BONDS WITH SOCIAL IMPACT

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GRADE IN FINANCE AND ACCOUNTING

ACADEMIC YEAR: 2018-2019

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1. Introduction

Over the years, countries have been affected by the financial crisis, forcing them to reduce public debt. The interventions needed to reduce public spending are often deficient due to lack of funding. Therefore, new ideas of financing and investment need to be incorporated.

First, the theoretical framework will be analysed, briefly explaining what financial bonds are, which are the most important issuers and which characteristics must be taken into account to carry out the issue. This will be followed by socially responsible investment and sustainable bonds, giving way to the main theme of this study, bonds with a social impact.

Consequently, this study will be based on the analysis of the social bonds of different countries compared to those of Spain, in this way it will be possible to observe whether the decision to invest in these bonds has had the same impact expected by the parties involved. It will also be possible to give a congruent conclusion of the same and corroborate that the objectives for which they have been designed are achieved.

Keywords: Sustainable bond, bond with social impact, socially responsible investment.

2. Theoretical Framework

2.1 What are traditional Bonds?

A new investment in plant and equipment needs capital. Sometimes companies retain profits to cover investment costs, but at other times they must raise additional capital from investors. If they need short-term capital, they could get a bank loan, but if they need cash for long-term investments, they usually issue bonds. **Martellini, Priaulet and Priaulet (2003).**

A bond is a financial right by which the issuer, or borrower, undertakes to pay to the holder of the bond, or to the lender, the amount of cash borrowed, called principal, plus periodic (fixed or variable) interest calculated on this amount over a specified period of time. Also referred to as fixed-income securities or debt instruments. **Martellini, Priaulet and Priaulet (2003).**

An important feature of a bond is the nature of its issuer. One of the largest issuers of debt are national corporations, including regulated utilities, or less regulated, municipalities are also financed by selling bonds, placing a portion of the debt publicly, while other bonds can be sold directly to one or only a few buyers. **Fabozzi, (2000)**

Consequently, the municipal government issues bonds to build schools widen highways or build a new sewer system. Companies also issue bonds in order to increase financial assets, but investors consider government bonds to be safer investments because they have the confidence to recoup the initial investment. However to a company, on the other hand, there is a risk that the company will become insolvent and not be able to liquidate its obligations. **Chtourou, (2015)**

In addition to the bonds issued by the federal government, we can also find municipal bonds: one of these bonds is the general bond: they are guaranteed by the local government rather than the proceeds from a particular project. Voters in the municipality, city, or state must approve these bonds before they are issued. Investors therefore tend to prefer these bonds, as defaults on general obligation bonds have been quite infrequent.

As for revenue bonds: interest and principal yields on these bonds depend on revenues, tolls, construction projects such as roads, bridges and stadiums. Since they do not depend on tax revenue, they do not require voter approval. Revenue bonds have been issued for hospitals, housing and airports. Since the repayment of interest and principal on these bonds depends on project revenues, unreliable revenues could have a negative impact on the issuer's profitability. **Mobius, (2012)**

Government bond issues take place in the primary market, where investors receive a periodic interest payment over the fixed term of the government bond. After the maturity date, the government must pay the value of the debt. In addition, government bonds are traded on the secondary market. **Chtourou, (2015)**

In short, the advantages of bonds that they are less volatile than equities, offer a regular return on interest payments, principal is returned at maturity, and provide investment diversification. The best strategy for investing in bonds takes into account the investor's personal needs, investment resources, and risk tolerance. **Mobius, (2012)**

2.2 Socially responsible investment. (SRI)

The transition to a sustainable global economy requires expanding the financing of investments that provide environmental and social benefits. Social investment has been used to describe a way of thinking about social spending in Europe since the adoption of the Lisbon Agenda in 2000. It is based on the premise that public social spending today will pay off at some point in the future through greater economic growth and employment.

For example, better early childhood education may result, in the futuree, in a more effective and competitive workforce that pays more in taxes and receives less in unemployment insurance and welfare payments. Applying this principle helps to prioritise those types of public welfare spending that have the greatest beneficial effects. **Davies, (2014)** Responsible investment is an approach to investing that aims to incorporate environmental, social and governance (ESG) factors into investment decisions, to better manage risk and generate sustainable, long-term returns. **PRI, (2015).**

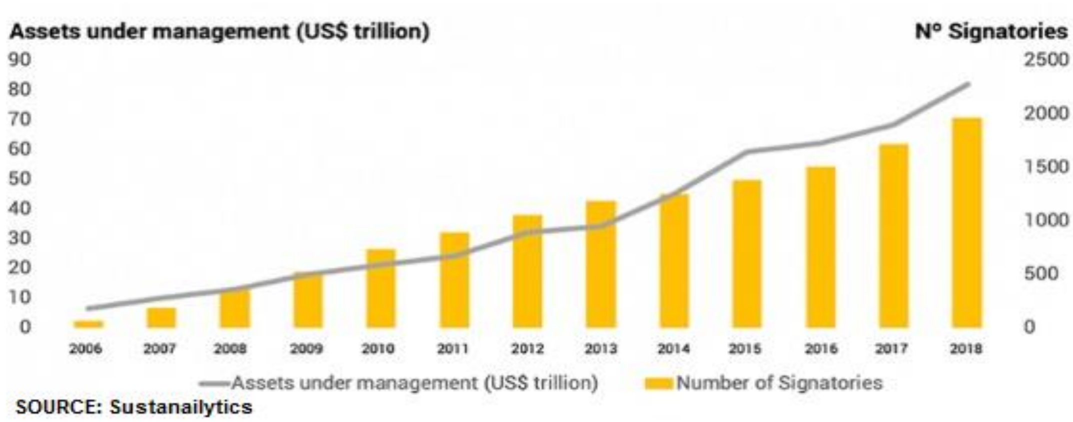


Figure 1 Number of investors incorporating ESG factors

The Principles for Responsible Investment, launched in 2005, introduced a core set of actions that investors could take to incorporate ESG factors into their investment process.

