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Establishing Social Impact Bonds in Continental Europe

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Establishing Social Impact Bonds in Continental Europe

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HARVARD Kennedy School

JOHN F. KENNEDY SCHOOL OF GOVERNMENT



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*“Nothing is more stirring than the recognition of great public purpose.
Every age is marked by innovation and daring – by the ability
to meet unprecedented problems with intelligent solutions”*

– John F. Kennedy – March 1962

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Foreword

On January 23 2014, with the support of the Brussels regional government, the management committee of the Brussels Employment Agency (i.e., Actiris¹) agreed to launch the first Social Impact Bond (SIB) in Belgium, a ground-breaking mechanism to fund social innovation. This event represents a landmark breakthrough as it is one of the first times a mechanism of Social Impact Bond is effectively implemented in continental Europe.

This publication traces the research efforts that have been led to support the effective launch of this first Belgian Social Impact Bond, from the identification of relevant social issues to the economic impact modelization of the mechanism.

According to the final agreement behind this first SIB in Belgium, an innovative social services provider (i.e., Duo for a Job²) based in Brussels will receive funding from a consortium of social investors to finance its operations for 3 years. The social services provided will consist of intensive intergenerational and intercultural coaching to help unemployed young individuals from immigrant families to successfully reintegrate the Belgian job market.

After a period of 3 years, an independent evaluator will assess the success of the social services provided. Depending on the success of the program, investors will be reimbursed (or not) by the Brussels Employment Agency and will perceive a financial return that varies according to the social performance of the program. At all levels of social performance, the amount paid back by the Brussels Employment Agency to the investors is only a marginal proportion of tax-payer money savings generated by the program (i.e., reduced unemployment benefits and increased tax revenues).

Our experience in Belgium demonstrates that SIBs can be valuable instruments for European governments. SIBs are not stand-alone solutions to address European social issues but they can be an effective way to reduce financial risks for public actors to test innovative approaches and to unleash the potential of social entrepreneurship.

This project would not have been possible without the early support of the Mossavar-Rahmani Center for Business and Government at Harvard and Professor J. Liebman, a truly inspiring pioneer in the field of social finance. I also want to thank the partners of the project implementation for demonstrating significant commitment and drive for social change³.

¹ More info at www.actiris.be

² More info at www.duoforajob.be

³ Vanessa Lion, Nicolas Janssen and Maxime Parmentier from the project team, Charlotte Boucquéau, Francois de Borchgrave and Charles-Antoine Janssen from Kois Invest, Fatine Daoudi, Nathalie Descheemaeker, Grégor Chapelle, Frans De Keyser and Stéphane Laloux from Actiris, Matthieu Le Grelle, Serge Raicher and Frédéric Simonart from 'Duo For A Job', Etienne Denoël from McKinsey, Irène Mathy, Hadrien Chef, Paul Dermine and Bruno Lombaert from Stibbe and our partners in the Brussels government.

Executive Summary

Social Impact Bonds (or pay-for-success contracts) are multi-stakeholder partnerships designed to provide innovative social services. Private investors engage funding for effective non-profit organizations to carry out their mission, and the state reimburses investors (plus a pre-determined return on their principal investment) if and only if the non-profit organization has met pre-specified, verifiable, performance targets.

Since the early pilot in the prisons of Peterborough (UK) in 2010, the concept of Social Impact Bond has generated significant interest in multiple countries. SIB initiatives are now flourishing around the world but so far cases are limited in continental Europe. However, today more than ever, being under tight budgetary pressure and facing an ever increasing demand for social services resulting from the long-lasting effects of the economic crisis, European governments need to improve the efficiency of social services provision. Social Impact Bonds can be a credible answer to that issue by drastically innovating in the way social services are delivered and unleashing the potential of social entrepreneurship in Europe.

This paper proposes to investigate potential hurdles and practical solutions to leverage the Social Impact Bond model to provide quality social services at a lower cost in continental Europe. Given the early stage of Social Impact Bonds' development, an operational approach has been adopted. The following initiatives have been sequentially performed:

Using a set of relevant criteria, four service areas that could potentially be targeted in Belgium have been selected: (i) juvenile and adult recidivism, (ii) chronic homelessness, (iii) education (school dropout & early childhood readiness) and (iv) workforce empowerment. For each of these four service areas, proven social interventions that could be replicated in Belgium have been identified. *(See Section 1.1, 1.2)*

With that information, several political and public stakeholders were met in Belgium during the winter 2012-2013. Two service areas were deprioritized but a preliminary agreement has been reached with the Belgian Ministry of Justice to investigate further a pilot on adult recidivism and with the Brussels Employment Agency (i.e., Actiris) to move forward on workforce empowerment. *(See Section 1.3)*

For the two service areas previously selected, the type of intervention that could be financed with a Social Impact Bond and the set-up of such an intervention has been defined. *(See Section 2.1)*

- On workforce empowerment, the intervention should be targeted at young unemployed individuals without any form of higher education and should be focused on providing these individuals with a short-term professional training to

specific skills required in sectors facing a critical labour shortage. Such a program could be a replication of the US ‘*Year Up*’ program.

- On adult recidivism, the intervention should prioritize young male offenders with multiple short prior stays in prison. Cognitive-behavioural therapies were identified as particularly well-suited interventions.

For these two Social Impact Bonds, we formulated specific recommendations on the timing of the pilot, metrics to be used and preferred evaluation method to identify a valid control group. (See Section 2.2)

Preliminary financial estimates indicate a relatively high cost-benefit ratio for both interventions ranging between 12 and 20. Taxpayer savings associated with those preventive interventions are expected to be significant given the absolute high level of remedial social spending of the Belgian welfare state. (See Section 2.3)

Based on preliminary evaluation of the Belgian legal and institutional context, Social Impact Bond in Belgium should be structured as an ‘*Investor-Provider Partnership*’ where the service provider is at the core of the mechanism and enters directly in a contractual agreement with the government. Analysis suggests that a single stage procurement process in which bidding service providers will be benchmarked against a predefined set of criteria is best suited for a Social Impact Bond mechanism in Belgium. Based on a review of relevant legislation and literature, a preliminary timeline and set of criteria for the procurement process is provided. Finally, the different contractual agreements that should be designed to support the implementation of the mechanism are briefly presented. (See Section 3.1, 3.2, 3.3)

Key learning points for public authorities, social entrepreneurs and social investors considering Social Impact Bonds as an alternative way to finance high-quality social services in continental Europe are formulated in the final section of this paper:

On public authorities – European public authorities may be reluctant to this kind of innovative financing mechanisms due to the implication of private investors in the provision of social services which is rather unusual in European social democracies. Positioning the Social Impact Bond as ‘*insurance contracts on the success of social programs*’ has been effective to overcome this initial hurdle. (See Section 5.1)

On non-profit organization – Given the high level of public funding in Europe, Social Impact Bonds may be perceived by non-profit organizations as a process that can crowd out public funding and substitutes it with conditional private funding with an outcome obligation attached to it. Positioning SIBs as ‘*seed capital for innovative social programs*’ has been effective to change that perception. Moreover, the tight budgetary situation facing many European states may represent an opportunity for Social Impact

Bonds as many non-profit organizations are forced to explore alternative financing mechanisms if they want to keep their level of ambition. *(See Section 5.2)*

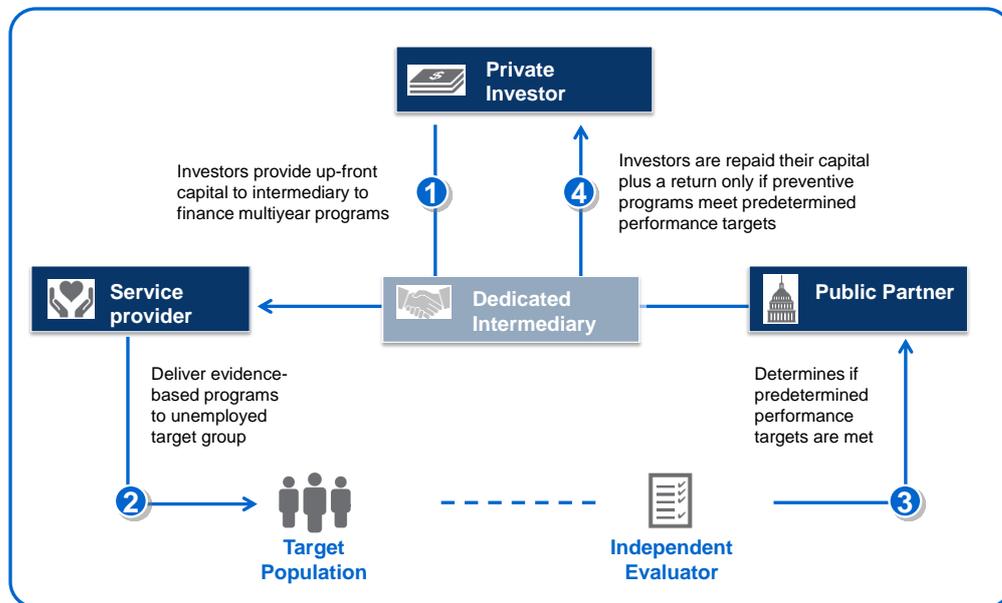
On private investors – The relative scarcity of philanthropic funding in Europe may be seen as an additional hurdle to Social Impact Bonds. However, as the odds of positive cost-benefit ratio for preventive interventions are higher in European welfare states, the risk profile of an SIB investment is also significantly different. Hence, even though the practice of philanthropic investment is only marginal in Europe, private funding of SIB shouldn't be considered as unrealistic as a broader range of investors can be tapped into. *(See Section 5.3)*

Introduction

OVERVIEW OF SOCIAL IMPACT BONDS MECHANISM

Social Impact Bonds (or *pay-for-success contracts*) are multi-stakeholder partnerships designed to provide social services while saving the state money by monetizing the financial gains of improved outcomes. Private investors provide funding for effective non-profits to carry out their mission, and the state reimburses investors (plus a pre-determined return on principal investment) *if and only if the non-profits meet pre-specified, verifiable, performance targets*.⁴ **Exhibit 1** below details the mechanism⁵.

Exhibit 1



Though the model has still to be proven effective over its entire lifecycle⁶, Social Impact Bonds and other Pay-For-Success financing mechanisms have attracted much attention from the public sector, social service providers, the philanthropic community and impact investment firms. Several advantages of the SIB mechanism explain this success⁷:

⁴ “*Social Finance, Inc.*”, Harvard Business School, Case Study 9-212-055, January 2012

⁵ Adapted from “*Social Impact Bonds : An Overview*”, Social Finance Inc., April 2012

⁶ The pioneering Social Impact Bonds project in Peterborough (UK) has been launch in November 2011 and has an expected duration of 7 years – See **Appendix I**

⁷ See for example:

LIEBMAN, J., “*Social Impact Bonds – A promising new financing model to accelerate social innovation and improve government performance*”, Center For American Progress, February 2011

1. **Ability to scale up proven social interventions** – Social Impact Bonds help quality programs to reach scale and allow rewarding the social sector for investment in what works;
2. **Support for government’s goal of performance transformation** – Under a Social Impact Bond mechanism, the government pays for outcomes rather than activities and therefore increases efficiency of the use of taxpayer’s money. Social Impact Bonds transfer intervention’s execution risk to an external party which is better able to manage it;
3. **Shift focus of state intervention from remediation to prevention** –The government pays for preventing costly outcomes *ex-ante* rather than correcting those *ex-post*;

MOTIVATION FOR THIS PAE

Since the early pilot in the prisons of Peterborough (UK) in 2010, the concept of Social Impact Bond has generated significant interest in multiple countries. SIB initiatives are flourishing around the world but so far have been mostly restricted to Anglo-Saxon countries⁸ (i.e., UK, US, Ireland, Australia).

In continental Europe, as social services are almost exclusively provided by the government and as the reluctance towards private sector involvement in the provision of social services is usually stronger, the attention paid to Social Impact Bonds has been limited.

However, today more than ever, being under tight budgetary pressure and facing an ever increasing demand for social services resulting from the long-lasting effects of the economic crisis, European governments need to improve the efficiency of social services provision. Social Impact Bonds can be a credible answer to that issue by drastically innovating in the way social services are delivered and unleashing the potential of social entrepreneurship in Europe.

The crisis in continental Europe provides a one-time opportunity to implement innovative policies and explore alternatives to current models. This PAE proposes to investigate potential hurdles and practical solutions to leverage the Social Impact Bond model as a way to provide quality social services at a lower cost in continental Europe.

“From Potential to Action: Bringing Social Impact Bonds to the US”, McKinsey & Company, May 2012
 RESNER, L., GODEKE, S., *“Building a Healthy & Sustainable Social Impact Bond Market”*, Godeke Consulting with support from Rockefeller Foundation, December 2012

⁸ See **Appendix III**

PAE STRUCTURE

Given the early stage of Social Impact Bonds' development and the lack of related research and projects in continental Europe, we decided that an operational approach was best suited rather than a more academic and theoretical approach. Practically, we spent nearly a year designing and preparing the launch of a Social Impact Bond pilot project together with a small support team based in Belgium and supportive public partners.

The first three sections of this PAE trace and synthesize the output of the analysis and work we performed to support our operational efforts in Europe:

- **Section I** is focused on initiatives led to originate SIBs deals and convince public partners in Europe to consider the implementation of a Social Impact Bond pilot with our team;
- **Section II** details the social intervention and key parameters of the mechanism (e.g., metrics, timing, evaluation and financials);
- **Section III** investigates further the structure, procurement process and legal prescriptions of our Social Impact Bond project;

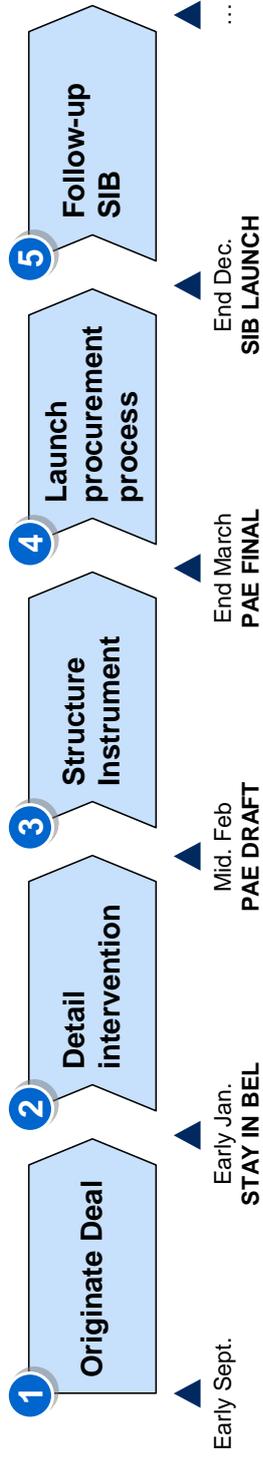
Those 3 sections, related timing and sub-sections are detailed in **Exhibit 2** below.

Beyond its academic purpose at the Harvard Kennedy School, this PAE is, hopefully, the preliminary work to the effective implementation of an SIB mechanism in Belgium.

Section IV of this document synthesizes very shortly the progresses made so far and details next steps for the project beyond the PAE process.

Finally, **Section V** presents a few recommendations and best-practices targeted to European social entrepreneurs and investors considering Social Impact Bonds as an alternative way to finance high-quality social services.

Establishing SIBs in continental Europe – PAE Timeline



- 1.1** Select relevant service areas
- 1.2** Vet proven models of intervention
- 1.3** Raise interest from public partners
- 2.1** Refine selected intervention design
- 2.2** Define metrics and evaluation design
- 2.3** Conduct financial modeling and articulate cash-flows
- 3.1** Define structure of investment vehicle
- 3.2** Define procurement process
- 3.3** Design of contractual agreements

- Secure legal framework
- Launch procurement process
- Select provider-investor partnership
- Formulate and issue contractual agreements
- Provide active ongoing project management
- Make course corrections as needed
- Coordinate third-party evaluation

Section 1 – Originate Deals⁹

SECTION OUTLINE

Section 1.1 – Based on an index of existing Social Impact Bond projects, we listed service areas and social issues that could be addressed in Belgium using Social Impact Bonds. Using four specific criteria, four service areas have been selected: (i) juvenile and adult recidivism, (ii) chronic homelessness, (iii) education (school dropout & early childhood readiness) and (iv) workforce empowerment

Section 1.2 – For those four identified service areas, based on relevant literature, we researched proven interventions that could be replicated in Belgium. We identified interventions for all those service areas except for school dropout.

Section 1.3 – With that information, we met several political and public stakeholders in Belgium during the winter 2012-2013. Two service areas were deprioritized (education and chronic homelessness) because of lower feasibility and/or lower political willingness to pursue a SIB pilot project. We decided to move forward with two service areas (adult recidivism and workforce empowerment).

SECTION 1.1 – SELECT RELEVANT SERVICE AREAS

The objective of this subsection is to select relevant service that could be further investigated to launch a pilot of Social Impact Bonds in Belgium¹⁰.

Index existing Social Impact Bonds projects worldwide

A first step in our approach consisted of indexing existing Social Impact Bonds project currently running or in the process of being implemented worldwide as of September 2012.

Appendix III details existing projects and social issues addressed using Social Impact Bonds and other types of Pay-for-Success contracts. This list includes readily identified social issues such as juvenile recidivism and chronic homelessness but also less obvious fields of social intervention such as family planning, elderly support and workforce empowerment.

