel (SFI)

SFI was incorporated in Israel in July 2013 as a Public Benefit Company working to develop innovative financing tools and to raise new capital for investment in social change organizations in Israel.

Approximately a year before, Sir Ronald Cohen, one of the founders of Social Finance UK, asked to examine the possibility of establishing an extension in Israel, to examine its feasibility, profitability and market maturity. Following meetings with stakeholders in the social field and in the capital market , it was concluded that the work model can be suitable to Israel, mainly due to the innovative tendency and risk-taking culture characterizing Israelis.

In those days, Yaron Neudorfer, whose term in office as CFO of the Jewish Agency was nearing its' end, was interviewed to The Marker magazine regarding the Agency's economic strategy and described changes in the philanthropic world, and the characteristics of new donors, incorporating business thinking in their larges related decisions, asking to know what is the true impact of their donation on the field and on changing the reality. The reporter identified lines of similarity akin to Ronald Cohen's way of thinking and offered to introduce the two “since, as it were, he is currently looking for a CFO for SFI”.

Yaron says that as early as their first meeting, he was already extremely enthused by the concept, as he understood that it is an economic tool which may entirely change Israeli reality and civil society in particular, mainly due to the emphasis on working through organized and measurable processes and the great importance attributed to results: “when you have investors you are committed to the results and choose the processes and modes of operation that will achieve the very best results”.

To begin with, Yaron met with the CEO of the Ministry of Finance and presented to him the underlying concept according to which the government will pay based on outcomes achieved. In those days, many people did not believe the government can be persuaded to replace the Tenders Model, in spite of its' total inflexibility and operational limitations, with a model offering an outcomes-based payment.



SFI initially focused its work on the development of a Social Impact Bond designed to find solutions for Ultraorthodox Employment, through intense collaboration with the Employment Commissioner at the Ministry of Economy. In 2013, the company conducted economic research in collaboration with the Pareto Group, in order to assess the total economic benefits anticipated to result from the integration of Ultraorthodox men in Employment. Research indicates that 3 main economic arteries are expected to be impacted by the social issue being addressed: a reduction in payment of benefits, increased revenue from different taxes and GNP (Gross National Product) strengthening. The research found that overall economic benefits are set at approximately NIS 94 thousand for each year in which an adult Ultraorthodox man is employed, compared to studying in Kollel [institute for full-time Jewish Studies]. After a year of research and discussion, the company team understood that the government is investing great efforts in promoting Ultraorthodox Employment under its' own initiated projects and therefore maintains it cannot simultaneously divert resources to another external project.

For more information on SFI, please visit company website: <http://www.social-finance.org.il/>

Part D: Social Impact Bonds in Israel

1. Reducing Higher-Education dropout rates in the University of Haifa and in the Academic College of Tel Aviv-Yafo

In 2014, the Edmond de Rothschild Foundation (IL), headed by Eli Buch, offered Yaron to expand the pilot they conducted in collaboration with The Academic College of Tel Aviv-Yafo in order to prevent students dropping out of academic studies in higher education institutions.

On 18 October 2016, on the roof of the Ilana Goor Museum, “on a night with too much wind” as Yaron says, the first Social Impact Bond in Israel, designed to reduce Higher Education drop-out rates, was launched.

The goal of the SIB was defined as a 32% reduction in drop-out rates among 600 Computer Science students over 8 years. According to this unique model, academic institutions are the public body that returns capital to investors for achievement of goals against incremental revenue gained by the academic institutions from tuition fees and PCB (the Planning and Budgeting Committee of the Council of Higher Education) funds. The



government took no active part in the development of the SIB, the CHE (Council of Higher Education) gave its' blessing and other government bodies were informed of the process.

NIS 8.1 million were raised fairly quickly from three investors, and currently the SIB can be said to be very successful; the SIB's annual yield for investors is expected to be 4-5%, with drop-out rate, previously set at around 46%, reduced by 50% during the first year and by 40% during the first and second years jointly.