Investors globally are increasingly incorporating environmental, social and governance (ESG) data and analysis into a multitude of investment approaches. From ethical and faith-based investors aligning investment decisions to their values to traditional financial institutions mitigating risk and searching for opportunities. **(Sustainalytics, 2019)**

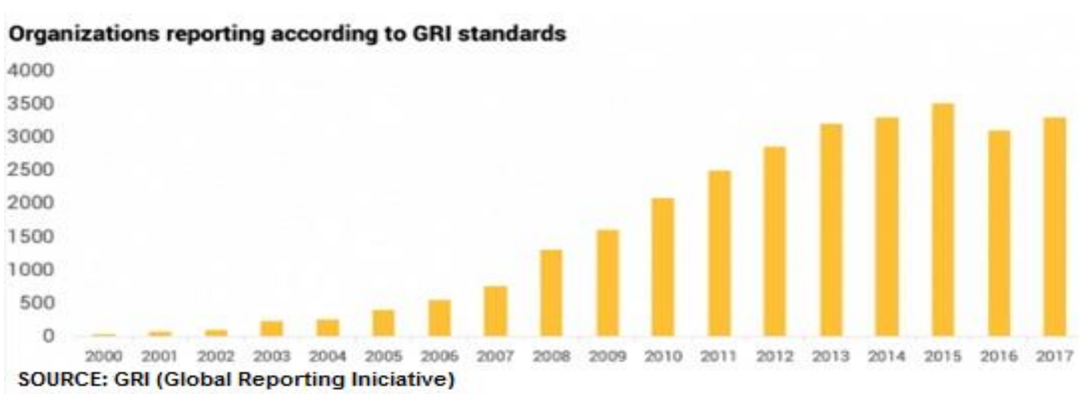


Figure 2 Contribution of ESG reports by companies

As investor interest in corporate sustainability increased, so did the disclosure by companies of relevant ESG data. Over 80% of the world's large corporations currently provide ESG information to the market through GRI (Global Reporting Initiative), the most widely used sustainability reporting framework in the world. **(Sustainalytics, 2019)**

Brzeszczynski and McIntosh, (2014) emphasize that this investment strategy combines the financial and developmental aspects of the company with other social and environmental benefits, thus linking an investor's "social, ethical benefits", ecological and economic concerns.

According to the **PRI, (2015),** some examples of environmental, social and governance factors (ESG) are as follows:

Environmental	Social	Governance
☐ Climate change	☐ Working conditions	☐ Bribery and corruption
☐ Resource depletion	☐ Conflict	☐ Executive pay
☐ Waste and pollution	☐ Health and safety	☐ Tax strategy

SOURCE: PRI

Table 1 The ESG factors

The global momentum around responsible investment is driven by:

- Recognition in the financial community that ESG factors play a material role in determining risk and return;
- Understanding that incorporating ESG factors is part of investors' fiduciary duty to their clients and beneficiaries;
- Concern about the impact of short-termism on company performance, investment returns and market behaviour;
- Legal requirements protecting the long-term interests of beneficiaries and the wider financial system;
- Pressure from competitors seeking to differentiate themselves by offering responsible investment services as a competitive advantage;

- Beneficiaries becoming increasingly active and demanding transparency about where and how their money is being invested;
- Value-destroying reputational risk from issues such as climate change, pollution, working conditions, employee diversity, corruption and aggressive tax strategies in a world of globalisation and social media.***PRI,(2015)***

2.3 The Sustainable Bonds.

Sustainable Bonds are those bonds where funds will be applied exclusively to finance or re-finance a combination of Green Projects and Social Projects. The Sustainable Bonds are aligned with the four main pillars of the GBP (The Green Bond Principles) published in 2014 and SBP (sustainability bond guidelines) published in 2017, the former being especially relevant for Green Projects and the latter for Social Projects. These principles were developed by the International Capital Market Association (ICMA).

It is possible to distinguish two main types of SIBs:

a) 'grant-based' SIBs: the issuer must assign a certain amount of money to the financing of a social project or venture (traditionally a no profit organization).
b) 'loan-based' SIBs: the entire proceeds are used to finance social initiatives (projects or ventures). They contribute to the creation of a ceiling that will be employed by the issuer (here a bank or an institutional investor) for the financing of a selected target of social businesses and projects. The study will be based on this type of social bonds.

It is also recognized that there is a market for sustainability thematic bonds, including those linked to Sustainable Development Goals ("SDGs"), in some cases issued by organizations that are primarily or wholly involved in sustainable activities, but are not aligned with the four basic components of the Principles. **Icmagroup.org, (2018a).**

2.4 Bonds with social impact. (SIBs)

Once you understand what a financial bond is and how it differs from sustainable. The analysis will focus and deepen on the Bonds with Social Impact.