⁹ A detailed road-map of tasks performed in Section I can be found in **Appendix II**.

¹⁰ This analysis is not suggesting that other service areas than the ones we selected may not be good SIBs candidates in Belgium. For the purpose of this PAE, we had to prioritize only a certain number of areas that we estimated could be good candidates for a SIBs project but that also had the highest likelihood to be accepted by a public partner.

Lay-out criteria to select social issues relevant to Belgium

Based on discussions with local stakeholders, input from Professor Liebman¹¹ and background knowledge on Belgian institutional system, four criteria have been identified to select social service areas that are relevant for a SIB pilot in Belgium. Those four criteria are:

- I. **Existing SIB track-record** (i.e., *is there another credible SIB pilot around the world targeting the same social issue?*) – Easier to design and convince partners if extensive research has been performed and track record of success established;
- II. **Measurable, scalable and beneficial outcome of intervention in Belgium** (i.e., *is the outcome of the social issue easily observable, scalable and measurable with limited quantitative sophistication?*) – SIBs require the measurability of the social outcome and scalability of the intervention designed to address it;
- III. **Political support** (i.e., *is there a strong political consensus supporting the outcome of the social issue? Is it at the top of the agenda? Is it politically neutral?*) – Easier to address social issues rallying a broad political consensus and not subject to political interpretations;
- IV. **Single Political Entity** (i.e., *is this social issue managed by a single or multiple government entity? Is it managed at the same layer of governments (federal vs. regional vs. local)?*) – Easier to manage and convince limited number of political stakeholders especially in complex Belgian institutional framework;

Define 3-5 targeted services areas for Belgium

Targeted areas are the result of a qualitative matching between the four criteria defined above and the list of potential services areas. This qualitative matching is purely subjective and is the result of internal team discussion. **Appendix IV** displays visually the result of this qualitative matching process.

From this analysis, we selected four service areas to be further investigated in Belgium: recidivism (both for adult and juvenile population), support for chronic homelessness, education (via teenager school dropout and early childhood readiness) and workforce empowerment (via active labor market programs).

SECTION 1.2 – VET PROVEN MODEL OF INTERVENTIONS

This sub-section identifies proven interventions to address the four selected social issues. The underlying objective of this research is to showcase potential public partners that innovative

¹¹ LIEBMAN, J., “*Social Impact Bonds – A promising new financing model to accelerate social innovation and improve government performance*”, Centre For American Progress, February 2011, p.18

evidence-based interventions do exist and could be replicated using SIBs in Belgium¹². Two criteria have been applied to identify *best-practices* programs:

- i. **Effectiveness of the program** – Existence a wide evidence base documenting the impact of the intervention;
- ii. **Efficiency of the program** – Evidence of positive cost-benefit analysis from taxpayer perspective;

Recidivism

Juvenile population

According to latest meta-analysis¹³, four interventions targeting juvenile recidivism are strongly backed by literature with a measured risk (odds of a positive net present value) ranging from 85% to 100% and a benefit-to-cost ratio higher than 8¹⁴.

Out of those four interventions, preferred intervention is the *Functional Family Therapy* (FFT), a family-based intervention program that has been applied successfully in a variety of contexts to treat high-risk youth and their families. FFT targets young people between the ages of 11 and 18 from a variety of ethnic and cultural groups. It also provides treatment to the younger siblings of referred adolescents. The intervention involves about 12 visits of a specially trained therapist during a 90 days period.

FFT has been preferred over other programs for two reasons:

- **Effectiveness** – FFT impact on juvenile recidivism rate is widely documented in specialized literature. As of April 2012, its impact had been documented by 25 studies including 8 in peer reviewed journals.
- **Efficiency** – FFT is a low-cost intervention with relatively high expected benefits. Indicatively, program costs per participants as computed by WSIPP are \$2,325 with expected benefits of \$34,146¹⁵.

¹² This sub-section relies heavily on meta-analysis of evidence-based policies. Of course, those cost-benefit analysis needs to be updated and tailored to the specific local and institutional context of Belgium, but these analyses provides already an indicative benchmark of different policy options.

¹³ “*Return on Investment: Evidence-Based Options to improve Statewide Outcomes*”, Washington State Institute for Public Policy, April 2012

¹⁴ Those four interventions are (i) Multidimensional Treatment Foster Care – MTFC, (ii) Multi-systemic Therapy – MST, (iii) Functional Family Therapy – FFT and (iv) Brief Strategy Family Therapy – BSFT. See **Appendix V** for further details

¹⁵ “*Evidence-based Juvenile Offender Programs: Program Description, Quality Insurance and cost*”, Washington State Institute for Public Policy, June 2007, p.12

Adult population

Relevant meta-analyses identify effective interventions to reduce recidivism among adult population¹⁶. From those interventions, cognitive-behavioural therapies appear as a particularly effective category of interventions.

Cognitive-behavioural therapies are built on the relationship between cognition and offending. Those therapies assume that deficits in cognitive skills influence social behaviour of individuals. Therefore, these interventions propose to teach social and thinking skills that will enable offenders to be better motivated to *withstand personal, situational, economic and interpersonal pressures towards illegal behaviour*¹⁷. Those interventions encompass a considerable diversity within the range of offender types, outcome variables, and quality of intervention design. In a detailed study, Landenberger et al.¹⁸ identified the “*Reasoning & Rehabilitation*” intervention as one of the most effective and efficient.

Chronic Homelessness

Several types of interventions target the homeless population ranging from mental health interventions to family reunification. Among other, *Permanent Supportive Housing* (PSH) is one that is often quoted in the relevant literature as most efficient. As synthesized by a McKinsey study¹⁹, PSH program *helps homeless individuals live as independently as possible by giving them long-term subsidized housing as well as supportive services including core case management, primary and mental health care, substance abuse treatment, and educational and vocational training*. Although PSH is primarily intended to benefit people who are chronically homeless, mentally ill and “episodic” homeless people can also take advantage of it.

This intervention has been retained as it meets our two criteria:

- **Effectiveness** – About 20 independent studies led in different cities across the US have documented the impact of PSH on post-program outcomes. Among other

¹⁶ PEARSON, F. S., LIPTON, D. S., CLELAND, C. M., YEE, D. S., “*The effects of behavioral/cognitive-behavioral programs on recidivism*”, *Crime and Delinquency*, 48(3), 2002, pp. 476-496

WILSON, D. B., BOUFFARD, L. A., MCKENZIE, D. L., “*A quantitative review of structured, group-oriented, cognitive-behavioural programs for offenders*”, *Journal of Criminal Justice and Behavior*, 32(2), 2002, pp.172-204

¹⁷ ROSS, R. R., ROSS, R. D., “*Programme development through research*”, in R. R. Ross, & R. D. Ross (Eds.), *Thinking straight: The reasoning and rehabilitation programme for delinquency prevention and offender rehabilitation*, Ottawa: AIR Training and Publications, 1995, pp. 25-37

¹⁸ LANDENBERGER, N. A., LIPSEY, M. W., “*The Positive Effects of Cognitive-Behavioural Programs for Offenders: A Meta-Analysis of Factors Associated with Effective Treatment*”, Vanderbilt Institute for Public Policy Studies

¹⁹ “*From Potential to Action: Bringing Social Impact Bonds to the US*”, McKinsey & Company, May 2012, p.17

remarkable randomized control trials studies have been led in Chicago²⁰ and Seattle²¹.

- **Efficiency** – PSH is associated with significant reductions on government spending (police intervention, health care emergencies budget, lower substance abuse rate and recidivism²²)

Education

On the topic of education, we targeted two potential areas: early childhood readiness and teenagers' school dropout.

Early Childhood Readiness

A large body of research on education makes a strong case for early childhood interventions for children in disadvantaged families. Strong evidences show that the absence of supportive family environments harms child outcomes²³. Heckman for example makes a strong case that *if society intervenes early enough, it can improve cognitive capacity, socio-emotional abilities and the health of disadvantaged children*.²⁴ Moreover, these interventions are estimated to have high benefit-cost ratios and long-term rates of return as early interventions promote schooling, reduce crime, foster workforce productivity and reduce teenage pregnancy.

According to Heckman, those interventions early in the life cycle of disadvantaged children have much higher economic returns than later interventions such as reduced pupil-teacher ratios, public job training, convict rehabilitation programs, adult literacy programs, tuition subsidies or expenditure on police. Using Heckman's words, *"the longer society waits to intervene in the life cycle of a disadvantaged child, the more costly it is to remediate disadvantage"*²⁴.

Based on this research, several interventions can be designed ranging from large scale programs (e.g., US Head Start program) to locally targeted interventions (e.g., Washington

²⁰ SADOWSKI, L.S., KEE R., , VANDERWEEE, T.J., BUCHANAN, D., *"Effect of a housing and case management program on emergency department visits and hospitalizations among chronically ill homeless adults: a randomized trial"*, JAMA, (2009) May 6, 301(17):1771-8

²¹ LARIMER, M. E., MALONE, D. K., GARNER, M.D., ATKINS, D.C., BURLINGHAM, B., LONCZAK, H.S., TANZER, K., GINZLER, J., CLIFASEFI, S.L., HOBSON, W.G., MARLATT, G.A., *"Health care and public service use and costs before and after provision of housing for chronically homeless persons with severe alcohol problems"*, JAMA, (2009) Apr 1, 301(13):1349-57

²² CULHANE, D. P., *"Public service reductions associated with placement of homeless persons with severe mental illness in supportive housing"*, Housing Policy Debate, Vol. 13, No. 1 (2002), pp. 107–63.

²³ FELITTI, V. J, ANDA, R. F., *"The Adverse Childhood Experiences (ACE) Study"*, Centres for Disease Control and Kaiser Permanente, (2005)

²⁴ HECKMAN, J. J., *"Schools, Skills, and Synapses"*, Discussion Paper Series, IZA DP No. 3515 Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor, (2008)

State's Learning Assistance Program). Washington State's *Learning Assistance Program* (LAP) is a funding stream for school districts to offer remediation to underachieving students²⁵. LAP primarily pays for teachers and instructional aides to provide tutoring, small group instruction, and extended learning time. Educators use assessment tests, teacher feedback, and other measures to identify eligible students. Early evaluation of this program suggests a significant impact of LAP on student achievement.²⁶ For the purpose of designing a SIB on early childhood readiness in Belgium, the latter type of smaller interventions targeted to specific schools could be investigated further.

School Dropout

Dropout prevention interventions commonly provide intensive services to a group of teenager students that are most likely to drop out. Students enrolled in this kind of program are selected based on several 'risk-factors' that are correlated with dropping out. These 'risk-factors' can include personal demographics, family background, past school performance, personal/psychological characteristics, adult responsibilities, and school or neighbourhood characteristics²⁷.

As noted by Dynarski and Glaeson²⁸, "*if programs using this approach are to be effective in reducing the dropout rate, then risk factors must effectively identify the students who would, in fact, drop out if they did not receive program services*". The main result of the analysis of Dynarski is that risk factors that are commonly used by dropout prevention programs to select participants do not identify dropouts effectively. Indeed, best predictors of drop-out behaviour are non-observable factors such as peer group effects, psychological factors, random transitory events (parents' divorce, pregnancy) that are only indirectly associated to risk-factors used to enrol students in programs. As a result, even programs with highly effective dropout prevention services are unlikely to reduce the dropout rate in a school, because those programs are unlikely to identify the students who are likely to drop out. These programs are likely to serve students who would remain in school regardless of the intervention.

In conclusion, unless programs can efficiently identify the students that are destined to drop out without intervention, they cannot prevent these students from dropping out. The case for

²⁵ PENNUCCI, A., LEMON, M., ANDERSON, L., "*How Does Washington State's Learning Assistance Program Impact Student Outcomes?*", Final Report. (Document No. 12-08-2201), Washington State Institute for Public Policy, (2012)

²⁶By the close of 2015, three years of individual-level data will be available to replicate this analysis with greater precision.

²⁷ AGODINI, R., DYNARSKI, M., "Are experiments the only option? A look at dropout prevention programs", *The Review of Economics and Statistics*, 86(1): 180–194, February 2004

²⁸ GLEASON, M., DYNARSKI, M., "*Do we know whom to serve? Issues in using risk factors to identify dropouts*", A Research Report from the School Dropout Demonstration Assistance Program Evaluation, June 1998

an efficient intervention aiming at reducing school dropout is therefore harder to make, hence the case for a successful SIB targeting school dropout.

Workforce empowerment

As a result of structural unemployment, European states have been leading active labor market programs since the early eighties. Those programs can be best described as targeted policies to increase the efficiency of the job market functioning. Those policies are opposed to general employment or macroeconomic policies. The OECD draws three types of active labor market policies²⁹:

- **Job Search Assistance Programs** (or Public Employment Services) includes the activities of job placement, counseling, vocational guidance and referring job-seekers to available slots;
- **Labor market training** (i.e., classroom or on-the-job training programs) is focused on vocational and remedial training for unemployed adults;
- **Subsidized employment** covers targeted measures to provide employment for the unemployed (e.g., hiring subsidies paid to private businesses to hire unemployed workers, assistance to unemployed persons who wish to start their own business)

Several meta-analyses benchmark econometric evaluations of active labour market policies led in Europe. For example, Kluve³⁰ and Kelly et al.³² assess the impact of different types of active labour market policies on post-program employment. Rather than contextual factors such as labor market institutions or the business cycle, they conclude that it is almost exclusively the program type that matters for program effectiveness:

- Subsidized employment programs have the least favorable impact estimates;
- Job search assistance programs have relatively significant impacts but in the short-run only;
- Labor market training programs, on the opposite, tend to demonstrate better outcomes in the medium/long-run than in the short-run;

An ideal active labor market intervention would therefore combine the above-mentioned two components: a job search assistance program to favor a short-term post-program transition to

²⁹ MARTIN, J. P., GRUBB, D., “*What works and for whom: A review of OECD countries’ experiences with active labour market policies*”, Swedish Economic Policy Review, Vol. 8, pp.9-56, (2001)

³⁰ CARD, D., KLUVE, J., WEBER, A. , “*Active Labour Market Policy Evaluations: A Meta-Analysis*”, IZA Discussion Paper No. 4002, February 2009

³¹ KLUVE, J., “*The effectiveness of European active labour market policy*”, RWI Discussion Papers, No. 37, (2006)

³² ELISH, K., MCGUINNESS, S., O’CONNELL, P. J., “*What Can Active Labour Market Policies Do?*”, ESRI, November 2011

the job market coupled with labor market training to ensure employability over the longer term.

SECTION 1.3 – RAISE INTEREST FROM PUBLIC PARTNERS

This subsection briefly summarizes the output of the various meetings led in Belgium with the government and several public agencies between October 2012 and early January 2013. The objective of these meetings was to initiate the process of launching a Social Impact Bond pilot in Belgium in a least one of the four service areas we had selected and studied.

As a result of these meetings, two service areas were deprioritized (education and chronic homelessness) because of lower feasibility and/or lower political willingness to pursue a SIB pilot project. However, interest was raised from public counterparts to move forward with two service areas (adult recidivism and workforce empowerment).

Outcome of meetings and research on Recidivism

On November 30, our team met with the Chief of Cabinet of the Belgian Minister of Justice³³ and his team to present a potential application of SIBs to the issue of recidivism in Belgium.

After answering two rounds of additional technical questions³⁴, the Cabinet of Justice agreed on the principle to move forward with the investigation of an SIB pilot project in Belgium targeted on recidivism and to enter an operational phase where the intervention and structure the instrument will be further detailed.

Outcome of meetings and research on Chronic Homelessness

Multiple contacts have been made to test the relevance and the public interest to finance a “*Permanent Supportive Housing*” (PSH) intervention through a SIB mechanism in Belgium.

Two conclusions emerged from this work. First, PSH is indeed a well-targeted and promising intervention to address the issue of chronic homelessness within the Belgian context. Second, a PSH project jointly led by “*Infirmiers de Rue*”³⁵ (Ashoka Fellows) and by Koïs Invest, is in the process of being implemented in Belgium. This project aims to test the PSH intervention by performing a first test on a small size building with a mix of private and public funding. Hence, at this stage of project, additional funding provided by a SIB mechanism is not needed. As the final objective is to scale this initiative by *setting up additional buildings*

³³ The Minister of Justice is Mrs. Annemie Turtelboom (Open VLD) and her Chief of Cabinet is Mr. Pierre Wilderiane. We would like to thank Mrs. Alexia Bertrand and Mr. Nicolas Janssen for having made that meeting possible and for their constant support and intermediation in the project

³⁴ Presentation documents and technical answers are available upon request.

³⁵ More info at <http://www.infirmiersderue.org>

across Brussels to significantly reduce homelessness in Brussels³⁶, Social Impact Bonds may be considered as growth capital at a later stage of the project.

Outcome of meetings and research on Education

From meetings led in Belgium, early childhood seemed to be an interesting service area to focus on in Belgium³⁷ and the intervention considered (i.e., learning assistance program) received positive feedback³⁸.

However, despite this favourable context, launching a Social Impact Bond on early childhood readiness appeared hardly feasible in Belgium for at least 2 reasons.

- It is difficult to operationally define an external variable that could be used to benchmark the students' performance across schools as there is no common standardized test performed to test students' performance in Belgium;
- Taxpayer money savings generated by the intervention are likely to be too diffused to be captured directly in a reasonable time period in the budget of the public SIB partner.³⁹

Outcome of meetings and research on Workforce Empowerment

On December 17 2013, the top leadership of Actiris, the Brussels Employment Agency expressed strong interest in leveraging an SIB mechanism to kick-off a new program combining professional training for specific qualifications and job search assistance services. Agreement was taken to move forward with the project and detail further its operationalization.