In view of the successful interim results, the University of Haifa asked to expand the program to include an additional academic year in Computer Sciences. Additionally, the University and SFI signed yet another Social Impact Bond for the reduction of drop-out rates, this time from the Department of Information Systems; for which NIS 2.5 million were raised. Currently, the company is engaged in assimilating of the model in other academic institutions and the government is interested in investigating possible collaboration in the marketing and assimilation of the model.

2. Prevention of Type II Diabetes morbidity

The SIB was launched in the month of March 2016 and described by the Deputy Director General of Research and Development as a “type of bureaucratic miracle” since the contract is signed by two Healthcare services (Clalit and Leumit), The National Insurance Institute, the Ministry of Health, the Ministry of Finance and SFI. The economic cost from Type II Diabetes patients to the Israeli economy is estimated at approximately NIS 5 billion a year, spread across several entities and government offices and composed of medical expenses, hospitalization days, National Insurance allowances, tax reliefs, exclusion from the labor market, insurance payments and a decrease in productivity. The SIB is constructed based on a change in lifestyle among high-risk diabetics and hence is designed to result in delaying or even preventing disease onset. The goal of this SIB is a 50% reduction in the transition of patients from a pre-diabetic to a diabetic state compared to a control group.

The SIB raised NIS 19.4 million from 15 investors. The intervention model begun with 1,400 patients, and by the end of 2021 included 2,038 participants. It is planned that more people will join the program so that the total number of patients will reach 2,200 men and women over a span of 7.5 years. As of now, the program reports on NIS 177,771 estimated contribution of total direct value per participant to the system.

3. Increasing the scope of matriculation exam graduates in 4 and 5-unit Math and in Hebrew, in the community of Rahat



The percentage of students taking matriculation exams in 4 and 5-unit Math in the community of Rahat (a predominantly Bedouin city in the Southern District of Israel) is currently set at about 15%. This percentage is significantly low compared to the percentage of examinees in the general population, which is 36%. The objective is to double the percentage of teenagers in Rahat who complete their matriculations with 4 or 5 units in Math. Strengthening educational results in Math in Rahat will have direct impact on reducing social gaps in Israel, and as a result on the growth of Israeli economy.

The Bond was launched during the summer of 2019, pursuant to government decision 2397 regarding the development of the Bedouin communities in the Negev region. It is a Cost-Oriented Bond model, according to which the government pays for positive changes defined as national priority. In the case in question, the Ministry of Education secured the services of SFI, and intends to pay a success commission if the rate of students taking the Extended Math exam (4 or 5 matriculation units) will exceed 24%.

The Bond raised NIS 14.8 million from 7 Israelis and foreign investors. The intervention program, designed to span 6 years, is operated by Beit Yatziv (a Rashi Foundation affiliate) and will be participated by more than 1,200 10th to 12th-grade students.

4. Preventing elderly loneliness

In March 2020, a municipal Social Impact Bond was launched for the first time, in collaboration with the City of Tel Aviv - Jaffa.

Loneliness of older adults, over the age of 65, is associated with a 5.8-fold increased risk for depression in older people, and a 2.1-fold increased risk for suffering dementia. It is also associated with a 3.3-fold increase in the risk for long-term hospitalization requiring full-time care, and a 1.9-fold increase in the number of times older adults contact their family doctor. In order to reduce this phenomenon, a program, designed to strengthen the ability of older adults to cope with loneliness, was developed. To finance this project, NIS 2.3 million were raised from social investors, and for the first time, 25% of the required funds will be raised from the public using the Crowdfunding mechanism.

The project will be operated for two and a half years, during which time improvement in the level of loneliness will be measured according to the UCLA scale globally customary for measuring loneliness, and at the end of which the percentage of conservation of the loneliness level will be measured relative to the baseline data. The index for project success was defined as an increase of more than 8% in conservation and improvement percentage, and an increase of more than 25% in the ratio between conservation and improvement. Only if at the end of the initial operation period, the indices reach these values, will the City of Tel



Aviv-Jaffa, jointly with the Tel Aviv-Jaffa Foundation, reimburse investors with the amount paid, respective of the measures of success.

Part E: The Case Study

This Case Study deals with a Prisoner Rehabilitation SIB developed by SFI in collaboration with the Prisoner Rehabilitation Authority.