2.4.1 What is a social bond with impact?

Bonds with social impact (BIS) are an innovative mechanism that generates a successful pay-for-you-go contract between the public administration, the private sector and civil society to finance innovative and evidence-based social interventions. A model that aligns the interests of different actors around the achievement of impact objectives that improve the results of social service interventions. **Creas.org.es, (2018)**

Social Finance launched the first social bond in 2010 with three cohorts of 1,000 inmates from Peterborough Prison for 7 years, resulting in a 9% reduction in recidivism of convicted offenders overall compared to a national control group. This exceeded the 7.5% target set by the Ministry of Justice, as a result the 17 investors in the Peterborough Social Impact Bond will receive a one-off payment representing their initial capital plus an amount that will represent a return of just over 3% per annum over the investment period. **Social finance (2017)**

The coalition government proposed that rehabilitation services be paid in part on the basis of their success in reducing recidivism; paying a basic fee to cover their costs and an additional fee paid if recidivism reduction targets are met. They cite the 'Peterborough Social Impact Bonds' as a promising model. **Clarke (2010).**

According to **Cabinet Office (2013),** social impact bonds are called Payment by Results (PbR). **Disley et al. (2011)** emphasize that they are called this way because it is a contract based on results. In the event that the projects produce the results expected and agreed in the contract, the State will be responsible for remunerating the private investors who have previously contributed the capital. These returns will be paid directly from the State's public coffers. However, if the result is negative or the project fails, the investor will lose the invested capital. **Cabinet Office (2014).**

2.5 Structure of the SIB

The structure of the SIB as explained and Bergfeld et al.(2016) and Burand (2013) may vary from contract to contract. It is used in Peterborough's SIB, and in the Harvard Kennedy School's social program in the Impact Bonus Technical Assistance Laboratory that includes the following actors related to the issuance of the social impact bond:

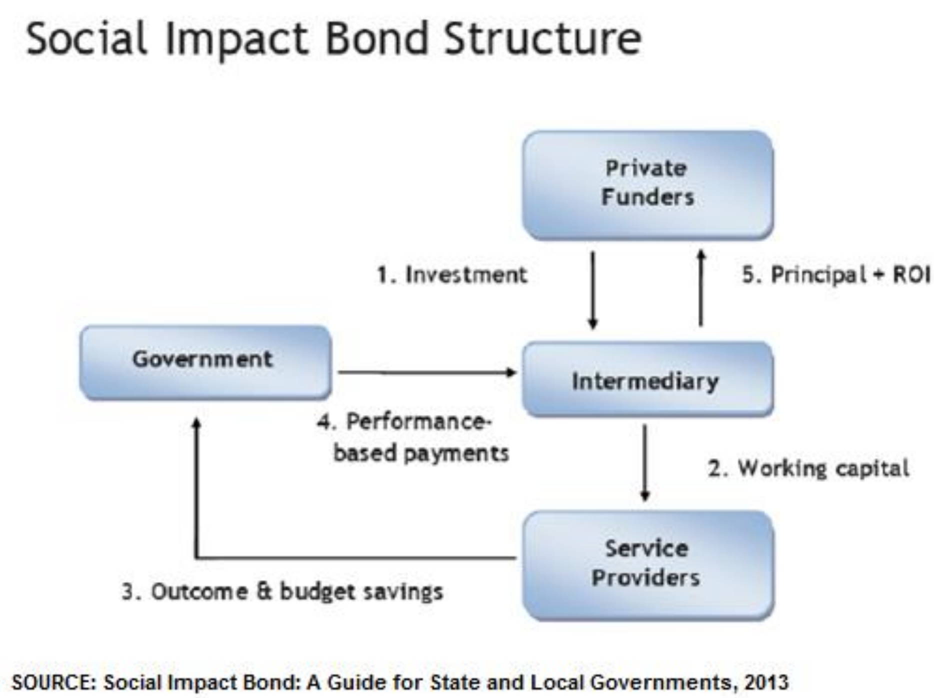


Figure 3 Social Impact Bond Structure

1. **<u>Government (payer of results)</u>**. The payer of results is the entity that establishes the payment, and defines what results will be measured. The government must be willing to make payments that cover the full costs of providing the services plus the rate of return required by investors, by virtue of receiving evidence of measurable improvements in the prevention of a defined social problem. So far, most SIB contracts have programmes aimed at criminal justice, education, employment and welfare (e.g. reducing homelessness) **Bergfeld et al, (2016)**

2. **Private investors (up-front capital).** Private funders are expected that are willing to put at risk not only potential financial returns but also to put up the initial capital needed for the intermediary and service provider to implement an intervention/program expected to be effective at achieving the outcomes agreed upon in the contract. **Bergfeld et al, (2016)**

3. **Intermediary (clearing house and organiser).** Intermediaries perform multiple functions and in some SIB constructions these are performed by separate entities. First it borrows money from the private investor(s), distributes the funds of the SIB loan to social service providers to use in expanding their services, and then during the life of the SIB organizes, and generally supervises with respect to the overall performance of the SIB and directs the flow of funds between social service providers, SIB investors and the contracting government authority. **Burand (2013)**

4. **Service providers (implementer).** The service provider is the entity responsible for implementing their own social program or a social program provided to them. They are supervised by an intermediary responsible for data acquisition and program evaluation (to analyze the service provider's on going performance). **Bergfeld et al.(2016)**

5. **Independent Evaluator".** It is the one that determines whether the expected results have been achieved according to the following criteria with the government's success payment contract. **Burand (2013)**

2.6 Essential criteria for a SIB

According to the website GOV.UK**. (2017)** and **Mulgan et al.,(2010)**. They say that some of the following factors are likely to be critical factors for the success of a new social investment model, including SIBs:

1. **Improves well-being in an area of high social need.** Intervention improves social welfare and prevents or improves a poor outcome.

2. **Evidence of efficacy.** The intervention is supported by evidence of its effectiveness and impact, which gives funders confidence in the likely success of the scheme.
3. **Measurable impact.** Whether it is possible to measure the impact of the intervention accurately enough to give all parties confidence in the effect of the intervention, including a sufficiently large sample size, appropriate time scales, and appropriate impacts that are closely related to savings and relatively easy to measure.

4. **Align incentives.** A specific government stakeholder achieves savings or lower costs as a result of actions taken by others. These savings should be cash-releasing and provide real savings to government stakeholders.