³⁶ “*Tackling Chronic Homelessness with Personal Support and Permanent Housing*”, Infirmiers de Rue & Kois Invest, Internal Presentation, July 2012

³⁷ Southern Belgian students have systematically performed poorly on the PISA tests over the last decade. To correct this, there is a vast consensus among the political class and public opinion that, in line with Heckman's findings, the earlier one intervenes to provide remediation to underachieving students the more efficient it is. See for example - BAMPS, N., « *L'éducation, un placement idéal trop négligé* », L'Echo, 6 Novembre 2012

³⁸ A boom in the activity of private remediation services to individual students has been observed over the last few years in Belgium. This has raised legitimate concerns about the reproduction of social inequalities and has also deeply questioned the capacity of the school system to produce socially fair outcomes. See for example - BOUILLON, P., “*Quand le coaching scolaire fait boom*”, Le Soir, 26 Novembre 2012

³⁹ The only taxpayer money savings that would be directly available would originate from a lower year repetition rate (i.e., less students failing to pass to the next grade) and hence a reduced average number of school years per students. Unfortunately this effect is very unlikely to compensate for the costs of the intervention. As shown in a McKinsey Education Practice study in Belgium, decrease in year repetition rate would have to be extremely aggressive (superior to 30%) to cover the cost of a similar intervention. – See “*Pour que la réussite scolaire d'un enfant ne soit pas limitée par son milieu socio-économique*” – Background study for *Teach For Belgium* project, McKinsey Belgium, Internal Document, October 2012

Section 2 – Detail intervention

SECTION OUTLINE

Objective of this second section is to define practically the type of intervention that could be financed with a SIB for the two selected social issues and detail further the set-up of such an intervention.

Section 2A focuses on the issue of **workforce empowerment** in the Brussels region.

Section 2A.1 – Based on in-depth analysis of the unemployment structure in Brussels, intervention should be targeted to young unemployed individuals without any form of higher education. The intervention should focus on providing these individuals with a short-term professional training to specific skills required in sectors facing a critical labour shortage. Such a program could be a replication of the US ‘*Year Up*’ program.

Section 2A.2 – Three outcomes of the program should be monitored and defined as performance thresholds for the project: short-term employment, long-term employment and variation in earnings. Given that participation in the program is likely to be voluntary, running a randomized control trial between programs applicants appears as the sole option to design a valid control group. A 5-year pro-format SIB pilot which includes 3 years of service delivery and 2 years during which performance is measured is recommended.

Section 2A.3 – Preliminary financial estimates indicate a relatively high cost-benefit ratio for the intervention. Service cost estimates ranges between 2,000€ and 2,500€ per individual enrolled in the program. Yearly taxpayer savings resulting from getting an unemployed individual back to work are estimated to roughly 33,500€ per person. These savings are especially high in the context of the Belgian welfare state characterized by relatively high unemployment benefits and high absolute income tax level.

Section 2B focuses on the issue of **adult recidivism** in Belgium.

Section 2B.1 – To maximize its impact, the intervention should prioritize young male offenders with multiple short prior stays in prison. The intervention should start right at the release from prison. We identified cognitive-behavioural therapies as particularly well-suited interventions. Among those, the ‘*Reasoning & Rehabilitation*’ has a particularly attractive operational model.

Section 2B.2 – Two program outcomes should be tracked and defined as performance thresholds for the project: short-term and long-term recidivism. If participation is voluntary, running a randomized controlled trial between programs applicants is the only option to define a control group. If participation is forced, a clustered benchmark between similar prisons appears as the best compromise between ease of evaluation and results robustness.

Section 2B.3 – This intervention seems financially feasible from a taxpayer perspective. Due to scale economies, cost structure of the program is relatively light in comparison with potential gains associated with a reduction in the number of prisoners. Cost-benefit ratio for this intervention ranges between 15 and 20 and the intervention generate net taxpayer savings as soon as recidivism rate observed in treatment group drops by more than 6% versus control.

Section 2A – Detail intervention for Workforce Empowerment pilot

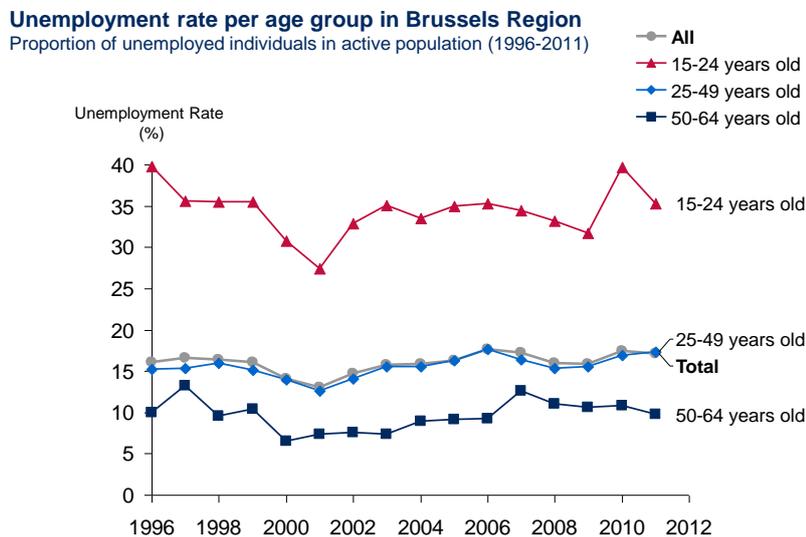
SECTION 2A.1 – CHARACTERIZE TARGET POPULATION & DEFINE INTERVENTION

Unemployment Structure in the Brussels Region

Though being an important employment hub, the Brussels Region is characterized by very high unemployment rate. As of end of December 2012, harmonized unemployment rate reached an overall 17.1%. Only about 50% of the 700,000 job positions in Brussels are filled by individuals living in Brussels. The reminder is filled by workers living in the wide suburbs of Brussels either in Wallonia or in Flanders.⁴⁰ Four key analyses help to better target our intervention:

#1 – SIB intervention should target young unemployed individuals

Exhibit 3



⁴⁰ The Brussels Region is an important employment pole in which the number of active residents (650,000 individuals) is smaller than the number of job positions available in Brussels (702,000 effective job positions in 2011). Only 48.5% of job positions in Brussels (341,000 jobs) are filled by people living in the Region of Brussels. 51.5% of jobs in Brussels (361,000 jobs) are filled by commuters living either in Wallonia (18.1%) or in Flanders (33.4%) - Source : SPF Economy - DGSIE (EFT), computations by *Observatoire bruxellois de l'Emploi*

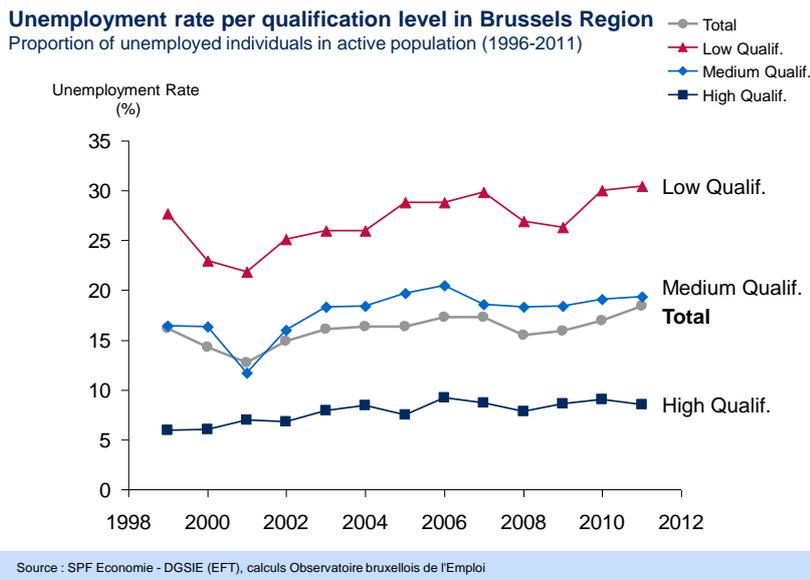
Exhibit 3 above decomposes the unemployment rate in Brussels per age group. While overall unemployment rate over 1996-2011 has remained in the 15-20% range, the unemployment rate for young people aged between 19 and 24 years old has been consistently above 30% over the last decade reaching 40% in specific peaks.

In absolute terms, at the end of 2011, there were 106,000 unemployed individuals registered at Actiris, the employment agency of the Brussels Region. 14.0% of those registered individuals are younger than 24 years old⁴¹.

#2 – SIB intervention should target in priority unemployed individuals with low qualification

Exhibit 4 below differentiates unemployment according to education level. Differences are striking: unemployment in the low qualified group (max. secondary education) is consistently at least four times higher than in highly qualified group (university degree or higher).

Exhibit 4



49.7% of the 106.000 registered unemployed individuals have a low education level.

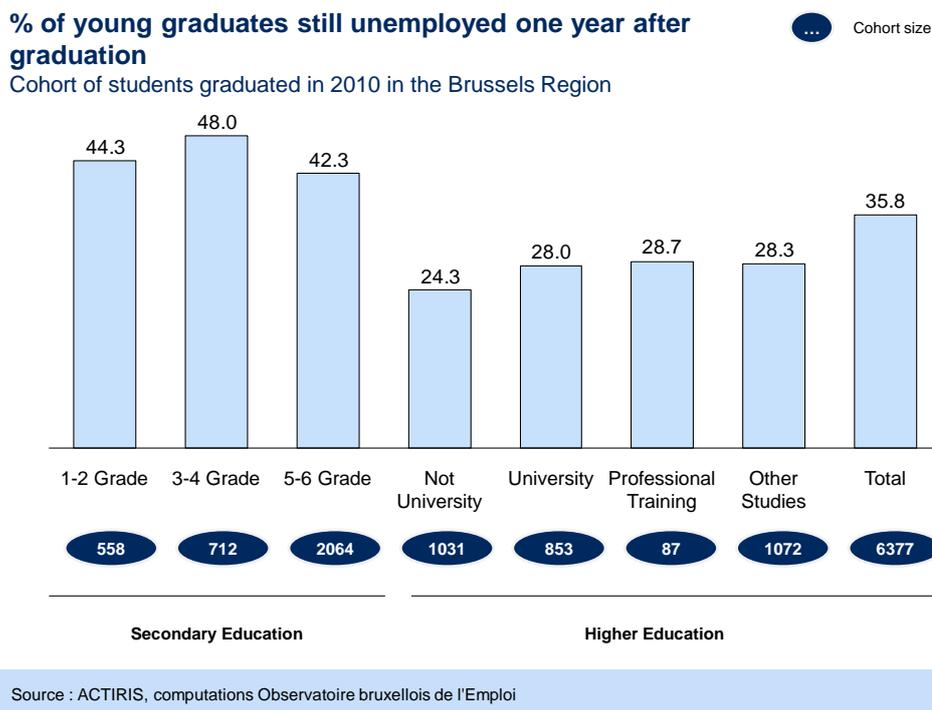
#3 – SIB intervention should target individuals quitting the education path after high-school and provide them with professional training

Exhibit 5 below provides an analysis on the dynamics of job market entry for graduates⁴² from different school levels. Two findings need to be highlighted:

⁴¹ Actiris – Observatoire de l’emploi « Rapport Annuel »

- Students stopping educational path while still in secondary education or right after graduation from secondary education have a significantly higher chance (i.e., roughly 45%) to remain unemployed over the long term than graduates from any form of higher education (i.e., 27%).
- Unemployment likelihood for graduates from short-term professional training (28.7%) is not significantly different than unemployment likelihood for graduates of other long-term forms of higher education (e.g. university education: 28.0%).

Exhibit 5



#4 – Professional training should be provided for sectors facing a critical labour shortage

The overall job matching rate in 2011 in the Brussels region was 61.6% meaning that for 26,940 job openings that were notified to Actiris in 2011 only 16,582 were fulfilled⁴³.

⁴² Results are from a 2010 study made by Actiris (the employment agency of the Brussels Region) tracking all students living in the Brussels Region that graduated in the summer 2010 and registered at Actiris as job applicant. The study seeks to analyse what was the employment status of these students one-year after graduation depending on their education level. See - Actiris, « *Jeunes domiciliés en Région Bruxellois e ayant quitté l'école par année d'étude* », Observatoire Bruxellois de l'Emploi, 2010

⁴³ Actiris keeps a record of every job opening and whether it has been fulfilled or not. As a result, detailed data can be accessed on the efficiency of the job market matching process between labour supply and labour demand.

Performing this analysis splitting job opening according to qualification requirements allows highlighting a clear mismatch between labour demand and supply⁴⁴ for jobs requiring specific qualifications.

It appears from a high level review of Actiris data that office employees (executive assistant, delivery assistant, financial transaction assistants, receptionists ...) and services employees (waiters, kitchen employees; cleaning services) are two areas where professional training should be concentrated⁴⁵.

Definition of intervention

An adapted intervention on workforce empowerment in the Brussels region should be based on the 2 following set of findings:

- Review of active labor market policies indicated that an optimal intervention should combine a job search assistance program to favor short-term post-program transitions to the job market and labor market training to ensure employability over the longer term⁴⁶.
- Based on analysis of the unemployment structure in Brussels, we concluded that the intervention should be targeted to young unemployed individuals without any form of higher education. The intervention should focus on providing these individuals with a professional training to specific skills that are required in sectors facing a critical labor shortage.

An interesting fact is that a program with similar objectives and positioning does exist in the United States. *Year Up*⁴⁷ is a non-profit organization which provides services to high-school graduates that are neither employed nor enrolled in post-secondary education. Year up has developed a one-year intensive training and education program that provides unemployed recipients with a combination of soft and technical skills development and corporate internship opportunities. The program also offers multiple incentives and services to avoid program dropout and ensure learning's efficiency⁴⁸. For example, students earn a little stipend while being in the program but the payment of this stipend is linked to their performance and behavior. If a student infringes one the program's guidelines (which mirror professional expectations such as tardiness or absence), he loses a certain number of points which is translated in his paycheck. If a student runs out of points, he is said to have "fired himself"

⁴⁴ Source : Observatoire Bruxellois de l'Emploi (Rapport Statistique 2011, Rapport mensuel Octobre 2011)

⁴⁵ For example, in 2011, 223 job openings for mechanics have been notified to Actiris but only 77 (i.e. 34.5%) have been fulfilled. The same holds for financial operators where only 121 jobs opening out of 223 (54%) have been fulfilled or for cashiers (257 out of 422). **Appendix VI** provides these data for every qualification type.

⁴⁶ See Section 1.2 Workforce empowerment

⁴⁷ More info at www.yearup.org

⁴⁸ "Education to Employment: Designing a System that Works", McKinsey Center for Government June 2012

from the program. As noted on website, *the transparency and clarity of this system helps hold students accountable for their actions*. The students are also grouped in learning communities to discuss their progresses and failures. Those communities provide a reflective environment to students in the program⁴⁹.

According to Year Up, 84% of Year Up's graduates are employed or attending college full-time within four months of completing the program. The Economic Mobility Corporation performed in 2011 a randomized control trial evaluation of the Year Up program showing that program participants had both a higher likelihood to find a job but also had on average a higher hourly wage⁵⁰. The program is effective in re-orienting unemployed workforce into jobs that require post-secondary education but remain unfilled (IT, investment operators, office supports). After their independent assessment, the Economic Mobility concluded that the program had *“the most exciting evaluation results we've seen in youth employment in 20 or 30 years, and the first to show a really substantial earnings gain.”*

Practical Intervention Set-up

Budget considerations, political discussions and local capabilities will guide the exact set-up of the intervention in Belgium. However, for the purpose of this PAE and the purpose of assessing the financial feasibility of the project, we make the virtual exercise of defining a pro-format intervention that would replicate the *Year Up* model in Belgium and we take assumptions on what such an intervention would imply.