The Bond was not executed since the consent of the involved body, the PRA (Prisoner Rehabilitation Authority), was not achieved.

During discussion in class, we recommend moving forward stage by stage, in accordance with the project plan prepared by the students, and at the same time examine how these staged were implemented in SFI's case.

Relevant questions during the discussion might include the following: What is the social problem? Who are the players involved? What is the proposed solution? What method was used to measure success facilitating payment to investors? What is the savings rate determined for the State? What is its' composition? What is the involvement body? Who are the proposed service providers? What yield rate is promised to investors? How much is left in the hands of the State?

A Social Impact Bond development consists of six stages:

1. A description of the Social Problem

Define the problem. Provide definitions for terms used to describe the problem.

The problem: ex-prisoners' re-incarceration (a second or subsequent incarceration). The actual re-incarceration of ex-prisoners constitutes a budgetary and social burden on the State and its citizens.

Recidivism: “a person's relapse into criminal behavior, often after the person receives sanctions or undergoes intervention for a previous crime”⁵.

Target population: prisoners.

The Solution: prisoner rehabilitation is an action designed to reduce the phenomenon of ex-prisoner re-incarceration. Re-incarceration is essential for creating a safe society

⁵ <https://nij.ojp.gov/topics/corrections/recidivism>



2. The Field of Action

Becoming thorough familiar with the Field of Action, mapping involved players, areas of responsibility and their modes of operation. Understanding the prisoner rehabilitation process in order to understand the players, mainly Israel Prison Service and the Prisoner Rehabilitation Department.

3. a. The Measurement Model

Examining problem costs in order to determine the Savings Rate. Building a problem-specific Prediction Model. In order to determine a model, define the Explanatory Variables as well as the nature of the explained variable. Determine the period of time for measurement.

Costs of crime include the costs of incarceration, crime damage economic worth, Ministry of Welfare costs, employment implications.

The Savings Rate (total costs) is NIS 571,000 per prisoner.

Explanatory variables: marital status, age, number of previous incarcerations, number of days in current incarceration, type of release, addiction, violent offense, property crime, drug offense, public order offense, traffic offense, fraud offense, offense of national security, felony against human life.

Explained variable: Recidivism rate.

A prediction model indicated that the rate of recidivism is 31.7%.

Time period: 4 years.

3. b. Effective Intervention

During this stage, answer the following questions: What are the dynamic/static factors involved? Impact will be realized on the changeable dynamic factors. How do we intervene effectively? Literature on factors that contribute to the resolution of the problem. What intervention programs were implemented in the past, in Israel and around the world?

Static factors were specified above under explanatory variables.

Dynamic factors: personality and behavioral characteristics, employment and education.



A decision was made to get involved in the employment factor. Literature reinforces the contribution of continuity of employment, preservation of employment, integration of employment and additional training.

The Afikim program (program assumptions, objectives and findings were presented) was previously implemented in Israel as an employment retention program for ex-prisoners.

4. a. Social Value versus Economic Value

Measuring the total cost of the program and comparing government benefit/savings.

Total cost 12 million for 360 prisoners, in other words 33,000 per prisoner.

State savings 571,000 per prisoner.

4. b. Interested Stakeholders

Bond interested stakeholders vary respective of the Field of Action and include its' public leadership, service providers, investors and target audience. All interested stakeholders should be identified, their main motivation for promoting the Bond should be analyzed and ways of maintaining contact with them in each one of the Bond's stages should be planned.

Public Leadership includes the Ministry of Finance and the Ministry of Public Security. Specifically: Ministry of Finance Budgets Department: head of the Budget Department, Public Security coordinator at the Ministry of Finance, Director of Planning Division at the Ministry of Defense, a representative of the Comptroller General's office.

Partners: PRA (Prisoner Rehabilitation Authority), IPS (Israel Prison Service).

Budget and Operations management: SFI (Social Finance Israel).

Service Providers: The Joint-TABAT and The Afikim program.

Investors: recruitment has not started yet.

5. Intervention Program Operation Model

At this stage, an elaborate work plan is being prepared including initial criteria, pre-launch program construction costs, defining measurement period and Program integration with other existing public services.