5. **Savings greater than costs.** Savings for the specific government stakeholder are relatively immediate and far greater than the cost of intervention and transaction costs. This provides investors with a sufficient return to absorb the risks inherent in the system and can provide significant funds for social investment.

2.7 Principles of Social Bonds

The Social Bond Principles (SBP) promote integrity in the development of the social bond market through guidelines recommending transparency, disclosure and reporting.

The SBP recommends a clear process and disclosure for issuers, which investors, banks, underwriters, placement agents and others can use to understand the characteristics of any given social bond. The SBP emphasizes the transparency, accuracy and completeness of the information that issuers must disclose and communicate to interested parties.

SBP has four basic components:

1. Use of proceeds
2. Project Evaluation and Selection Process
3. Revenue management
4. Reports

1. Use of proceeds

Social projects have the direct objective of addressing or mitigating a specific social problem and/or trying to achieve positive social results, especially, but not exclusively, for one or more target populations.

The following are illustrative examples of categories of social projects that seek to achieve positive socio-economic outcomes for the target populations. The following list of project categories, while indicative, lists the most commonly used types of projects supported or expected to be supported by the social bond market.

Categories of Social Projects include, but are not limited to, providing and/or promoting:

- Affordable basic infrastructure (e.g. clean drinking water, sewerage, sanitation, transport, energy).

- Access to essential services (e.g. health, education and vocational training, health care, financing and financial services).
- Affordable housing
- Employment generation, including through the potential effect of SME finance and microfinance.
- Food security
- Socio-economic advancement and empowerment

Examples of target populations include, but are not limited to, those that are:

1. Living below the poverty line
2. Excluded and/or marginalized populations and/or communities
3. Vulnerable groups, including as a result of natural disasters
4. Persons with disabilities
5. Migrants and/or displaced persons
6. No education
7. Unemployed

2. Project Evaluation and Selection Process

The issuer of a Social Bond must clearly communicate to investors:

- the social objectives of the bond
- the process by which the issuer determines how projects fit into the categories of eligible social projects identified above
- the relevant eligibility criteria, including, where appropriate, exclusion criteria or any other process applied to identify and manage potentially significant social and environmental risks associated with the projects.

The SBP encourages a high level of transparency and recommends that an issuer's project evaluation and selection process be complemented by an external review.

3. **Revenue management**

The net proceeds of the Social Bond, or an amount equal to these net proceeds, must be credited to a sub-account, transferred to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner, and credited by the issuer in a formal internal process linked to the issuer's lending and investment operations for Social Projects.

The SBP fosters a high level of transparency and recommends that the management of an issuer's income be complemented by the use of an auditor, or other third party, to verify the internal monitoring method and the allocation of funds from the income of social bonds.

4. **Reporting**

Issuers must make available and maintain up-to-date information on the use of funds, which must be renewed annually until full allocation, and in due course in the event of major events. This annual report should include a list of projects to which income from social bonds has been allocated, as well as a brief description of the projects and the amounts allocated and their expected impact.

Transparency is particularly valuable in communicating the expected impact of projects. The SBP recommends the use of qualitative performance indicators and, where feasible, quantitative performance measures (e.g., the number of beneficiaries, especially target populations) and disclosure of the key underlying methodology and/or assumptions used in the quantitative determination. Issuers with the capacity to monitor the impacts achieved are encouraged to include them in their regular reports**. Icmagroup.org. (2018b).**

2.8 Advantages of the actors that participate in bonds with social impact

The SiB project has not been going on for many years and many countries are unaware of the benefits it can bring, in some places such as Spain they continue to be uncommon and there are still few banks that commercialise products of this type, something that is still in full development. Therefore, it is important to know what benefits and advantages they would obtain when carrying out the SIB project.

According to the website **Inuitfundacion. (2017)** these are the advantages of the actors involved in the SIBS:

- **Government.**
- Efficiency in the management of public funds.
- Promotion of social innovation.
- Rigor in the provision of services and the measurement of their impact.

- **Private financiers.**
- Obtaining funds and guaranteeing the sustainability of the project during the years the contract is in force.
- Promotion of programs that offer innovative solutions.

- **Intermediary.**
- Contribution to social change.
- Hybrid formula of social and financial profitability.

- **Service providers.**
- Consolidation of the process through intermediation and coordination of the different actors.

- **Independent Evaluator**
- Certified guarantee of compliance with the established Social Impact objectives.

2.9 Types of social bonds

There are currently four types of Social Bonds (additional types may emerge as the market develops and these will be incorporated into the annual updates of the SBP):

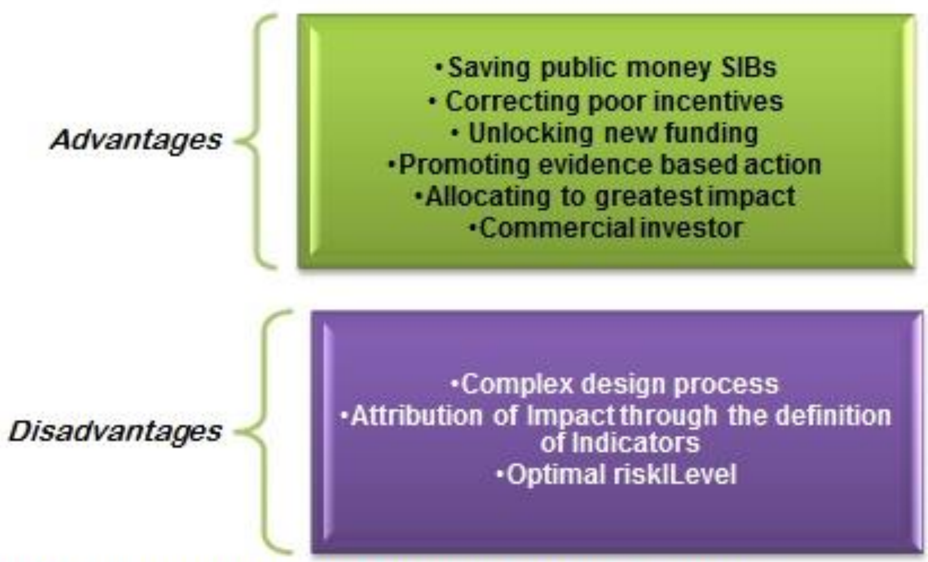
- **Standard Social Use of Proceeds Bond:** a standard recourse-to-the-issuer debt obligation aligned with the SBP.