Target Population – High school graduates that are neither employed nor registered in any higher education programs in Brussels;

Intervention – Based on *Year Up* case (see above), the model is a one-year intervention combining 6 months of training and 6 months of coached internship. Training will be a mix of acquisition of professional skills required for jobs with current shortage of qualified workforce and soft professional skills;

Timing & Size – The SIB project would provide the funding to set-up the intervention and to effectively run the program for 3 years. Each yearly cohort will count 200 individuals; hence, over the initial period of 3 years, 600 young unemployed individuals would have been treated;

Evaluator – The natural evaluator for the SIB would be the *“Observatoire de l'Emploi bruxellois”*. Discussions have still to be led with that respect;

Team Size – Preliminary *‘outside-in’* analysis indicates that roughly 8-10 full-time employees would be required to run the program + 5-10% of administrative costs;

⁴⁹ More information about Year Up at www.yearup.org

⁵⁰ RODER, A., ELIOTT, M., *“A promising start: Year Up's initial impact on Low-Income on Young Adult's careers”*, The Economic Mobility Corporation, April 2011

SECTION 2A.2 – DEFINE SIB TIMING AND EVALUATION METRICS, AND DESIGN

Objectives and Metrics of the Workforce Empowerment pilot

The SIB focussed on workforce empowerment should target three objectives for its participants:

- **Foster short-Term Employment** (i.e., the intervention should help its participants to re-enter the job market shortly after release from the program);
- **Sustain long-Term Employment** (i.e., the intervention should provide the skills and stability for its participants to stay employed over the medium/long term);
- **Increase earnings** (i.e., The intervention should help participants to attain higher level of income);

As detailed by Kohli et al.⁵¹, the metrics inserted in the SIB contract should aim to track the performance on these 3 objectives:

- I. **Proposed metric for ‘short-term employment’** – Difference between the proportion of program participants in a particular cohort who are employed and have been in continuous employment for at least one month, observed 12 months after the release from the program and the corresponding proportion in a control group;
- II. **Proposed metric for ‘long-term employment’** - Difference between the proportion of people in the program group of a particular cohort who have been employed for at least 18 months over the past 24 months, observed 24 months after the release from the program and the corresponding proportion in a control group;
- III. **Proposed metric for ‘increase earnings’** – Difference between median earnings of people in the program group of a particular cohort over the past 12 months, observed 24 months after the release from program and the median earnings in a control group;

Evaluation Design for the Workforce Empowerment SIB pilot

The choice of the control group lies at the core of the evaluation design. A short review of four options (randomized control trials, historical benchmark, clustered benchmark, holistic benchmark) identified two preferred options. If participation in the program is voluntary (based on individual applications), running a randomized controlled trial (RCT) between program’s applicants appears as the sole valid option. If participation is forced, which is

⁵¹ KOHLI, J., , BESHAROV, D. J., COSTA, K., “*Inside a Social Impact Bond Agreement - Exploring the Contract Challenges of a New Social Finance Mechanism*”, Center for American Progress, May 2012

rather unlikely given the time commitment of the program, traditional benchmark methods with comparable population groups can be used.

1. **Randomized Control Trials** - Randomized control trials (RCTs) are the gold standard for measuring counterfactuals. RCT is well-suited to this case as no significant crossover or spill over effects between of control and treatment groups are expected. However, running a RCT involved significant logistical complications and practical complexity that may scare our public partner.

The only case when a RCT would be absolutely needed is if the enrolment in the program is voluntary (via an application process) and not forced. In such a case, the pool of individuals applying to enrol in the program would differ from non-applicants with respect to their motivation and their willingness to enter the job market. In this specific case, a RCT should be used to assign randomly unemployed applicants either to the program or to the control group⁵².

2. **Historical Data** – The use of historical benchmark should be dismissed upfront due to the cyclical nature of the job market.
3. **Clustered benchmarking** – A clustered benchmark for this intervention would consist of comparing unemployed individuals in the program at a specific unemployment office in a specific municipality with a control group in another office in another municipality. A closer look at the data provided by Actiris allows us to dismiss this possibility as geographic disparities in unemployment and in sectorial specializations are huge between municipalities. For example, youth employment is lower than 20% in specific municipalities (e.g. Woluwé-St-Pierre) and higher than 40% in other (e.g., Molenbeek-St-Jean).
4. **Holistic Benchmark** – A holistic benchmark would compare the treatment group in the program with the entire population of unemployed with the same characteristics (age group, qualifications ...). As Actiris has data processes that would allow to track those metrics, this option could be feasible. The main role of the evaluator in this scenario would be to make sure that the treatment group is representative of the whole population targeted.

This method is only feasible if enrolment in the program is forced. If participation is voluntary, participants in treatment group will differ from control group with respect to their motivation to enter the job market and only an RCT within the applicants pool is possible.

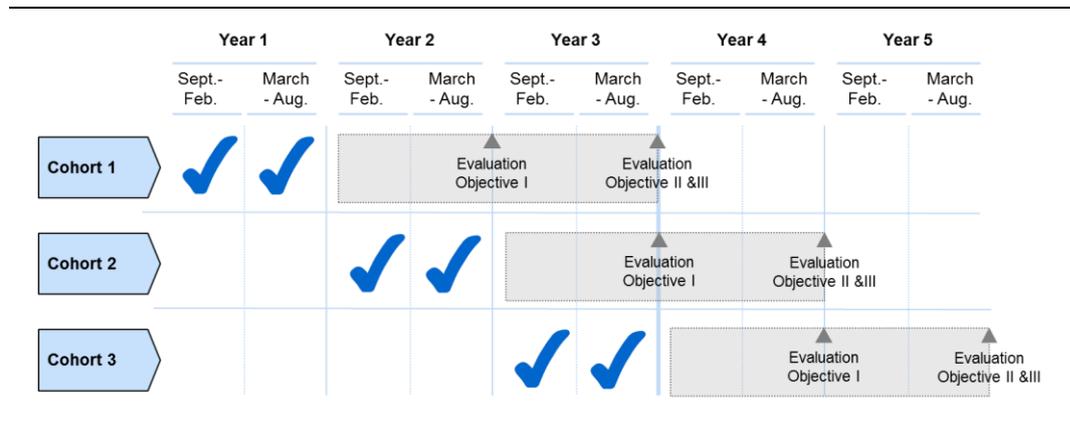
⁵² Same design as for evaluation of Year-Up – See RODER, A., ELIOTT, M., “*A promising start: Year Up’s initial impact on Low-Income on Young Adult’s careers*”, The Economic Mobility Corporation, April 2011

Workforce Empowerment SIB Pilot Timing

SIBs pilot timing proposals is structured as 5-year pro-format project which includes 3 years of service delivery; and 2 years during which performance is measured.

As illustrated below on **Exhibit 6**, the pilot SIB will deliver the intervention to 3 distinct yearly cohorts. For each cohort, the intervention will last a full year: 6 months training (Sept.-Feb.) and 6 months practical internship with dedicated supervision and coaching (March-Aug.). Once the intervention is delivered, a follow-up period of 2 years starts in which evaluations are performed. At the end of the first year of this follow-up period, the Objective I of the SIB pilot (i.e., foster short-term employment) is evaluated and triggers the first payment (see below) if achieved. At the end of the second year, the objectives II & III are measured (i.e., sustain long-term employment, increase earnings) and related payment are triggered if objectives are met.

Exhibit 6



SECTION 2A.3 – FINANCIAL MODELLING OF SIB ON WORKFORCE EMPOWERMENT

Main Results

Preliminary financial estimates indicate a relatively high cost-benefit ratio for the intervention. Service cost estimates ranges between 2,000€ and 2,500€ per individual enrolled in the program. Yearly taxpayer savings resulting from getting an unemployed individual back to work are estimated to roughly 33,500€ per person⁵³. These savings are especially high in the context of the Belgian welfare state characterized by generous unemployment benefits,

⁵³ GERARD, M., VALSAMIS, D., VAN DER BEKEN, W., with the expert contribution of ATKINSON, I. (Ecorys UK), EICHHORST, W. (IZA - Institute for the Study of Labor), FERNANDEZ, J. (Ecorys Spain), JOHANSSON, E., (Oxford Research) and ROTHFUSS, C., (Eureval), “Why invest in employment? A study on the cost of unemployment” , on behalf of European Federation for Services to Individuals (EFSI), Final report, Brussels, January 2013

high contribution rates for the employer and the employee once the individual is back on the job market and high value added tax (VAT) on consumption.

On an aggregated basis, assuming that a target of -10% of unemployment is achieved within each cohort versus relevant control group, the total taxpayer benefits from the intervention amounts to roughly 4.0 m€. As illustrated in **Exhibit 7**, the direct and indirect costs of the intervention represent only about 30% of the total taxpayer benefits. The net taxpayer benefits amount to roughly 2.8m€. By assumption, we provide a marginal success fees to the service providers and allow the private investor to generate a 12% IRR on his investment. When those amounts are cleared, the savings to the taxpayers still reach ~2.2m€⁵⁴.

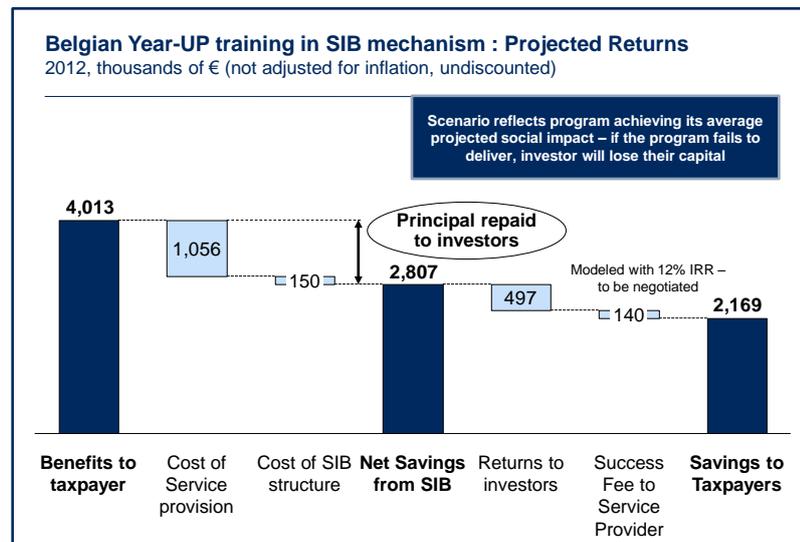
This preliminary analysis has to be considered as indicative and many assumptions should be further defined and discussed with all parties involved. Nevertheless, it clearly indicates that interventions aiming at empowering workforce within the context of the Belgian welfare state can be financially sustainable from a taxpayer perspective.

Exhibit 7

Project Returns

Example of workforce empowerment

PRELIMINARY ANALYSIS



Financial Assumptions

Costs modelling

The costs associated with the intervention on workforce empowerment are primarily based on the practical intervention set-up described above. Below are the main parameters used:

⁵⁴ Detailed financial model available upon request

- Direct costs of the intervention include the cost of the wages of the 8 full time employees required to implement the intervention (yearly employer costs of wage of 40,000€/year) and related administrative costs (10% of total)⁵⁵;
- Indirect costs of the SIB include set-up and legal costs (70,000€ in the first year) plus a recurring cost of 50,000€/year for SIB administration and evaluation.

Taxpayer savings forecast

Recent analysis of Gerard et al.⁵⁶ providing detailed taxpayer cost estimates for an unemployed worker in different European countries including Belgium⁵⁷ is used as a basis.

Similarly to the methodology developed by Jespersen et al.⁵⁸, the cost of unemployment is defined as the sum of:

- The additional public intervention induced by unemployment (i.e., payment of unemployment benefits and guidance policies) and,
- The potential loss of revenues for the government stemming from the loss of direct taxation and the loss of indirect taxation on consumption.

Quoting Gerard et al. (2013, p.23), “*Belgium stands out with the highest nominal cost for unemployment with a yearly total of 33,443 euros for an average unemployed person.*” This high estimate is mainly driven by a loss of revenues for the state. As Belgian contribution rates are high both for employers and employees, standing on average in 2010 at respectively 29.8% and 14%, there is a huge loss of revenue when a worker falls into unemployment. The relatively high standard VAT rate (21%) on consumption contributes further to the potential loss of revenue for the government.

Those estimates should be considered as rather conservatives as they do not integrate the reduction of dead weight loss subsequent to a reduction of income transfers (i.e., unemployment benefits). Also, they do not integrate labor market behavioral changes of the unemployed prior to the participation (i.e., the existence of the program may intensify the search behavior of unemployed individuals before the program to avoid entering it). **Appendix VII** summarizes the set of assumptions being used and the preliminary output of our analysis on a year by year basis.

⁵⁵ The present cost structure assumes that the program could be hosted within Actiris

⁵⁶ GERARD, M., VALSAMIS, D., VAN DER BEKEN, W., with the expert contribution of ATKINSON, I. (Ecorys UK), EICHHORST, W. (IZA - Institute for the Study of Labor), FERNANDEZ, J. (Ecorys Spain), JOHANSSON, E., (Oxford Research) and ROTHFUSS, C., (Eureval), “*Why invest in employment? A study on the cost of unemployment*”, on behalf of European Federation for Services to Individuals (EFSI), Final report, Brussels, January 2013

⁵⁷ These estimates would need to be further tailored to our cases but are sufficient to get a rough idea of the financial viability of such an intervention.

⁵⁸ JESPERSEN, S. T., MUCH, J. R., SKIPPER, L., “*Costs and benefits of Danish active labour market programmes*”, Labour Economics, Vol. 15, Issue 5, pp. 859–884, October 2008

Section 2B – Detail intervention for Adult Recidivism pilot

SECTION 2B.1 – CHARACTERIZE TARGET POPULATION & DEFINE INTERVENTIONS

Analysis of Recidivism in Belgium

Analysing recidivism in Belgium is a difficult task as recidivism data are not tracked on a systematic basis by Belgian public authorities. This section relies on the sole study and dataset released on that matter by the Belgian National Institute for Criminology⁵⁹ since the mid-eighties. This report uses re-incarceration rates (i.e., going back to jail) as a substitute for recidivism rates (i.e., committing another offense). Small variations may exist between both variables but are neglected in this analysis.

The dataset has tracked the re-incarceration pattern of all 46,789 prisoners that were released from Belgian jails between January 1st 2003 and December 31st 2005 (i.e., the cohort). The follow-up period extended till December 31st 2010. Hence, we have 7-years of re-incarceration data for the 2003 cohort and 5-year of re-incarceration data for the 2005 cohort. **Appendix VIII** further describes the cohort used for this analysis.

Four key analyses based on Robert et al. (2012) help to better target our intervention on adult recidivism in Belgium⁶⁰:

#1 – SIB intervention should target male offenders in priority right at their release from prison

Overall observed re-incarceration rate within our 3 year cohort at the end of the observation period was 44.1%. The re-incarceration rate among men at the end of the observation period was 14 p.p. higher than for women.

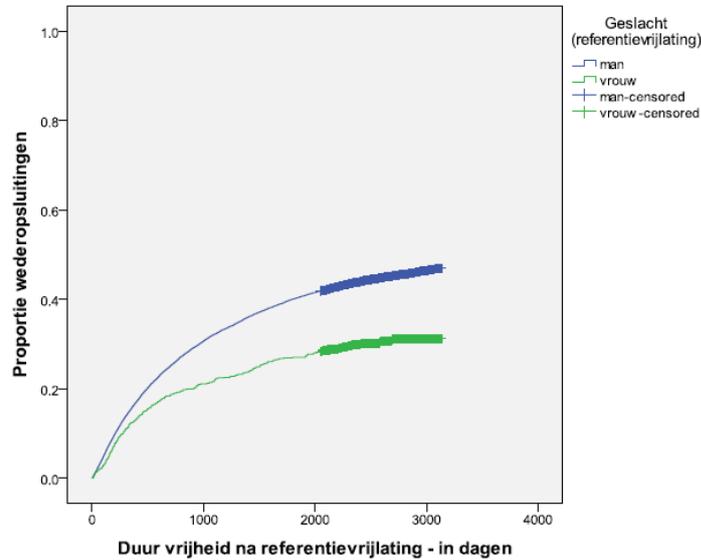
36.7% of all re-incarcerations occur during the first year after release and 22.0% in the second year after release. Men are not only more likely to be re-incarcerated; they are also likely to go faster back behind the bars once released, hence the need to intervene shortly after release from prison(See **Exhibit 8**).

⁵⁹ ROBERT, L., MAES, R., “Wederopsluiting na vrijlating uit de gevangenis”, Onderzoeksrapport, January 2012

⁶⁰ These results were obtained using extensive statistical analysis and Cox regressions that identify variables that influence recidivism rate. For the purpose of this PAE and because we couldn't access the data directly for confidentiality reasons, we only provide a high level synthesis of that research.

Exhibit 8

Figuur 22. Wederopsluiting volgens geslacht



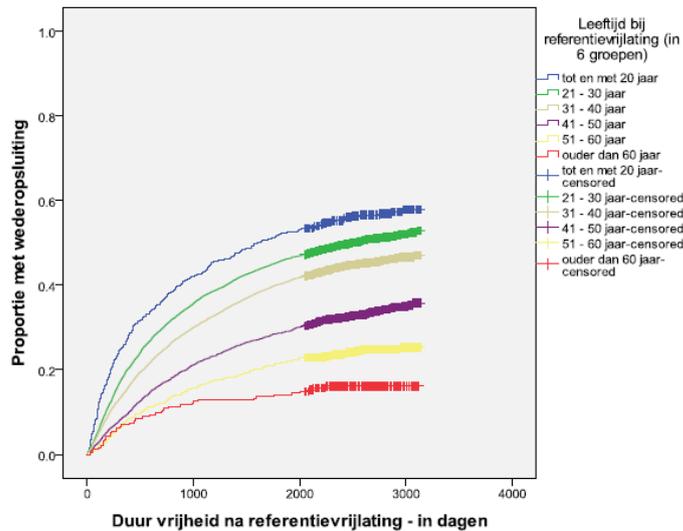
Re-incarceration rate according to sex

#2 – SIB intervention should target young offenders in priority

As clearly showed on **Exhibit 9** below, re-incarceration is not only higher but also faster for younger categories of the cohort. For instance, re-incarceration rates reach 56.5% for people younger than 20 years old and 51.9% for people between 20 and 25 years old. As a comparison, those rates are less than 25% on average for people above 40 years old.