At the same time, due diligence is conducted for potential service providers including past successes and experience in carrying out similar programs, the ability to assimilate the scope of work required by the Bond in the organization, and the organization's economic stability.

Defining the Population: formal and dynamic criteria.

Working Model: Participant recruitment and screening stage, activity within the prison, community accompaniment.

Financial assistance within the program.

6. The contract outlines

Between which parties was the contract signed? What are the responsibilities of each party? What is the planned intervention program? What is the success measurement method? What is the planned program financing by investors? What is the planned government funding?

The contract should be signed between the governmental representatives and SFI. Areas of responsibility of the operator, the IPS and the PRA were specified. The Intervention Program included: location (3 prisons), dates, cycles of activity, number of candidates. Measurement of success was defined by comparing the results to the prediction model, success reviewed by an accountant. For investors' funding, an agreement between the company and the investors being established. For the State financing, payment of the consideration will be performed 4 times. Success-based payment, the consideration will be calculated by an accountant. Maximum payment was set at NIS 20,467,514.

Dilemmas for Discussion in Class

After reviewing the various stages and understanding what actions are required in each stage, a discussion may be developed with students in respect of advanced issues associated with Social Impact Bonds, such as:

1. What factors leading to the success/failure of Social Impact Bond development, can be learned from this event?
2. How can one avoid a situation in which public or social bodies who, as part of their daily function, are engaged in work similar to that proposed by the intervention



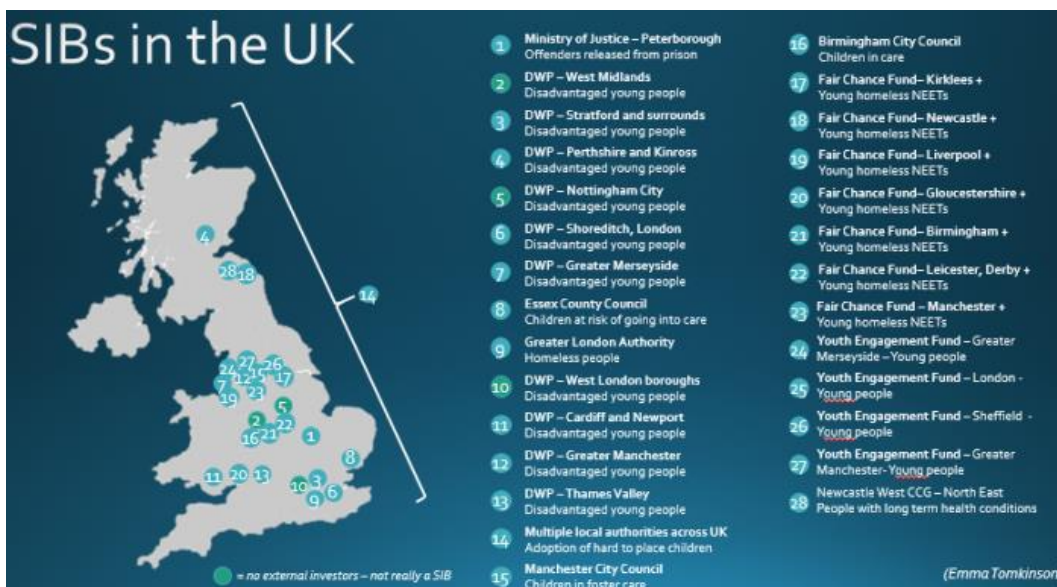
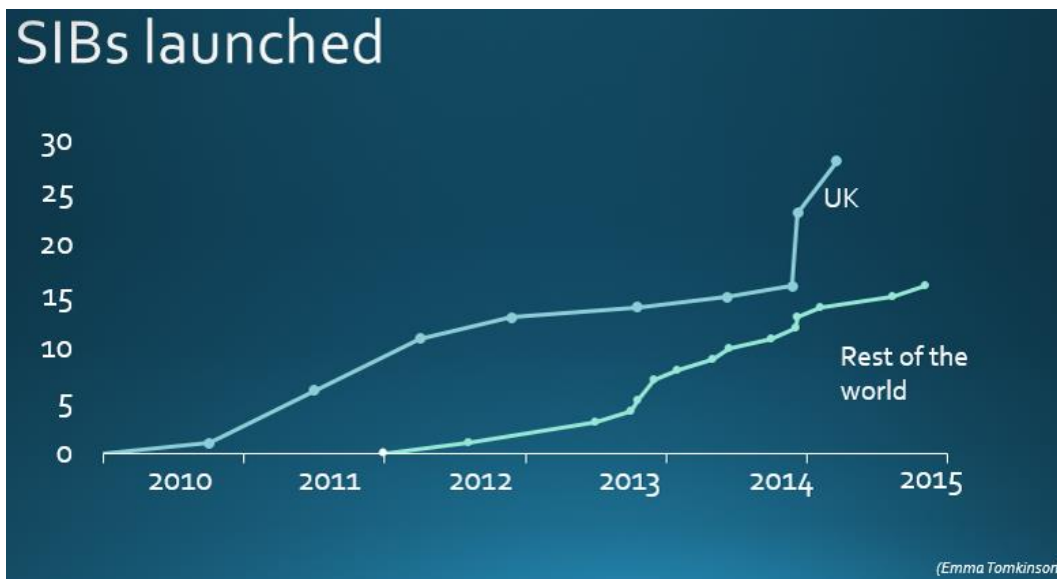
program, are threatened by the project, and rather make them understand that it can serve as a tool for their own specialization and for improving the positive impact of their work? Moreover, will they be able to relate to the Bond as a new tool in their toolbox that can generate more successes for them?