- **Social income bond**: a debt obligation without recourse to the issuer aligned with the SBP in which the credit exposure in the bond is to the promised cash flows of income flows, fees, taxes, etc., and whose use of the income is earmarked for one or more related or unrelated social projects.

- **Social project bond:** a project bond for a single or multiple Social Project(s) for which the investor has direct exposure to the project risk with or without potential recourse to the issuer, and which is aligned with the SBP.

- **Social Security** covered and insured bonds: bonds guaranteed by one or more specific social projects, including but not limited to covered bonds, ABS, MBS and other structures; and aligned with the SBP. The first source of repayment is generally the cash flows of the assets. This type of bond covers, for example, covered bonds backed by social housing, hospitals and schools. **(Icmagroup.org, 2018b)**

2.10 Advantages and disadvantages of SIBS.



SOURCE: Fundación CODESPA,(2019) and Mulgan et al., (2010)

Table 2 Advantages and disadvantages of SIBs

According to **Mulgan et al.,(2010)** these are the advantages of the SIBs.

- **<u>Saving public money SIBs</u>** are able to save money for the public purse even at a time of intense pressure on public resources. They are able to achieve this result by acting to correct poor incentives and attain new sources of funding, by promoting evidence based action, by allocating resources to where it can achieve greatest impact and achieving real risk transfer.

- **<u>Correcting poor incentives</u>** In many fields of public policy, incentives are poorly aligned, with those who have the ability to improve social outcomes lacking the incentive to act. For example, Local Authorities responsible for providing services to young people that divert them away from crime or worklessness do not share the savings from reduced prison numbers or reduced benefit bills. SIBs can help to align activities in a systematic way.

- **<u>Unlocking new funding</u>** From homelessness to health, it has often proved difficult to secure funding for initiatives that set out to prevent undesirable outcomes. Against the current backdrop of public sector funding, these activities are likely to be even more difficult to fund. The analytic rigour of the SIB framework offers a potential way of funding these activities.

- **<u>Promoting evidence based action</u>** SIBs put evidence at the heart of the process, strengthening the evidence base for 'what works' - and what does not work. In addition, SIBs encourage commissioners and providers to think in terms of investment and returns. SIBs encourage greater investment in evaluation of impact -an issue that delivery agencies (especially in the voluntary sector) often find difficult to resource sufficiently – and offer prospects of turning the rhetoric of 'investing in people' into action.

- **<u>Allocating to greatest impact</u>** Charitable funding often does not flow to the areas of greatest social need. More emotionally appealing areas attract greater funding levels. Equally, political considerations make it difficult for Government to spend money in certain areas. Prisoners, youth offenders, and drug addicts are disadvantaged in this way and these very categories impose the greatest costs on society and the public purse.

- **Commercial investor** SIBs are a new opportunity to seek returns. They allow private funders to access new sources of investment return that have not previous been available. They also allow investors to support charitable work that improves social wellbeing at the same time as getting a financial return.

According to the website "**Fundación CODESPA" (2019)** these are the disadvantages that can occur through the development of the SIB structure:

- **Complex design process.**

- The project analysis work requires some initial investment to finance the feasibility study and design.
- There must be unanimity among all the actors when defining the different components of the program, the expected results, the evaluation and payment metrics, among other aspects.
- As for the payer of results (PfR), this is, the agent that undertakes to pay the investor in case of achievement of the relevant social results, are contracted through a public tender, with subsequent negotiation and require an extensive workload in the collection of information and subsequent analysis.

- **Attribution of impact through the definition of indicators.**

- The results evaluated on the basis of quantitative indicators, given the need for precise measurement of impact attribution.

- **<u>Optimal risk level.</u>**

- They depend on the need to transfer risk. If the risk is very high, the impact investors will not want to invest in the project or will ask for a rate of return that the payer per result will not be willing to pay.

3. Methodology

First, five social bonds from different countries have been analysed: the United Kingdom, the United States, Canada and the Netherlands. The variables have been acquired through the database of Social Finance Ltd (2018), with the aim of knowing which of the following bonds meets the criteria necessary to qualify them as SIB.

Secondly, there will be an analysis of the social bonds launched by the ICO in Spain. On the one hand, a brief explanation of how the ICO bonds work and what their purpose is will be elaborated. On the other hand, the same analysis will be carried out as with foreign bonds, obtaining the variables from the Ico.es website.

Finally, it will be commented if the results obtained from the impacts of both analyses are similar, and if there are big differences between them.

4. Empirical Analysis.

4.1 Analysis of bonds with social impact from foreign countries.

The purpose of this section is to analyze whether the following five bonds with social impact from different countries meet the most relevant criteria to qualify them as Social Impact Bonds (SIB).