Exhibit 9

Figuur 24. Wederopsluiting volgens leeftijd bij vrijlating



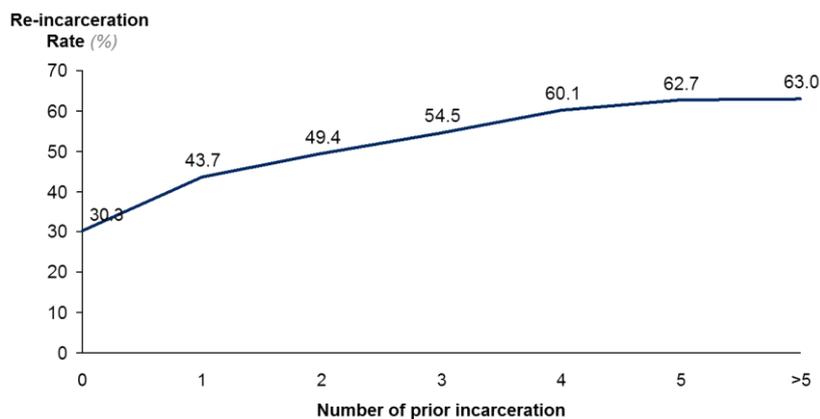
Re-incarceration rate according to age categories

#3 – SIB intervention should target offenders with multiple prior short stays prison versus one-single long stay in prison

Data show an inverted relationship between the length of incarceration prior to the release and the likelihood of re-incarceration. The longer the prior stay in prison, the lower is the likelihood of going back to jail. A difference in re-incarceration rates of more than 12 p.p. at the end of the observation period is observed between the individuals with prior incarceration of less than 3 years and those with more than 3 years.

On the opposite, the number of prior incarcerations independently from the length of those stays in prison is positively linked to the likelihood of re-incarceration. **Exhibit 10** shows this clear relationship. For individuals who were for the first time in prison, the re-incarceration rate in cohort is 30.3%, for individuals with more than 5 prior stays in prison it is 63.0%.

Exhibit 10



Re-incarceration rate depending on number of prior incarcerations

#4 – SIB intervention should target offenders with a specific criminal track record in priority (e.g., drugs, extortion, theft, theft with violence)

The type of crimes that has led to incarceration is another important differentiation between prisoners. With that respect, Robert et al. provide interesting data. Among crimes with lower re-incarceration probability, we find human trafficking (10.8%), assault (21.7%), rape (26.8%) and unwilling homicide (28.4%). Among the type of crimes with highest re-incarceration likelihood, we find drugs (50.4%), extortion (54.4%), public disorder (56.0%), theft (56.4%) and theft with violence (57.9%). Those should be targeted in priority.

Definition of intervention

Two set of analysis are available to define an adapted intervention on adult recidivism in Belgium:

- Academic review identified cognitive-behavioral therapies and more particularly ‘Reasoning & Rehabilitation’ (R&R) as particularly well-suited interventions. R&R is a therapy developed in Canada for teaching the cognitive and social skills and values that are required for pro-social competence of past offenders.
- Our previous analysis of re-incarceration in Belgium allows to identify more precisely the target population in Belgian prisons. The intervention should prioritize young male offenders with multiple short prior stays in prison and with a behavior pattern of committing specific types of crimes. The intervention should start right at the release from prison

The R&R program provides 35 structured two-hour sessions for groups of 6-12 youths or adults who are evidencing antisocial, delinquent or criminal behaviour. Ideally, a number of two to four sessions should be held a week, but the set-up is quite flexible. Activities performed during sessions include role-playing, small group discussions and thinking games.

When implemented with integrity by well trained and motivated trainers, its efficacy has been demonstrated in numerous international, independent, controlled evaluations. A meta-analysis of R&R⁶¹ evaluations showed an overall 14% decrease in recidivism for program participants compared with controls. This study also conclude that the program can be effectively replicated outside of Canada (significant impact has been observed in USA, UK and Spain) and it has been effective both for low-risk and high-risk offenders.

Practical Intervention Set-up

For the purpose of assessing the financial feasibility of the project, we define a pro-format intervention and size the resources required to fund an R&R program in Belgium.

Target Population – Young male individuals (<30years old) after stays of less than 1 year in prison at their release of prison;

Intervention – As per the R&R methodology: 35 sessions of 2 hours spread across 4 months with 6 ex-offenders and a dedicated and trained therapist in each group;

Team Size – 10 therapists would be hired, trained and certified + 5-10% of administrative costs;

Timing & Size – Each therapist has a caseload of 3 groups and will work with 3 groups during the 4 months of the intervention. Groups are composed of 6 individuals. This way a group of 10 therapists can treat up to 540 individuals per year. The SIB mechanism would provide the working capital to run the intervention for 3 years.

⁶¹ JOY TONG, L. S., FARRINGTON, D.P., “How effective is the “Reasoning and Rehabilitation” programme in reducing reoffending? A meta-analysis of evaluations in four countries”, *Psychology, Crime & Law*, , Vol. 12(1), pp. 3-24, January 2006

Evaluator – The natural evaluator for the SIB would be the “*Institut National de Criminologie et de Criminalistique (INCC)*”. Luc Robert, Researcher at INCC and author of the only study on recidivism in Belgium has expressed interest to play that role.

SECTION 2B.2 – DEFINE SIB TIMING AND EVALUATION METRICS, AND DESIGN

Objectives and metrics of the Recidivism Pilot

We decided to focus on re-incarceration and not on arraignment or conviction as put forward in other recent work⁶². This is a deliberate choice based on two considerations. First and very practically, re-incarceration is currently the only statistical input possible to track on a systematic basis in Belgium. In other words, even if we had preferred tracking reconviction rate, this would have been impossible due to technical constraints in the Belgian reporting processes⁶³. Second, we estimate that the largest share of taxpayer savings generated by the intervention, if successful, will be linked to a reduction in the number of prisoners effectively in jail. Therefore, it makes sense to us to align objectives and metrics with this source of taxpayer money savings.

This SIB pilot has two main objectives which are to reduce re-incarceration of its participants over the short and medium term:

- I. Proposed metric for short-term re-incarceration** – Difference between the proportion of individuals enrolled in the program from a particular cohort who have been reincarcerated at least once within a 12 month period following release from jail and the corresponding proportion in a control group⁶⁴;
- II. Proposed metric term re-incarceration** – Difference between the proportion of individuals enrolled in the program from a particular cohort who have been reincarcerated for at least 3 months over 24 months period following release from jail and the corresponding proportion in a control group;

Evaluation Design for the Recidivism SIB pilot

A short review of control group possible designs points out three specific techniques. If participation is voluntary, running a RCT between programs applicants appears as the sole

⁶² See discussion in WISE, A., BELINSKI, M., “*Launching of the first US Pay-For-Success Contract*”, Policy Analysis Exercise, Harvard Kennedy School, March 2012, p.50

⁶³ See discussion in ROBERT, L., MAES, R., “*Wederopsluiting na vrijlating uit de gevangenis*”, Onderzoeksrapport, January 2012, pp.8-10

⁶⁴ This metric corresponds at the one used in the UK Peterborough Prison SIB pilot, except that reconviction rate is preferred over re-incarceration rate.

valid option. If participation is forced, a clustered benchmark between similar prisons appears as the best compromise between ease of evaluation and results robustness. Historical benchmark could be used as a substitute but not as the preferred option.

1. **Randomized Control Trials** - Randomized control trials (RCTs) may not be optimal in this case as it could face challenges of crossover and spillover between the treatment and control group (i.e., prisoners released from the same prison around the same date are likely to interact after release). To avoid those effects, one would have to work with a significant number of different prisons which adds considerable complexity to the project and increases unnecessarily the need for coordination.
2. **Historical Data** – Criminal activity and hence re-incarceration appears to be less prone to cyclical variation than employment data. Robert et al. provide data on incarcerations over 3 years (2003, 2004 and 2005). The total number of re-incarceration appears constant across yearly cohort with absolute variations in re-incarceration rate across yearly cohorts being smaller than 0.2%⁶⁵. This suggests that historical benchmarking could be used as a “cheap” evaluation method but should not be favoured as it doesn’t control for unobserved time-related factors.
3. **Clustered benchmarking** – Running a clustered benchmark would practically mean treating the prisoners released from a selected prison (treatment group) and comparing outcomes with prisoners released from another or a group of other comparable prisons (control group). When selecting prisons to be considered as control and treatment groups, three considerations have to be taken into account:
 - Services provided to former prisoners at their release from prison vary from region to region as it is a regional competence. Therefore, a prisoner in Flanders doesn’t receive the same service type and intensity than a prisoner in Wallonia or in the Brussels region. Hence, a prison in Wallonia cannot be a good counterfactual for a prison in Flanders and vice-versa⁶⁶.
 - Significant variations in re-incarceration rates have been observed across prisons resulting from local differences and socio-economic background of prisoners. For example, re-incarceration rates in prisons such as *Marneffe* (29.8%), *Forêt* (33.2%) or *Louvain central* (33.7%) appear relatively low in comparison with other prisons such as *Merkplas* (49.5%), *Lantin* (50.1%), *Wortel* (51.8%), *Ittre* (55.3%), and *Andenne* (56.7%). Hence, similar prisons have to be chosen as control and treatment groups.

⁶⁵ ROBERT, L., MAES, R., “*Wederopsluiting na vrijlating uit de gevangenis*”, Onderzoeksrapport, January 2012, p.15

⁶⁶ Robert et al. (2012, p.115) supports that conclusion as their data show that there are significant differences in re-incarceration rate among Belgian regions.

- To have large enough control and treatment groups to observe statistical significance, prisons to be included in SIB pilot have to be in the category of large prisons (i.e., releasing on average more than 300 prisoners a year).

Selected pair of prisons has to respect those 3 criteria. For example, it could be the prisons of *Anvers* and *Bruges* in Flanders and the prisons of *Jamioulx* and *Lantin* in Wallonia.

4. **Holistic Benchmark** – An holistic benchmark including all prisons in Belgium minus the “treatment prison” as a control group, on top of being cumbersome, would not be relevant as it would wipe out regional variation in re-incarceration rate. Grouping a couple of comparable prisons in the same region as control group to reach higher level of statistical significance might however be an idea to be further explored.

Adult Recidivism SIB Pilot Timing

Based on a similar model as the one detailed in **Exhibit 6**, the pilot SIB on recidivism will deliver the intervention to three distinct yearly cohorts. The major difference with the workforce empowerment program is that participants are not enrolled once a year in a single yearly batch but are enrolled on a rolling basis at their exit of prison for a four-month intervention. For the purpose of facilitating evaluation, we artificially divide individuals in three cohorts based on their respective completion date of the intervention.

The evaluation of the objective I (i.e., lower short term recidivism) is measured one year after the last individual of the cohort has completed the program. Similarly, the evaluation of Objective II (i.e., reduce long-term recidivism) is performed 24 months after the last individual of the cohort has completed the program and related payment is triggered if objectives are met.

SECTION 2B.3 – FINANCIAL MODELLING OF SIB ON ADULT RECIDIVISM

Main Results

The intervention seems feasible from a taxpayer perspective. Cost structure of the program is relatively light ranging from 1,500€ to 2000€ per individual treated. On the opposite, taxpayers savings associated with re-incarceration prevention are relatively high as the fully loaded marginal cost of a prisoner reaches 164€/day⁶⁷ in Belgium. Given that the average

⁶⁷ This price corresponds to the price paid by the Belgian state to ‘export’ its overflow of prisoners in the Dutch prisons. See for example - <http://news.bbc.co.uk/2/hi/8335868.stm>

length of stay in prison is around 260 days, the taxpayer savings per individual that is effectively prevented from going back to jail lies around 40,000€ to 45,000€.

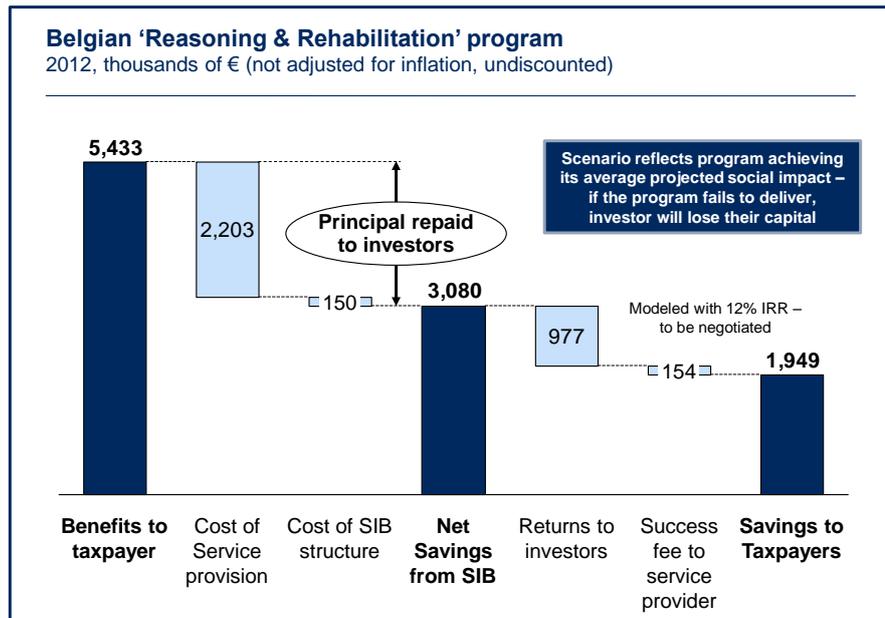
On an aggregated basis, assuming that a target of -15% of re-incarceration is achieved within each cohort versus relevant control group, the total taxpayer benefits amounts to roughly 5.4 m€. As illustrated in **Exhibit 11**, the direct and indirect costs of the intervention amount to 2.3m€, roughly 40% of the total taxpayer benefits. The net tax payer benefits resulting from the program is 3.1m€. By assumption, we provide a marginal success fees to the service providers and allow the private investor to generate a 12% IRR on his investment. When those amounts are cleared, the savings to the taxpayers reach ~2.0m€⁶⁸. These preliminary results have to be considered as indicative but clearly demonstrate the potential to create significant taxpayer savings while improving crucial social outcomes

Exhibit 11

Project Returns

Example of adult recidivism

PRELIMINARY ANALYSIS



⁶⁸ Detailed financial model available upon request

Financial Assumptions

Costs modelling

The costs associated with the SIB project on recidivism are primarily based on the practical intervention set-up (Reasoning & Rehabilitation program in Belgium) detailed in previous sections. Here are the main parameters that we used:

- Direct costs of the intervention include the cost of the wages of the 10 full time employees required to implement the intervention (yearly employer costs of wage of 40,000€/year) and related administrative costs (10% of total). It also includes the initial training and accreditation of the therapists for the R&R methodology (5,000€ per therapist) and a quality insurance on the effectiveness of the program delivered.
- Indirect costs of the SIB includes set-up and legal costs (70,000€ in the first year) plus a recurring cost of 50,000€/year for SIB administration and evaluation.

Taxpayer savings forecast

On the benefits side, we take into account two types of costs that can potentially be saved by the intervention:

- **Marginal costs of detention** – Those costs relate to the stay in prison of the offenders. As Belgium prisons are at a capacity, Belgium is currently ‘exporting’ prisoners to the Netherlands and pays 164€ per prisoner per night⁶⁹. This data point gives a good anchor of the marginal cost per prisoner per day. Based on Robert et al.⁷⁰, we computed the average length of a stay in jail for individuals in our target group (265days). By multiplying both factors, a rough estimate of the marginal cost of detention can be estimated.
- **Cost of individual offense processing** – Those costs relate to the processing of the offenders through the police department and the judiciary process. Average estimates of 670€ per offense are provided by Aos et al. (2007)⁷¹.

Appendix IX summarizes the set of assumptions being used and the preliminary output of our analysis on a year by year basis.

⁶⁹ See for example <http://news.bbc.co.uk/2/hi/8335868.stm>

⁷⁰ ROBERT, L., MAES, R., “Wederopsluiting na vrijlating uit de gevangenis”, Onderzoeksrapport, January 2012, p.72

⁷¹ DRAKE, E. K., AOS, S., MILLER, M. G., “Evidence-Based Public Policy Options to Reduce Crime and Criminal Justice Costs: Implications in Washington State”, Victims & Offenders: An International Journal of Evidence-based Research, Policy, and Practice, Vol. 4, Issue 2, pp.170-196, (2009)

Section 3 - Structure the SIB instrument

SECTION OUTLINE

This section is generic for the two Social Impact Bond pilot projects sketched presents preliminary recommendation that will need to be further tailored to the specificities of each project.

Section 3.1 – Based on careful evaluation of alternative options, SIB projects in Belgium can be structured as an ‘*Investor-Provider Partnership*’. In this structure, service providers are at the core of the mechanism and enter directly in a contractual agreement with the government demonstrating a prior ‘*principle agreement*’ of investment commitment from a private investor.

Section 3.2 – Analysis suggest that a single stage procurement process in which bidding service providers will be benchmarked against a predefined set of criteria is best suited for a Social Impact Bond mechanism in Belgium. Based on a review of relevant legislation and literature, a preliminary timeline and set of criteria for the procurement process is provided.

Section 3.3 –Four different contractual agreements are presented very briefly and should be designed to support the mechanism. This section is not intended to be a substitute for legal advice.