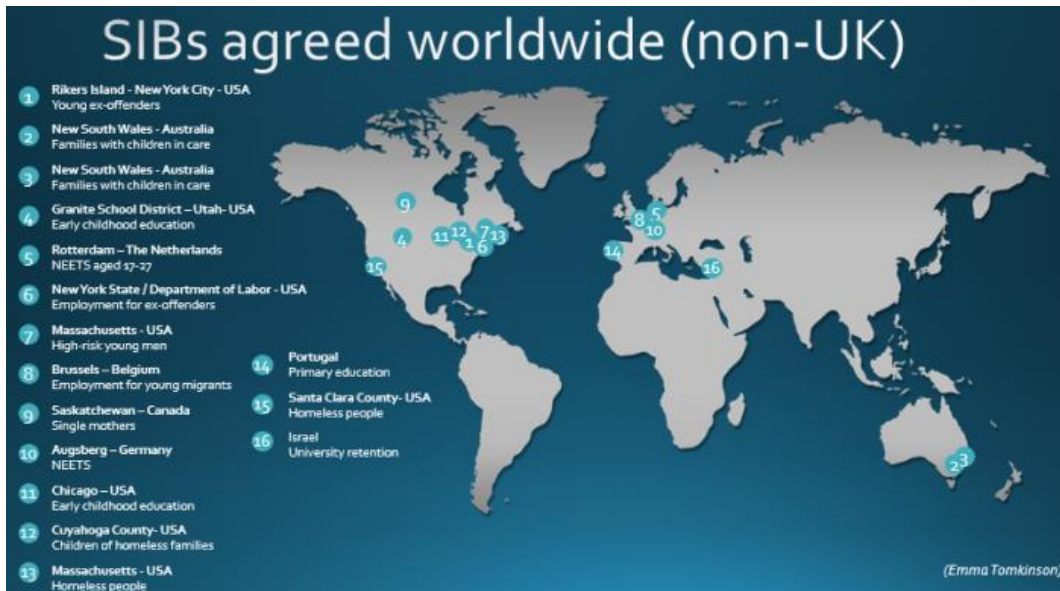




Appendix: Trends of SIBs launched worldwide

Source: <https://emmatomkinson.com/2014/02/14/social-impact-bond-sib-uk-v-world-map/>





References

Gustaffson-Wright, E., Boggild-Jones, I., Nwabunnia, O., & Osborne, S. (2021). Social and Development Impact Bonds by the Numbers.

Bond related information websites worldwide:

- <https://www.gov.uk/government/news/centre-for-social-impact-bonds-new-tools-launched>
- <http://emmatomkinson.com/category/world-map/>
- <http://www.instiglio.org/en/projects>