The information on each of the bonds is acquired from the **Social Finance database (2019).** Each of them will be detailed below. The essential criteria that appear in the table are adapted through **Mulgan et al, (2010)**

Social Impact Bonds (SIB)								
		Success Criteria						
SIB Name	**Category**	**Improves wellbeing in an area of high social**	**Preventative intervention / aligns incentives**	**Evidence of efficacy**	**Measureable impact**	**Savings greater than costs**	**Money refund**	**Mission**
ESSEX	Child and family welfare	√	√	√	√	√	√	Multi-Systemic Therapy (MST), which delivers family therapy in the home through highly qualified therapists delivered to 380 children on the edge of care or custody
New York	Criminal justice	√	√	√	√	√	X	This was the first Pay for Success project to be implemented in the United States, announced in 2012. The high recidivism rates among young offenders in Riker's Island prison, the existence of effective interventions, and the interest of U.S. politicians and investors came together to launch it.
Santa Clara Country, CA	Homeless-ness	√	√	√	√	√	√	This county-level project, the first Pay for Success project to launch services in California, aims to reduce chronic homelessness in Santa Clara County.
Rotterdam	Workforce development	√	√	√	√	√	√	This Social Impact Bond tries to reduce unemployment by encouraging and supporting young people to start their own businesses, with a focus on developing confidence and skills.
Toronto & Vancouver	Health	√	√	√	√	√	√	This Pay-for-Success project will support a new health programme, the Community Hypertension Prevention Initiative (CHPI), aimed at increasing awareness of and preventing hypertension.

Source. Own work based on the analysis of different Social Bonds regarding Mulgan et al., (2010) principles.

Table 3 Analysis of bonds with social impact from other countries

Firstly, **ESSEX SIB** was issued in the UK, launched in November 2012 for a duration of 8 years and the project's capital raised is £3.1M. The target population are young people between 11 and 16 years of age who are at risk of entering the care system, who exhibit antisocial, offensive or other behavioural disorders, referred to the Essex County social services service, for example, the educational level is five times worse than for the general population, and a third of the children previously served are NEET (not in education, employment or training) at 19 years of age. Action for Children will work with 380 families in 20 cohorts over the five-year period.

The first criteria is met as there **is improvement in welfare in an area of high social need**. By focusing on parenting and relationships in at-risk families, this Social Impact Bonus aims to create more stable and supportive environments to prevent children from entering care.

Second criteria is met since there is **preventive intervention/Aligns incentives**: Multisystemic Intensive Therapy (MST) is administered for a period of 3-5 months to youth and their parents by specially qualified therapists who work with approximately ten families per year and provide support 24 hours a day, 7 days a week.

Third criteria is met as **evidence of effectiveness is found**. MST is an evidence-based program that seeks to improve parenting and rebuild positive family relationships, enabling families to manage future crisis situations. A flexible funding source is also available so that resources can be allocated to program elements that are successful, or where more resources than anticipated are required.

Fourth criteria is met as **impact is measured**. The success of Social Impact Bond will be measured by the reduction in days of care, as well as by improved school performance, well-being and reduced recidivism.

Fifth criteria is met as **savings outweigh costs**. Placing children in out-of-home care is also expensive, with costs ranging from £20,000 to £180,000 per year per person. Therefore, this Social Impact Bonus could save Essex County Council a total of £10.3m in avoided costs for the system of care, less the cost of intervention.

Sixth criteria is met the **refund of money**. The value of performance payments per day of placement saved corresponds to a proportion of the cost savings to Essex County Council. Bridges Ventures and Big Society Capital provided a critical investment to encourage other investors, and target returns per year are 8% to 12%. Returns increase gradually with the number of days of placement saved, up to a maximum of £7m.

Secondly, the **SIB New York** was issued in the United States, launched in January 2013, with a duration of 3 years and capital raising of $9.6M. The initial target population was young men between the ages of 16 and 18 who entered the New York City jail on Rikers Island for more than 4 days (estimated at 3,000 per year) and were at risk of recidivism. Towards the end of the programme, the target population was expanded to include people aged 19 to 21.

The high recidivism rates among juvenile offenders in Riker's Island prison, the existence of effective interventions, and the interest of U.S. politicians and investors came together to launch America's first social impact bond. Nearly 50 percent of the 16- to 18-year-old men released from Riker's Island Jail return to jail within one year.

The first criteria is met by **improvement in welfare in an area of high social need**. Existing evidence-based interventions were chosen to help improve outcomes for these youth and benefit New York City by reducing recidivism and increasing employment.

The second and third criteria are met as there is **preventive intervention and evidence of effectiveness:** ABLE provides Moral Recognition Therapy (MRT), an evidence-based intervention that focuses on improving social skills, personal responsibility, and decision making. It consists of cognitive behavioral therapy (CBT) and counseling, training, and educational services provided to adolescents prior to their release from Rikers Island, with considerable evidence of previous success.

Fourth criteria is met as the **impact is measured**. Success is measured in terms of two factors: recidivism (if the person is sent to prison) and employment. For investors to be reimbursed, the project must reduce recidivism by at least 8 percent and/or increase employment by at least 5 percentage points. But in this case no fall in recidivism was achieved for eligible children aged 16-18 years was not statistically significant compared to the comparison group and thus did not meet the predefined threshold of an 8% reduction on the day of recidivism.

Fifth criteria is not met as the **savings are greater than the costs**. If the programme had performed better than these objectives, investors would have been able to obtain a positive return on their investment that was proportional to the savings and benefits achieved by the public sector.

Sixth criteria does not meet the **refund of money**. Because the program did not meet the impact requirements, the City is not paying for a program that did not produce positive results for the City and taxpayers. Although the program did not reduce recidivism, the experience of its implementation can leave a positive legacy on Rikers by introducing an intervention for a very high need population for whom little or no programming was previously offered. **(MDRC, 2015)**

Third, the **SIB Santa Clara County**, CA was issued in the United States, was launched in September 2015 with a duration of 6 years and the capital raising of the project was $6.9M. The target population is 150 to 200 chronically homeless people in Santa Clara County. A chronically homeless person is defined as an adult with an incapacitating condition, such as substance abuse or mental illness, who has been continuously homeless for one year or more and/or has experienced four or more episodes of homelessness in the past three years.