SECTION 3.1 - DEFINE STRUCTURE OF SIB

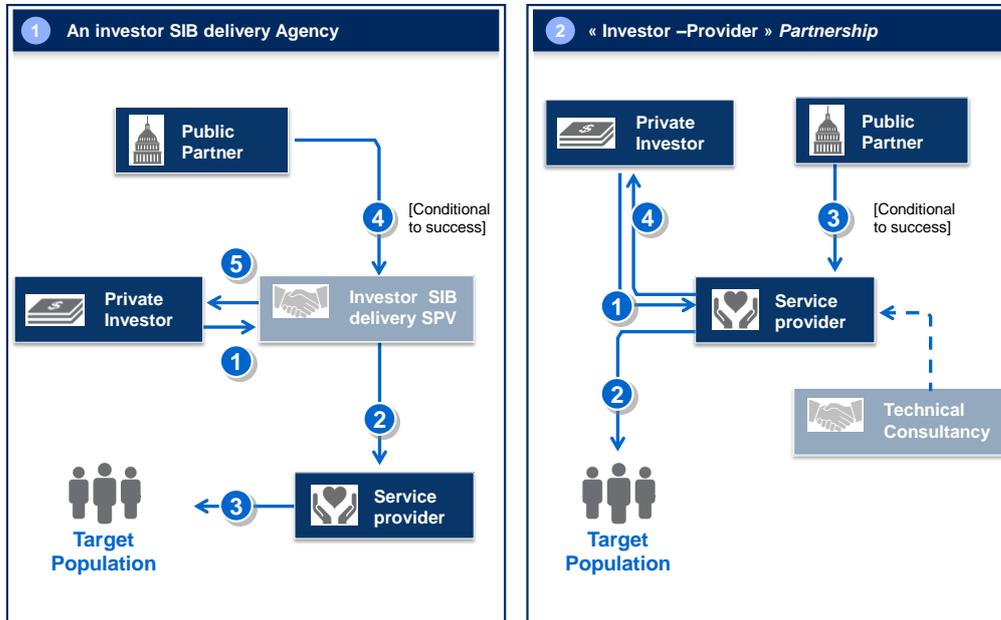
Options for structure of SIB

Based on existing SIB mechanisms worldwide and initial check on compatibility with Belgian public law⁷², two potential structures that should be further investigated in Belgium can be laid out (see **Exhibit 12**).

⁷² Pro-bono support from Stibbe, an international law firm based in Brussels

Exhibit 12

Options for Structure of SIB



Option 1 – Investor Social Impact Bond Delivery Agency

A dedicated and newly created ‘*Investor Social Impact Bond Delivery Agency*’ will source the investment capital, act as the coordinator of the contract and sub-contract the delivery of the specific services required to achieve the outcome.

This model is used for the Peterborough Social Impact Bond to reduce re-offending. In this case, a Social Impact Bond Delivery Agency, the ‘**One Service*’ was established to manage the contract and coordinate the parties on behalf of investors. It has sub-contracted the service delivery to ex-offenders to four social sector organizations.⁷³

Option 2 – Investor-Provider Partnership

In this structure, the social service provider is not a sub-contractor but a central partner in the Social Impact Bond mechanism. Service providers enter directly in a contract with the government showing that they have a prior ‘*principle agreement*’ of investment commitment from a private investor. If the pre-agreed objectives are achieved, the government makes the payment to the service provider that retrocedes it to the private investor.

⁷³ “A Technical Guide to Commissioning Social Impact Bonds”, Social Finance, November 2011, p.11

Structure Recommendation

We recommend the Option 2 ‘*Investor-Provider Partnership*’ over the Option 1 ‘*Investor Social Impact Bond Delivery Agency*’ for a SIB pilot in Belgium. This recommendation is based on several considerations:

- **Timing – Option 2 would allow a shorter procurement and set-up process.** Under Option 1, sufficient time needs to be allowed for the establishment of a new Social Impact Bond Delivery Agency that, after a bidding process with the government, will then finalize arrangements with social service subcontractors. Under Option 2, parallel contracting processes can take place allowing for shorter lead time.
- **Minimum Size – Option 2 has a lower minimum contract size to be financially viable.** A Delivery Agency, as defined in Option 1, would involve significant set-up and running costs. A typical minimum contract size for establishing a separate investor-owned entity is probably around €5 million in order to cover those fixed costs⁷⁴. Under Option 2, minimum contract size is not a financial constraint as no specific vehicle needs to be set up.
- **Public Opinion – Option 2 should be less vulnerable to public opinion criticism.** Financial flows from the public partners are transferred directly to social service providers which act as intermediation layer between the state and the private investor. Hence, under Option 2, the mechanism is less exposed to the criticism of those seeing the involvement of private sector actors in the provision of social services as a threat to public sector’s integrity.
- **Compatibility with Belgian law and accounting incentives⁷⁵ – Both options are legally feasible under Belgian law but Option 2 provides stronger incentive for long-term involvement of the public partner.** As for Option 1, a public intermediate financial structure should be created where private funds will be deposited. Such a structure could be assimilated to a ‘*Service à gestion séparée*’ and would require a specific legal agreement. As for Option 2, the mechanism could be read as a subsidy with deferred payment (i.e., *subvention « à liquidation différée »*). In Option 1, the intermediate financial structure has an independent accounting system that is managed independently from the public budget. On the opposite, under Option 2, the SIB financing appears year-on-year in public accounting as a deferred payment to be made. This represents a strong incentive for the public partner to stay actively involved and provide ongoing attention to the SIB partnership.

One pitfall of the second option is that, because the service provider is at the core of the mechanism, it is difficult for the private investor to adjust it once an agreement is made. On

⁷⁴ “A technical Guide to Commissioning Social Impact Bonds”, Social Finance, November 2011, p.15

⁷⁵ The response to this question has been drafted by Stibbe LLP

the opposite, the Option 1 is more flexible as it allows a number of different service providers to be working together to achieve a common outcome. Option 1 may therefore be considered when it is important to enable investors to change service providers over the course of the contract.

SECTION 3.2 - DEFINE PROCUREMENT PROCESS

Caveat

This section provides high-level recommendation on the design of the public procurement process to select services providers. Assumption is taken that the SIB structure used is the ‘*Investor-Provider Partnership*’ structure (Option 2 above) where the service provider is positioned at the core of the mechanism. If Option 1 had been preferred (i.e., *Investor Social Impact Bond Delivery Agency*), a similar public procurement process should be initiated but its objective would rather be to select the intermediary that will coordinate the mechanism and select service providers independently at a later stage.

The process described in this section assumes that no preferred provider has been identified prior to the launch of the procurement process. As noted by Social Finance⁷⁶, if there is only one interested service provider or if one provider has readily been identified, public commissioners are not obliged to undertake a competitive process⁷⁷.

Legal prescriptions

Public procurement contracts are ruled by EU regulation transposed in national Belgian law⁷⁸. Social Impact Bonds fall in the category of service contracts. Those contracts are divided into two categories (‘*Part A*’ and ‘*Part B*’ services). ‘*Part A*’ services (where there is a fully competitive European market) require full adherence to EU regulations and the respect of four clearly specified procurement processes. ‘*Part B*’ services (not fully competitive European markets) only need to follow a couple of principles but are not forced to comply with specific procurement routes⁷⁹. As analysed by Social Finance UK⁸⁰, majority of Social Impact Bonds services (social services, vocational trainings, education) will be ‘*Part B*’ services requiring

⁷⁶ “A technical Guide to Commissioning Social Impact Bonds”, Social Finance, November 2011, p.14

⁷⁷ For example, the Peterborough Social Impact Bond to reduce re-offending was not produced through a competitive process; it was undertaken as a “proof-of-concept” pilot. The same is true for the Rykers Island recidivism Social Impact Bonds contract in New York City.

⁷⁸ EU Procurement directives

⁷⁹ “Buying into communities Jobs, skills training and business opportunities from council contracts” , Local Government Association, London UK, December 2011

⁸⁰ “A technical Guide to Commissioning Social Impact Bonds”, Social Finance, November 2011, p.18

the respect of key principles (e.g. non-discrimination, equal treatment and transparency) but having a greater freedom in the design and management of the procurement process.

Recommended procurement process

A single stage procurement process is recommended in which bidding service providers will be benchmarked against a predefined set of criteria. This option is preferred over other types of procurement processes (e.g., two stage process with a first request for interest and a subsequent selection) as initial work conducted in Belgium indicates that there are only a limited number of service providers that have good relationships with private investors and would therefore be able to submit a bid. The process could be organized around four potential steps:

Step 1 – Pre-procurement phase (4-6 weeks)

- Advance notice of a likely forthcoming contract;
- Definition of a very clear set of criteria;

Step 2 – Procurement phase (10-12 weeks)

- Publish tender together with background information and key elements of the contracts (such as type of intervention, length, cohort size, ...);
- Allow at least 10-12 weeks for bids to be received as given the early stage of social investment market, getting ‘in principle agreement’ from investors to back the Social Impact Bond may take a significant amount of time;

Step 3 – Selection phase (2-4 weeks)

- Bids submitted and interviews held for clarification;
- Selection of preferred providers;

Step 4 – Negotiation phase (8-12 weeks)

- Draft of final legal agreements;
- Finalization of private investment;

Suggested service provider selection criteria

As stated by Belinski and Wise⁸¹, the selection panel can use scoring matrix to benchmark the selection criteria for service providers. Selection criteria for service providers can include⁸²:

⁸¹ WISE, A., BELINSKI, M., “*Launching of the first US Pay-For-Success Contract*”, Policy Analysis Exercise, Harvard Kennedy School, March 2012, p.49

⁸² Adapted from proposals in WISE, A., BELINSKI, M., “*Launching of the first US Pay-For-Success Contract*”, Policy Analysis Exercise, Harvard Kennedy School, March 2012, p.50 and “*A technical Guide to Commissioning Social Impact Bonds*”, Social Finance, November 2011

1. Ability of the organization and program model to deliver stated outcomes (30%);
2. Strength of the existing evidence base for assessing likely program impact (10%);
3. Cost-effectiveness of the proposed delivery model in achieving the stated objectives (10%);
4. Ability to source financing and quality of ‘principle agreement’ with investor (20%);
5. Willingness and capability to collaborate effectively with state government organizations, private investors and other entities (10%);
6. Ability to monitor success and measure outcomes, including counterfactuals (10%);
7. Extent to which the program establishes safeguards against harm for the target population (10%);

Weights between brackets are only suggestive and should be agreed prior to the release of the tender.

SECTION 3.3 - DESIGN OF CONTRACTUAL AGREEMENTS

The contractual agreements supporting the Social Impact Bond are critically important to the success or failure of the mechanism as it defines the relationships and responsibilities of all parties involved. In this section, the different contracts that should be designed to support the mechanism are briefly presented. As in previous section, we suppose that the structure of the SIB is an ‘*Investor-Provider partnership*’ (Option 2). This section is not intended to be a substitute for legal advice.

“Service Provider/Government” Contractual Agreement

This contract is the central piece of the Social Impact Bond as a SIB is fundamentally *a contractual agreement between government and an external organisation where payment is promised in return for achieving one or more outcome*⁸³.

This contract should define clauses on the outcomes the government wants to achieve, the definition and the recruitment process of the beneficiary population, the evaluation method and the payment terms. It must also define the working relationships and mutual expectations between the government and the service provider. Kohli et al. (2012) from the Centre for American Progress provide a useful template and clauses inventory of such an agreement.

⁸³ KOHLI, J., BESHAROV, D. J., COSTA, K., “*Inside a Social Impact Bond Agreement - Exploring the Contract Challenges of a New Social Finance Mechanism*”, Center for American Progress, May 2012, p.3

“Service Provider-Financial Investor” Contractual Agreement

This agreement has two components. A first section should define the financial relationships between the two parties involved. It should define the amount and timing of the payments made by the private investor to the service provider to finance the working capital of the intervention. The contract should also reflect the repayment terms from the service providers to the investor if outcomes are achieved. Those repayment terms should normally mirror the payments terms made by the government to the service provider minus a possible success fee retained by the service provider.

A second section should define the working relationship between the investor and the service provider. For example, this agreement should define ways for the investor to influence and exert pressures on the governance of the service providers.

“Government-Public Entity” involved Contractual Agreement

The government should also modify/expand its current agreement with the public entity involved with the follow-up of the target population. For example, in the case of the recidivism pilot, the Ministry of Justice should define contractually with the ‘treatment’ prison what are the responsibilities involved and how the release process should be modified.

“Government-Independent Evaluator” Contractual Agreement

A final contract should define the role of the independent evaluator that will assess the service provider’s intervention. The independent evaluator is responsible for determining whether the service provider has achieved outcomes at measurement date and what is the level of payment that is due. This contract should mirror the evaluation clauses contained in the ‘*Service Provider-Government*’ contractual agreement.

Section 4 – Synthesis & Next steps

The ambition of this document was threefold (see **Introduction**):

- #1 Select service areas that are best suited for a Social Impact Bond pilot in Belgium and convince the relevant Belgian authorities to move forward with the investigation of a potential SIB project in Belgium;
- #2 Detail social interventions that have a strong evidence base and are specifically adapted to the Belgian context; Assess economic feasibility of such an intervention in Belgium from a taxpayer perspective;
- #3 Lead preliminary analyses on how a Social Impact Bond pilot can be structured and implemented in Belgium;

These objectives have been met:

- #1 Four service areas have been identified as credible SIB candidates in Belgium. For two of these areas, public partners have expressed interest to investigate further a SIB pilot: Actiris, the public employment agency in Brussels on workforce empowerment and the Belgian Ministry of Justice on adult recidivism (*see Section I*);
- #2 Relevant interventions backed by a strong evidence base and tailored to the specificities of the Belgian context have been identified and detailed. High level analyses indicate that those interventions can be financially attractive from a taxpayer perspective. Preliminary evaluation metrics and methods have been laid out (*see Section II*);
- #3 Though specific legal agreements still need to be drafted, specific investment structure and procurement process have been recommended. This set of recommendations proposes a clear path to move forward with a SIB pilot (*see Section III*);

Section 5 - Key Learnings

This section details selected learning points and success/failure factors that were acquired. These recommendations are targeted at public authorities, social entrepreneurs and social investors considering Social Impact Bonds as an alternative way to finance high-quality social services in continental Europe.

SECTION 5.1 – ON INTEREST FROM GOVERNMENT

As expected, the concept of Social Impact has triggered mitigated reactions when first introduced to political decision makers in Belgium. Concerns expressed by Belgian public policy makers can be classified in two categories: ideological and pragmatic.

The first category comprises individuals expressing ideological concerns *vis-à-vis* the concept of Social Impact Bonds which represents a threat as private investors are likely to *profit from public value*. For these individuals, as nicely formulated by Warner⁸⁴ (2012), *SIBs just reflect the continuing logic of neo-liberalism and the sway that neo-liberal ideas and interests continue to hold over government thinking*. Their positions reflect a fundamental distrust in the commitment of private investors to the pursuit of public value. This type of reactions however has been marginal, attesting a certain shift in the mindset of European decision makers and an increasing openness towards alternative models.

A second category includes more pragmatic individuals raised practical and valid concerns about the implementation of SIBs. Those concerns were about the potential loss of government control on the design of the intervention, a potential narrowing of program design to those element that lend themselves to measurable outcome evaluation and/or a lack of faith in the ability to effectively measure performance to ensure that program targets are really met and budget savings are effectively generated. This perspective represents the dominant reaction faced in Belgium. An interesting fact is that these individuals are easily turned into strong SIB advocates if they are explained the specific features and safeguards of the SIB model that ensure that public value is created.

Practical tip - Wording does matter to avoid ideological reactions from public stakeholders. The term ‘*Social Impact Bond*’ is poorly chosen. First, because the mechanism is not a bond *per se* technically speaking but most importantly because it directly refers to financial jargon and therefore evokes the threat of ‘*financialization*’ of social services provision which is at odds with the conception of social democracy as conceived in continental Europe. Describing SIBs as ‘*an insurance on the success of social programs*’ has been quite effective to describe

⁸⁴ WARNER, M., “*Profiting from Public Value? The Case of Social Impact Bonds*”, Cornell University, Paper presented at conference ‘*Creating Public Value in a Multi-Sector, Shared-Power World*’, University of Minnesota, Minneapolis, MN, Sept 20-22, 2012

the mechanism: if the social program is not effective, the government doesn't have to pay; if it is effective the government pays the costs of the program plus a marginal insurance premium to hedge against the risk of the program not being effective.

SECTION 5.2 – ON INTEREST FROM NON-PROFIT ORGANIZATIONS

In the US, non-profit organizations are only marginally and indirectly funded by public taxpayer money. Therefore, Social Impact Bonds represent a valued opportunity to increase the pool of social funding available by '*crowding in*' new investors.

In Belgium, as in other European countries, the context is radically different. Most non-profit organizations are directly funded by the government. Therefore, Social Impact Bonds may be perceived as a process that crowds out public funding and substitutes it with conditional private funding with an outcome obligation attached to it. This threat has been mentioned in most of the interviews led with Belgian non-profit organizations.

However, the recent crisis that has deeply hit most European countries has deeply challenged the classical public funding structure. Many non-profit organizations are currently struggling to keep their public financing and face severe issues when trying to launch new programs. This context may represent an opportunity for Social Impact Bonds as non-profit organizations will be forced to explore alternative financing mechanisms if they want to keep their level of ambition.

Practical tip - Positioning the SIB concept right does matter with European non-profit organizations. Positioning SIBs as '*seed capital for social innovation*' has been quite effective. In this approach, SIBs are conceived as tools to test innovative interventions and create the local evidence base required for a broader subsequent shift in public funding.

SECTION 5.3 – ON INTEREST FROM PRIVATE INVESTORS

As widely diagnosed in the US, it is unlikely that in the medium term, capital markets will release significant amounts of equity for financing high risk social ventures through Social Impact Bond mechanisms⁸⁵. On the contrary, SIBs are much more likely to evolve as a *new form of venture philanthropy than a new form of private equity investment*⁸⁶.