The first criteria is met by **improvement in well-being in an area of high social need**. This countywide project, the first Pay for Success project to launch services in California, aims to reduce chronic homelessness in Santa Clara County.

The second and third criteria are met because there is **preventive intervention/Aligns incentives and evidence of effectiveness**: Adobe Services, a leading organization in housing services under the Welcome Home project, will provide two evidence-based interventions, Assertive Community Treatment and Housing First. Participants will have access to integrated housing with supportive services that will support their mental and behavioral health. The objective outcome of Project Welcome Home is a reduction in chronic homelessness based on each participant. At higher levels of impact, additional successful payments will be made, subject to a maximum of $8 million in successful total payments.

Fourth criteria is met as **impact is measured**. The objective impact of the project is that more than 80% of participants achieve 12 months of continuous work. This represents more than 6,900 months of stable and continuous tenure by participants in the six-year project. At the expected level of impact, the amount of the successful payments made would fully reimburse all funders for their main investment and annual interest base.

Fifth criteria is met because the **savings are greater than the costs**. When chronically homeless people stay in stable and continuous housing, especially if they reach 12 months or more, they are less likely to use expensive medical and mental health resources and are more likely to experience better health outcomes.

The sixth criteria is the **refund of money**. The first successful payment was made in 2016. At the target impact level, investors received a refund of their principal plus annual interest. The project will accumulate outcome payments for each participant who reaches 3, 6, 9, 12+ months of stable housing.

Fourthly, the **Rotterdam SIB**, issued in the Netherlands, was launched in December 2013, with a duration of 2 years and the capital raising of the project was € 0.7 M. The target population is 160 unemployed young people aged 17 to 27 living in the city of Rotterdam, in four cohorts of 40. To qualify for intervention, young people must receive unemployment benefits from 0 to 24 months.

The first criteria is met by **improvement in welfare in an area of high social need**. This Social Impact Bonus aims to reduce unemployment by encouraging and supporting young people to start their own businesses, with a focus on developing confidence and skills.

<u>The second criteria</u> is met since there is **preventive intervention/Aligns incentives**: the Buzinezclub service provider offers a comprehensive package of support, helps young people discover their passions and work to start their own business. Volunteer "coaches" provide support with writing business plans and developing skills, and when it is not possible to start a business, youth are supported to find a job or enter education.

<u>Third criteria</u> is met as **evidence of effectiveness is found**. Investors have provided 60% of the working capital, and the remaining capital is provided by the service provider, Buzinezzclub, which is therefore incentivised to maximise results for young people.

<u>Fourth criteria</u> is met as the **impact is measured**. The reduction in unemployment achieved by the Social Impact Bond is measured using a model that predicts an expected duration of unemployment based on the personal characteristics of each individual. The average reduction in the 160 participants will be used as the basis for performance payments.

<u>Fifth criteria</u> is met because the **savings are greater than the costs**. The city of Rotterdam supports unemployed people with basic benefits of 14,400 per year, which translates into Û39.70 per day of unemployment. In contrast, this intervention costs $4,000 per person, and the City of Rotterdam will pay for each day that the program reduces unemployment. The banks generate a return while they are socially committed and the SIB solves municipal liquidity problems by preventing red figures from appearing in the municipal budget.

<u>The sixth criteria</u> is the **refund of money**. The results published in January 2016 of the first year showed that more than 47 (59%) of the first cohort of 80 young people achieved a successful result and no longer receive benefits. This equates to a total reduction of 464 days of benefits and can be increased further as some young people are still in the process of applying for a job. Already anticipated by saying that the second cohort will be even more successful than the first, investors will enjoy the maximum rate of return.

To conclude, the last **SIB of Toronto and Vancouver**, issued in Canada, was launched in October 2016, with a duration of three and a half years and the capital raising of the project is $ 2 M. The SIB of Toronto and Vancouver was launched in October 2016, with a duration of three and a half years and the capital raising of the project is $ 2 M. The target population is 7,000 prehypertensive (60+) seniors in Toronto and Vancouver. The Social Impact Bond will also count prehypertensive adults 40 years of age or older.

Hypertension, or high blood pressure, affects approximately 6 million Canadians between the ages of 20 and 79 and is the most important risk factor for stroke, as well as a key risk factor for heart disease. Strokes and heart disease kill approximately 66,000 Canadians each year.

The first criteria is met by **improvement in well-being in an area of high social need**. This Pay-for-Success project will support a new health program, the Community Hypertension Prevention Initiative (CHPI), whose goal is to increase awareness and prevent hypertension. Improving participants' ability to manage these modifiable risks.

The second criteria is met since there is **preventive intervention/Aligns incentives**: Evaluation and enrollment in the CHPI program are offered free of charge at selected sites in Toronto and Vancouver.

Performance will be based on two metrics, an intake volume metric and a blood pressure metric. The intake volume metric reflects the effectiveness of CHPI in reaching the target population and counts the number of qualified people: prehypertensive people over 40 who do not take blood pressure medications, who undergo a blood pressure reading and enroll in the program. Blood pressure metrics calculate the average change in blood pressure for all individuals who qualify after six months.

Third criteria is met as **evidence of effectiveness is found.** Investors' commitments are partially protected by a performance guarantee of CAD1 million from the Public Health Agency of Canada as a performance financier.

Fourth criteria is met as the **impact is measured**. For the Volume Income Metric, in order to reach its target population of 7000 qualified individuals, the Heart & Stroke Foundation expects to examine up to 29,000 individuals. The development of complete clinical hypertension can be prevented through effective management of health behavior and cardiovascular risk factors, including exercise, diet and smoking cessation.