This finding deeply undermines the prospects of Social Impact Bonds in Europe where the practice of philanthropic funding is much less developed than in the US. However, as the

⁸⁵ See for example - RESNER, L., GODEKE, S., "*Building a Healthy & Sustainable Social Impact Bond Market*", Godeke Consulting with support from Rockefeller Foundation, December 2012, p.13

⁸⁶ WARNER, M., "*Profiting from Public Value? The Case of Social Impact Bonds*", Cornell University, Paper presented at conference '*Creating Public Value in a Multi-Sector, Shared-Power World*', University of Minnesota, Sept 20-22, 2012

odds of positive cost-benefit ratio for preventive interventions are higher in European welfare states⁸⁷ than in the US, the risk profile of an SIB investment is also significantly different. High taxpayer money savings potentially generated by an SIB investment in Europe makes it more attractive for traditional investors with lower risk tolerance than philanthropic investors. Therefore, even though the practice of philanthropic investment is only marginal in Europe, private funding of SIB shouldn't be considered as unrealistic as a broader range of investors can be tapped into.

⁸⁷ See SECTION 2A.3 – Financial modelling of SIB on Workforce Empowerment & SECTION 2B.3 – Financial modelling of SIB on Adult Recidivism

Bibliography

- AGODINI, R., DYNARSKI, M., “*Are experiments the only option? A look at dropout prevention programs*”, *The Review of Economics and Statistics*, 86(1): 180–194, February 2004
- CARD, D., KLUVE, J., WEBER, A., “*Active Labour Market Policy Evaluations: A Meta-Analysis*”, IZA Discussion Paper No. 4002, February 2009
- CULHANE, D. P., “*Public service reductions associated with placement of homeless persons with severe mental illness in supportive housing*”, *Housing Policy Debate*, Vol. 13, No. 1 (2002), pp. 107–63.
- DRAKE, E. K., AOS, S., MILLER, M. G., “*Evidence-Based Public Policy Options to Reduce Crime and Criminal Justice Costs: Implications in Washington State*”, *Victims & Offenders: An International Journal of Evidence-based Research, Policy, and Practice*, Vol. 4, Issue 2, pp.170-196, (2009)
- ELISH, K., MCGUINNESS, S., O’CONNELL, P. J., “*What Can Active Labour Market Policies Do?*” ESRI, November 2011
- FELITTI, V. J., ANDA, R. F., “*The Adverse Childhood Experiences (ACE) Study*”, *Centres for Disease Control and Kaiser Permanente*, (2005)
- GERARD, M., VALSAMIS, D., VAN DER BEKEN, W., with the expert contribution of ATKINSON, I. (Ecorys UK), EICHHORST, W. (IZA - Institute for the Study of Labor), FERNANDEZ, J. (Ecorys Spain), JOHANSSON, E., (Oxford Research) and ROTHFUSS, C., (Eureval), “*Why invest in employment? A study on the cost of unemployment*”, on behalf of European Federation for Services to Individuals (EFSI), Final report, Brussels, January 2013
- GLEASON, M., DYNARSKI, M., “*Do we know whom to serve? Issues in using risk factors to identify dropouts*”, *A Research Report from the School Dropout Demonstration Assistance Program Evaluation*, June 1998
- HECKMAN, J. J., “*Schools, Skills, and Synapses*”, *Discussion Paper Series*, IZA DP No. 3515 *Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor*, (2008)
- JESPERSEN, S. T., MUCH, J. R., SKIPPER, L., “*Costs and benefits of Danish active labour market programmes*”, *Labour Economics*, Vol. 15, Issue 5, pp. 859–884, October 2008
- JOY TONG, L. S., FARRINGTON, D.P., “*How effective is the “Reasoning and Rehabilitation” programme in reducing reoffending? A meta-analysis of evaluations in four countries*”, *Psychology, Crime & Law*, Vol. 12(1), pp. 3-24, January 2006
- KLUVE, J., “*The effectiveness of European active labour market policy*”, *RWI Discussion Papers*, No. 37, (2006)

- KOHLI, J., BESHAROV, D. J., COSTA, K., “*Inside a Social Impact Bond Agreement - Exploring the Contract Challenges of a New Social Finance Mechanism*”, Center for American Progress, May 2012
- LANDENBERGER, N. A., LIPSEY, M. W., ‘*The Positive Effects of Cognitive-Behavioural Programs for Offenders: A Meta-Analysis of Factors Associated with Effective Treatment*’ , Vanderbilt Institute for Public Policy Studies
- LARIMER, M. E., MALONE, D. K., GARNER, M.D., ATKINS, D.C., BURLINGHAM, B., LONCZAK, H.S., TANZER, K., GINZLER, J., CLIFASEFI, S.L., HOBSON, W.G., MARLATT, G.A., “*Health care and public service use and costs before and after provision of housing for chronically homeless persons with severe alcohol problems*”, JAMA, (2009) Apr 1, 301(13):1349-57
- LIEBMAN, J., “*Social Impact Bonds – A promising new financing model to accelerate social innovation and improve government performance*”, Center for American Progress, February 2011
- MARTIN, J. P., GRUBB, D., “*What works and for whom: A review of OECD countries’ experiences with active labour market policies*”, Swedish Economic Policy Review, Vol. 8, pp.9-56, (2001)
- PEARSON, F. S., LIPTON, D. S., CLELAND, C. M., YEE, D. S., “*The effects of behavioral/cognitive-behavioral programs on recidivism*”, Crime and Delinquency, 48(3), 2002, pp. 476-496
- PENNUCCI, A., LEMON, M., ANDERSON, L., “*How Does Washington State’s Learning Assistance Program Impact Student Outcomes?*”, Final Report. (Document No. 12-08-2201), Washington State Institute for Public Policy, (2012)
- RESNER, L., GODEKE, S., “*Building a Healthy & Sustainable Social Impact Bond Market*”, Godeke Consulting with support from Rockefeller Foundation, December 2012
- ROBERT, L., MAES, R., “*Wederopsluiking na vrijlating uit de gevangenis*”, Onderzoeksrapport, January 2012
- RODER, A., ELIOTT, M., “*A promising start: Year Up’s initial impact on Low-Income on Young Adult’s careers*”, The Economic Mobility Corporation, April 2011
- ROSS, R. R., ROSS, R. D., “*Programme development through research*”, in R. R. Ross, & R. D. Ross (Eds.), *Thinking straight: The reasoning and rehabilitation programme for delinquency prevention and offender rehabilitation*, Ottawa: AIR Training and Publications, 1995, pp. 25-37
- SADOWSKI, L.S., KEE R., , VANDERWEEE, T.J., BUCHANAN, D., “*Effect of a housing and case management program on emergency department visits and hospitalizations among chronically ill homeless adults: a randomized trial*”, JAMA, (2009) May 6, 301(17):1771-8
- WARNER, M., “*Profiting from Public Value? The Case of Social Impact Bonds*”, Cornell University, Paper presented at conference ‘*Creating Public Value in a Multi-Sector, Shared-Power World*’, University of Minnesota, Minneapolis, MN, Sept 20-22, 2012

- WILSON, D. B., BOUFFARD, L. A., MCKENZIE, D. L., “*A quantitative review of structured, group-oriented, cognitive-behavioural programs for offenders*”, *Journal of Criminal Justice and Behavior*, 32(2), 2002, pp.172-204
- WISE, A., BELINSKI, M., “*Launching of the first US Pay-For-Success Contract*”, Policy Analysis Exercise, Harvard Kennedy School, March 2012, p.50
- «*Jeunes domiciliés en Région Bruxellois e ayant quitté l'école par année d'étude*», Actiris, Observatoire Bruxellois de l'Emploi, 2010
- “*Tackling Chronic Homelessness with Personal Support and Permanent Housing*”, Infirmiers de Rue & Kois Invest, Internal Presentation, July 2012
- “*Buying into communities Jobs, skills training and business opportunities from council contracts*”, Local Government Association, London UK, December 2011
- “*From Potential to Action: Bringing Social Impact Bonds to the US*”, McKinsey & Company, May 2012
- “*Education to Employment: Designing a System that Works*”, McKinsey Center for Government June 2012
- “*A Technical Guide to Commissioning Social Impact Bonds*”, Social Finance, November 2011
- “*Return on Investment: Evidence-Based Options to improve Statewide Outcomes*”, Washington State Institute for Public Policy, April 2012
- “*Evidence-based Juvenile Offender Programs: Program Description, Quality Insurance and cost*”, Washington State Institute for Public Policy, June 2007

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APPENDIX I – OVERVIEW OF PETERSBOROUGH (UK) SIB MODEL

Study of a practical case : The UK Peterborough Prison Pilot (1/2)

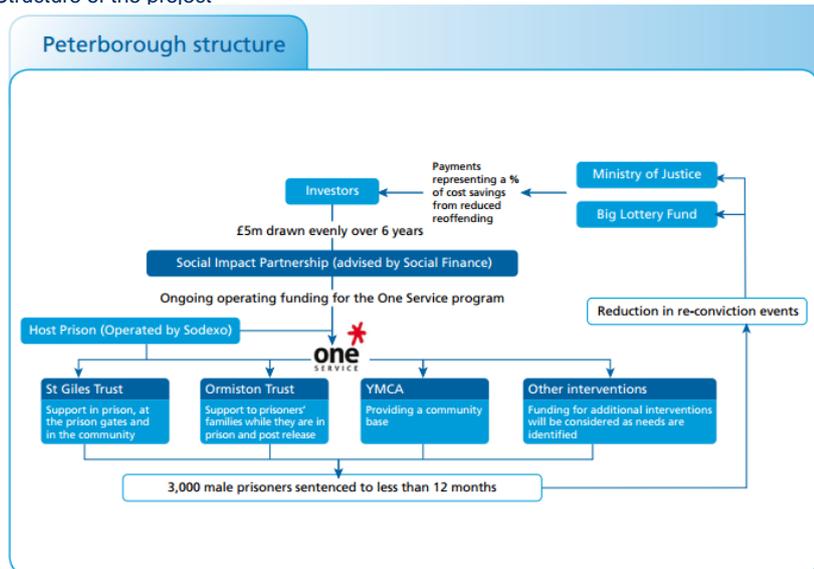
The background Story

- England **recidivism rate around 60%** (comparable rate in specific target groups in Belgium)
- UK Justice Ministry has contracted with a non-profit intermediary called **Social Finance** to deliver services **to prevent recidivism**
- The government will make payment to Social Finance only if the recidivism rate falls by **at least 7.5%** compared to the recidivism rate in a group of comparable prisons
- If payments are earned, they will be made in the fourth, sixth and eighth years based **on outcomes achieved in working** with prisoners during three consecutive two-years period.
- Social Finance has raised **\$8million from Financial Investors** to finance services delivery by non-profit providers (i.e., St Giles Trust, YMCA, Ormiston Trust)
- Social Finance estimates that if this intervention is successful and scaled across the UK, reductions in incarceration costs would be more than cover the costs of the Services

SOURCE: Social Finance UK, Harvard Kennedy School, Institut National de Criminalistique et de Criminologie

Study of a practical case : The UK Peterborough Prison Pilot (2/2)

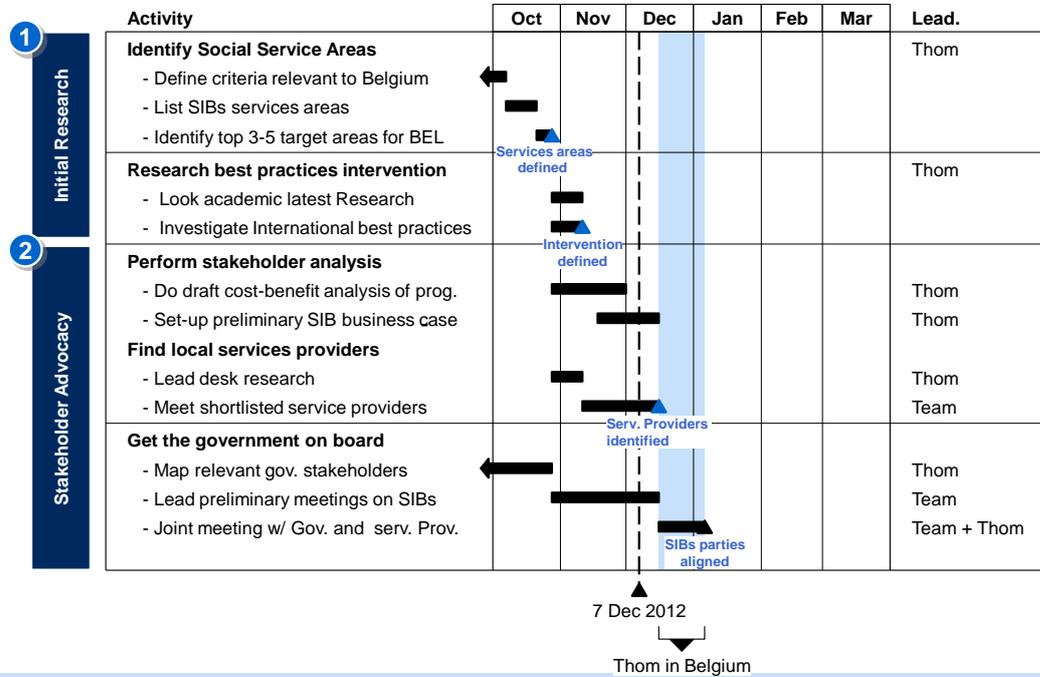
The Structure of the project



SOURCE: Social Finance UK

APPENDIX II – PROJECT PLANNING FOR ORIGINATING SIB DEALS

Project Plan – Section I : Originate Deals



APPENDIX III – INDEX OF SIBS PROJECTS AND ISSUES TARGETED WORLDWIDE

Index of SIBs projects currently running or in the process of being implemented

As of September 2012

#	Project Place & Social Issue	Country	Status	Contracting Entity	Intermediary	Service Provider	Contract Size	Duration	Evaluation method
1	Peterborough - Adult Recidivism	UK	Launched March 2009	UK Ministry of Justice	Social Finance UK	St. Gilles Trust; The Ormiston;	\$8 million	6 years	randomized trial
2	New South Wales - Drug Rehabilitation,	Australia	Launched March 2012	Treasury Dpt of New South Wales	Westpac Corporation and	tbd	\$25 million split between social	5-8 years	randomized trial
3	Essex County - Foster care	UK	Tender for Service	Essex County	Social Finance UK	tbd	\$10-20 million	tbd	tbd
4	Greater Merseyside - Employment	UK	Launched Jan 2012	UK Department for Work and Pensions	Triodos Bank	Greater Merseyside	\$7 million	3 years	tbd
5	Greater London - Chronic Homelessness	UK	Announced Jan 2012	Greater London Authority	tbd	tbd	\$7.8 million	tbd	tbd
6	Rhode Island - Adult Recidivism	USA	Announced July 2012	Social Venture Partners Rhode Island	Social Finance US	tbd	tbd	tbd	tbd
7	Massachusetts - Chronic Homelessness	USA	Launched August 2012	State of Massachusetts	Third Sector Capital Partners	Roca, Youth Options	\$ 25 million	6 years	tbd
8	Massachusetts - Recidivism (Juvenile)	USA	Launched August 2012	State of Massachusetts	Third Sector Capital Partners	Massachusetts Housing and	\$ 25 million	6 years	tbd
9	New York City	USA	Launched August 2012	Mayor Bloomberg NYC	Goldman Sachs	MDRC	\$ 10 million	6 years	tbd
10	Ireland - Social Housing	Ireland	Announced Sept 2011	Government of Ireland	Social Finance, Social Investment	tbd	tbd	tbd	tbd
11	Perth District - Adult Recidivism	Scotland	Announced March 2012	tbd	Social Finance	Perth & District YMCA, other	tbd	tbd	tbd
12	Minnesota - Unemployed Human Capital	USA	Launched Jan 2012	Minnesota Planning Agency	none	Twin Cities RISE	\$5 million	tbd	historical benchmark

SOURCE: McKinsey, Social Finance, Wyse&Belinski, Instiglio Inc. , PayForSuccess.org

List of Social Issues currently targeted with SIBs

As of September 2012

#	Social Issue		Existing SIBs projects	
	Name	Program/Treatment Description	Yes/No	Where?
1	Homelessness	Permanent Supportive Housing	Yes	New South Wales (AUS), Greater London
2	Juvenile Criminal Recidivism	Youth or Family Therapy, Foster Care	Yes	Massachusetts (US), New South Wales (AUS)
3	Adult Criminal Recidivism	Sentencing Alternatives	Yes	Peterborough (UK), Massachusetts (US)
4	Alcohol and Drug Rehabilitation	Drug Courts	Yes	New South Wales (AUS)
5	School Dropout	Multi-systemic treatment for residential care	Yes	Essex County (UK)
6	Employment	Blend of interventions (coaching, matching)	Yes	Merseyside (UK)
7	Family Planning	Contraception services	No	n/a
8	Early Childhood Readiness	Provide early school prep to at-risk population	No	n/a
9	Elderly Support	Provide support for elderly to stay in their	No	n/a

SOURCE: McKinsey, Social Finance, Instiglio

APPENDIX IV – QUALITATIVE SERVICE AREAS SELECTION

Evaluation of Social Issues : Qualitative Matching

Social Issue	Existi. SIBs?	Single gov. level?	Pol. Neutral ?	Measur-able?	Reco
▪ Homelessness	●	●	●	●	■
▪ K12 education and school success	●	●	●	●	■
▪ Youth & Adult Criminal Recidivism	●	●	●	●	■
▪ Alcohol and Drug Rehabilitation	●	●	●	○	■
▪ Education	●	●	●	●	■
▪ Workforce empowerment	●	●	●	●	■
▪ Family Planning	○	●	○	○	■
▪ Early Childhood Readiness	○	●	●	○	■
▪ Elderly Support	○	●	●	●	■

● High
● Med
○ Low

■ Reco

Based on initial assessment and review, we suggest that four specific issues should be prioritized given:

- Research on impactful intervention
- Track-record of success with SIBs
- Management with a single political layer
- Un-discussable political will
- Measurability of outcome

SOURCE: Internal Team Discussion

APPENDIX V – DETAILS ON JUVENILE RECIDIVISM PROGRAMS

Exhibit 13

“Best-Practices” evidence-based intervention for juvenile recidivism

Intervention	Description	Evidence	Right for SIBs ?
Multidimensional Treatment Foster Care (MTFC)	Rather than living in a group home with other youth offenders, youths are placed with specially trained foster families where they learn to accept rules and limits; build skills; and develop appropriate social behavior.	Two randomized controlled trials (RCTs) showed a 40-50% decline in criminal referrals.	Maybe: Foster parents will need to receive special training, so the intervention may not be easily replicable and scalable.
Multi-systemic Therapy (MST)	Parents learn to monitor and discipline their children so the family can stay together. Trained therapists are available 24/7.	Three studies demonstrate approximately 50% declines in criminal referrals.	Maybe: It may not pay for itself through taxpayer benefits. It also incurs a hefty price tag because it mandates graduate-level therapists.
Functional Family Therapy (FFT)	This short-term (8-12 sessions) prevention or intervention treatment for troubled youths focuses on entire family functioning.	More than 10 studies found a 25-60% decline in criminal referrals.	Yes: Its wide use suggests high potential to scale.
Brief Strategic Family Therapy (BSFT)	Developed for Hispanic families and now used among diverse ethnic populations, it targets kids aged 6-17 and their families in 12-16 weekly sessions.	Multiple studies show declines in measured conduct disorder, aggression, and drug use among participating youth.	Maybe: It has been shown to work with the communities for which it was designed, but it may not meet the needs of a broader population and may not be easily replicable and scalable.

SOURCE: McKinsey, James Alexander, Bruce Parsons, Christie Pugh et al, Functional Family Therapy: Blueprints for Violence Prevention, Book Three, Blueprints for Violence Prevention series, Delbert S. Elliott, ed., Boulder, CO: Center for the Study and Prevention of Violence, Institute of Behavioral Science, University of Colorado, 2000.

APPENDIX VI – JOB MATCHING RATES IN BRUSSELS

Groupe de professions d'ouvrier	Offres reçues			Offres satisfaites			Taux de satisfaction
	2011	± 10-11		2011	± 10-11		
		VA	%		VA	%	
Agriculteurs	88	-80	-26,5	68	-19	-21,8	81,9
Travailleurs des transports et communications	478	28	5,1	888	14	4,4	70,4
Travailleurs du textile -fourrure- cuir et vêtement	78	1	1,4	22	-14	n.s.	80,1
Travailleurs de la production et traitement des métaux	26	17	n.s.	5	2	n.s.	19,2
Mécaniciens de précision, horlogers et graveurs	28	10	n.s.	15	7	n.s.	65,2
Travailleurs de la transformation des métaux dont :	582	187	54,2	216	-19	-8,1	40,6
Tôliers et chaudronniers	78	86	85,7	84	5	n.s.	48,6
Plombiers et tuyauteurs	120	14	18,2	69	-14	-16,9	57,5
Soudeurs et découpeurs	84	19	n.s.	19	5	n.s.	55,9
Régisseurs et conducteurs de machines-outils	52	88	271,4	11	4	n.s.	21,2
Mécaniciens réparateurs et ajusteurs d'entretien	228	75	50,7	77	-6	-7,2	84,5
Monteurs	18	2	n.s.	5	-11	n.s.	27,8
Electriciens dont :	445	170	61,8	147	-9	-5,8	88,0
Electriciens et réparateurs	165	42	84,1	76	2	2,7	46,1
Electromécaniciens	196	105	115,4	40	-6	n.s.	20,4
Travailleurs du bois dont :	101	-6	-5,6	81	2	2,5	80,2
Menuisiers et charpentiers	95	-1	-1,0	77	1	1,8	81,1
Travailleurs de la construction dont :	581	18	8,2	458	-88	-6,8	78,0
Peintres et tapisiers	28	-7	n.s.	28	-6	n.s.	82,1
Maçons et carreleurs	188	-6	-4,2	109	-18	-10,7	79,0
Plafonneurs et plâtriers	14	-11	n.s.	8	-7	n.s.	57,1
Couvresseurs	80	-4	n.s.	21	-4	n.s.	70,0
Ouvriers d'entretien	854	56	18,8	278	10	8,7	78,5
Travailleurs de l'imprimerie	128	29	29,8	88	24	40,7	64,8
Travailleurs du verre, céramique et agglom. de ciment	0	-2	n.s.	0	0	n.s.	
Travailleurs du traitement des produits alimentaires dont :	202	6	8,1	87	-21	-19,4	48,1
Boulangers-pâtisseries	88	-14	-14,4	49	-16	n.s.	59,0
Bouchers	85	28	49,1	26	1	n.s.	80,6
Artisans et autres ouvriers à la production	47	4	n.s.	26	0	n.s.	55,8
Emballleurs, étiqueteurs et assimilés	12	8	n.s.	6	-8	n.s.	50,0
Dockers et manutentionnaires	196	-8	-1,5	186	11	8,8	69,4
Manœuvres	78	82	78,0	41	1	n.s.	56,2
Travailleurs des services dont :	8 559	859	11,2	2 879	104	4,6	66,8
Cuisiniers et personnel de cuisine	698	106	17,9	458	65	16,8	64,9
Serveurs et personnel de salle	728	70	10,7	408	6	1,5	56,4
Femmes de ménage et nettoyeurs	571	40	7,5	480	47	10,9	84,1
Coiffeurs et spécialistes des soins de beauté	212	47	28,5	122	-6	-4,7	57,5
Femmes de chambre, domestiques et assimilés	47	-26	n.s.	26	-28	n.s.	55,3
Gardiens, veilleurs de nuit	188	10	8,1	89	-4	-4,8	66,9
Aides-familiales et aides-seniors	288	51	28,0	171	40	80,5	78,4
Autres	104	-1	-1,0	47	-9	n.s.	45,2
Total ouvriers	6 658	817	14,0	4 145	88	0,9	62,8
Total (ouvriers + employés)	26 940	4 208	18,5	16 582	874	2,8	61,6

n.s. : non significatif.

Source – Actiris Rapport Annuel 2011

APPENDIX VII – FINANCIAL DETAILS ON WORKFORCE EMPOWERMENT PILOT

Set of Assumptions used

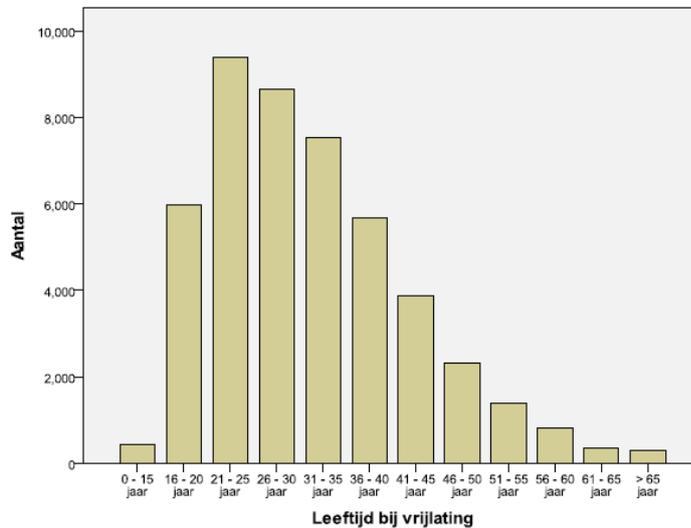
Items	Definition	Assumption
0 Constituents treated	Number of program participants	3 yearly cohorts of 200 students in the program
1 Direct Costs of Service Provision	Delivering intervention (e.g., wage of employees, quality insurance, transportation and administrative costs)	8FTEs @ 40,000€/year, 10% of administrative cost, 3000€/employee of Program training,
2 Ind. Costs of SIB structure	SIB cost (e.g., set-up, legal and evaluation costs)	50k€ of legal fees to structure SIB, 20k€ recurring to design research and monitor recidivism
3 Total Costs of SIB	Sum of direct and indirect costs of SIBs	-
4 Principal drawn down	Funds required from private investor each year	Principal drawn down as required over first 3 years
5 Total Direct Taxpayer Benefit	Average direct benefits from program accruing to taxpayers (i.e., fiscal gains on new earnings and consumptions and reductions of unemployment transfer payments)	Source : Gerard et al. (2013), average yearly cost of 33,443 euro / unemployed
6 Total Indirect TaxPayer Benefit	Average indirect benefits from program accruing to taxpayers	NOT INCLUDED IN WORKFORCE EMPOWERMENT CASE
7 Total TaxPayer Benefit	Sum of Direct and Indirect benefit to TaxPayer	-
8 Net Savings of Social Impact Bond	Benefits to taxpayers remaining after cost of SIBs	-
10 Social Investor Net Cash Flow	Flow of funds from and to private investors in each year based on average benefits to taxpayers	Payouts at the end of year 5 based on predetermined IRR of 15%
11 Success fee to providers and interm.	Contingent fee to intermediate/service provider based on program's success	5% of Net Savings from Social Impact Bonds
12 Savings to Taxpayer	Average benefits to taxpayers retained by government	Reminder of Net Savings minus payments to Social investor and Service providers

Year-on-Year Financials

	Process	Year 1	Year 2	Year 3	Year 4	Year 5	Total
0 Constituents treated	[From Assumptions]	200	200	200			600
1 Direct Costs of Service Provision	[From Assumptions]	€ (352,000)	€ (352,000)	€ (352,000)			€ (1,056,000)
2 Ind. Costs of SIB structure	[From Assumptions]	€ (70,000)	€ (20,000)	€ (20,000)	€ (20,000)	€ (20,000)	€ (150,000)
3 Total Costs of SIB	[1] + [2]	€ (422,000)	€ (372,000)	€ (372,000)	€ (20,000)	€ (20,000)	€ (1,206,000)
5 Total Direct Taxpayer Benefit	[From Assumptions]	€ -	€ -	€ 668,860	€ 1,337,720	€ 2,006,580	€ 4,013,160
6 Total Indirect TaxPayer Benefit	[From Assumptions]	€ -	€ -	€ -	€ -	€ -	€ -
7 Total TaxPayer Benefit	[5] + [6]	€ -	€ -	€ 668,860	€ 1,337,720	€ 2,006,580	€ 4,013,160
8 Net Savings of Social Impact Bond	[3] + [7]	€ (422,000)	€ (372,000)	€ 296,860	€ 1,317,720	€ 1,986,580	€ 2,807,160
10 Savings to Taxpayer	* [8]	€ (304,281)	€ (268,228)	€ 214,049	€ 950,134	€ 1,432,412	€ 2,024,086
11 Success fee to providers and interm.	0.1 * [10] in Year 7					€ 140,358	€ 140,358
12 Investor Net Cash Flow	[Reminder of net Savings]	€ (422,000)	€ (372,000)	€ (412,000)		€ 1,848,716	€ 642,716

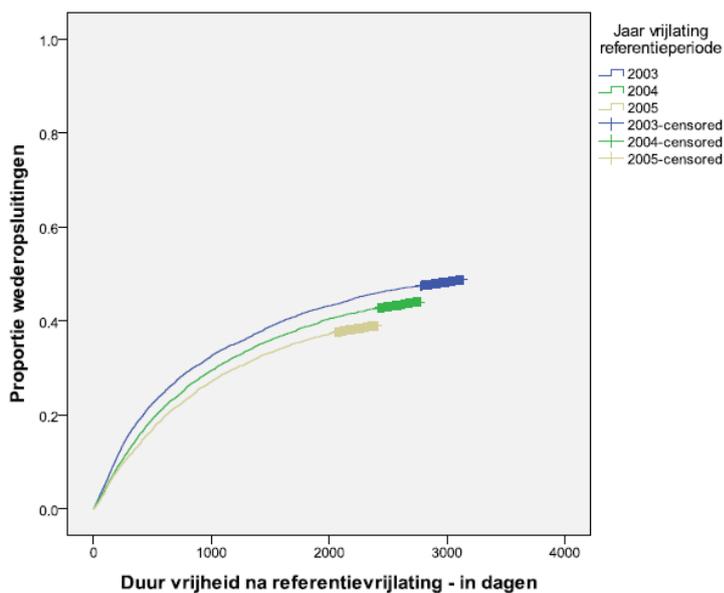
APPENDIX VIII – DESCRIPTION OF RECIDIVISM ANALYSIS COHORT

The cohort comprises 46,789 individuals that were released from jail within the 2003-2005 period. The cohort is composed of 93.2% male and 6.8% female. As displayed in **Exhibit 10**, age distribution of released prisoners is highly skewed to the left: 52.3% of the cohort was less than 30 years old when released; 20.1% of them were between 21 and 25 years old.



Release age distribution (From Robert et. Al, p.20)

Figuur 20. Wederopsluiting volgens jaar van de referentievrijlating



Re-incarceration rate in yearly cohorts (from Robert et. Al, p.40)

APPENDIX IX – FINANCIAL DETAILS ON ADULT RECIDIVISM PILOT

Set of Assumptions used

Items	Definition	Assumption
0 Constituents treated	Number of program participants	10 therapists animating 3 groups of 6 adult offers in bi-weekly sessions over 18 weeks
1 Direct Costs of Service Provision	Delivering intervention (e.g., therapist, quality insurance, transportation and administrative costs)	10 FTEs @40k€, 10% of administrative cost, 3000€/therapist of Program training, 200€/youth of Program quality insurance
2 Ind. Costs of SIB structure	SIB cost (e.g., set-up, legal and evaluation costs)	50k€ of legal fees to structure SIB, 20k€ recurring to design research and monitor recidivism
3 Total Costs of SIB	Sum of direct and indirect costs of SIBs	-
4 <i>Principal drawn down</i>	Funds required from private investor each year	Principal drawn down as required over first 3 years
5 Total Direct Taxpayer Benefit	Average direct benefits from program accruing to taxpayers (i.e., reduced government spending from incarceration and offense processing)	Source : WSIPP (methodo), INCC (Belgian Data). Impact on recidivism : -15%, cost of offense processing : 670€, cost/day in jail : 164€, average length : 265 days
6 Total Indirect Taxpayer Benefit	Average indirect benefits from program accruing to taxpayers	NOT INCLUDED IN ADULT RECIDIVISM CASE
7 Total Taxpayer Benefit	Sum of Direct and Indirect benefit to Taxpayer	-
8 Net Savings of Social Impact Bond	Benefits to taxpayers remaining after cost of SIBs	-
10 <i>Savings to Taxpayer</i>	Average benefits to taxpayers retained by government	Reminder of Net Savings minus payments to Social investor and Service providers
11 <i>Success fee to providers and interm.</i>	Contingent fee to intermediate/service provider based on program's success	10% of any returns to investor after principal is repaid
12 <i>Investor Net Cash Flow</i>	Flow of funds from and to private investors in each year based on average benefits to taxpayers	Payment based on assumed 15% IRR

Year-on-Year Financials

	Process	Year 1	Year 2	Year 3	Year 4	Year 5	Total
0 Constituents treated	[From Assumptions]	540	540	540			1620
1 Direct Costs of Service Provision	[From Assumptions]	€ (767,768)	€ (717,768)	€ (717,768)			- 2,203,304 €
2 Ind. Costs of SIB structure	[From Assumptions]	€ (70,000)	€ (20,000)	€ (20,000)	€ (20,000)	€ (20,000)	€ (150,000)
3 Total Costs of SIB	[1] + [2]	€ (837,768)	€ (737,768)	€ (737,768)	€ (20,000)	€ (20,000)	- 2,353,304 €
4 <i>Principal drawn down</i>	From [3]	€ (837,768)	€ (737,768)	€ (777,768)			€ (2,353,304)
5 Total Direct Taxpayer Benefit	[From Assumptions]	€ 857,887	€ 1,286,831	€ 1,572,793	€ 857,887	€ 857,887	€ 5,433,286
6 Total Indirect Taxpayer Benefit	[From Assumptions]	€ -	€ -	€ -	€ -	€ -	€ -
7 Total Taxpayer Benefit	[5] + [6]	€ 857,887	€ 1,286,831	€ 1,572,793	€ 857,887	€ 857,887	€ 5,433,286
8 Net Savings of Social Impact Bond	[3] + [7]	€ 20,119	€ 549,063	€ 835,025	€ 837,887	€ 837,887	€ 3,079,982
10 <i>Savings to Taxpayer</i>	0.5* [8]	€ 10,866	€ 296,527	€ 450,963	€ 452,509	€ 452,509	€ 1,663,374
11 <i>Success fee to providers and interm.</i>	0.1* [10] in Year 7					€ 153,999	€ 153,999
12 <i>Investor Net Cash Flow</i>	[Reminder of net Savings]	€ (837,768)	€ (737,768)	€ (777,768)		3,615,913 €	€ 1,262,609

APPENDIX X – NEXT PHASES FOR PROJECT IMPLEMENTATION