Fifth criteria is met as the **savings outweigh the costs**. If program objectives are met, investors will receive a maximum internal rate of return of 8.8% on their investment.

The sixth criteria is the **refund of money**. In phase 1 of the Activate programme, more than 90% of the 500 people completed the programme. Blood pressure readings for 112 of these participants showed an average drop of 5 mmHg in the systolic rate. The results for phase 1 represent an overall decrease in blood pressure, which exceeds the goal of success set by the cardiologists without increase.

4.2 Social bonds ICO

4.2.1 What is the ICO?

Instituto de Crédito Oficial, Corporate State-owned Entity (henceforth, ICO), is a state-owned bank, with the legal status of corporate state-owned entity, attached to the Ministry of Economy and Business, via the State Secretariat for Economy and Enterprise Support.

4.2.2 What is your objective?

ICO's main role is to promote economic activities that contribute to the growth and development of the country while improving the distribution of wealth, especially sectors identified as a priority due to their social, cultural, innovational or environmental significance. **Ico.es, (2018a)**

4.2.3 ICO's own eligibility criteria.

In order to be eligible for the social bond product, loans financed by the facilities of the second plant of the ICO must be granted to companies that meet each of the following eligibility criteria established by the ICO:

To finance SMEs in regions located in Autonomous Communities with a per capita GDP below the Spanish average, in order to help them maintain or create jobs in economically disadvantaged regions of Spain. On the other hand, it must not operate in any of the sectors considered unsustainable from the point of view of social responsibility. This financing will be granted to companies through the ICO Mediation Lines (these are financing lines in which the ICO acts through the Credit Entities, i.e. it grants the funds with the intermediation of the aforementioned Entities). **Ico.es, (2018a)**

4.3 Analysis of Spain's bonds social impact

Social Impact Bonds (SIB) ICO SPAIN							
	Success Criteria						
SIB ICO	Improves wellbeing in an area of high social	Preventative intervention / aligns incentives	Evidence of efficacy	Measureable impact	Savings greater than costs	Money refund	External Review Report
1º	√	√	√	√	X	√	Sustainalitycs
2º	√	√	√	√	X	√	Sustainalitycs
3º	√	√	√	√	√	√	Sustainalitycs
4º	√	√	√	√	√	√	Sustainalitycs
Mission	The objective of the ICO bonds is to raise funds that will be used to finance SMEs in the following regions of sectors with a per capita GDP below the Spanish average, for the creation or maintenance of employment						

SOURCE: Own work based on the analysis of different Social bonds regarding web Ico,(2018) principles

Table 4 Analysis of Spain's social impact bonds

In Spain, on 27 January 2015, the Official Credit Institute (ICO) made its first issue in the Capital Market, an issue of social bonds for an amount of 1,000 million euros with a term of 3 years and pays an annual coupon of 0.5%. Credit Agricole, Goldman Sachs International, HSBC and Santander were the leading banks in the operation. It is worth noting the great diversity of investors, with 33% among fund managers, 30% in public institutions, 19% in insurance companies and pension funds, 15% in central banks and 3% in private banks.

There has also been an important geographical diversity among the investors that have subscribed the issue. A 25% stake was subscribed in Asia and the Middle East and 60% in various European countries: Germany and Spain 15%, United Kingdom 11%, France 11%, Netherlands 7%, Scandinavia 5%, other European countries 10% and 1% in America, thus positioning the ICO at the forefront of current trends in international capital markets. **Ico.es, (2015a)**

Subsequently, in 2016, the ICO issued **the second ICO social bond** of 500 million euros, with the payment of an annual coupon of 0.1%, maturing in 2018, estimating the creation or maintenance of 63,398 jobs. The main organisers of the issue were BBVA, Crédit Agricole and HSBC. The issue has generated great interest among investors with a portfolio of more than 2,000 million euros, and socially responsible investors represent 47% of the total. By type of investor, the demand for investment funds was significant, representing 52%, while the rest of the issue was placed in banks (21%), insurance companies and pension funds (15%) and central banks (12%). Geographically, 64% were located outside Spain, mainly in Germany and Austria (18%) and Holland (16%). **Ico.es, (2016).**

The first issue in 2017 was followed by **the third benchmark ICO social bond**. It was the first bond issued on the SEK market for SEK 500 million (approx. EUR 52 million). The issue, which is managed by HSBC, Goldman Sachs and Crédit Agricole, pays a coupon of 0.963% for a period of five years. Forty-nine percent of the transaction was made with accredited socially responsible investors (SRIs), reflecting the favourable reception of ICO bonds among the specialised investor base.

In terms of distribution by type of investor, the demand from asset managers stands out, who have acquired 34% of the total issue, followed by insurance companies and pension funds, with 29%, and banks, with 22%.

The rest of the document has been distributed among the central banks. In terms of geographical distribution, it should be noted that 63% of the bonds were placed with foreign investors, mainly from Germany and the Netherlands. And there was also significant demand for Asian accounts, which together accounted for 10% of the total issue. **Ico.es. (2017a).**

There was one last issue, The Official Credit Institute (ICO) launched social bonds worth 1000 million euros at the end of 2017. The operation, managed by BBVA, Santander, Société Générale and Unicredit, pays a coupon of 0.25% and has a duration of five years. The strong acceptance of the issue has allowed the ICO to continue diversifying its investor base both in terms of type of investor and geographical location.

In terms of distribution by country, the interest shown by European investors stands out, especially German investors, who have acquired 29% of the operation, and Italian investors, who account for 11%. In addition, the role of Asian accounts has been important, representing 12% of bonds. According to the distribution by type of investor, the banks accounted for 37% of the issue, followed by fund managers (34%), central banks (18%) and insurance and pension funds (11%). **(Ico.es, 2017b)**

In contrast to the analysis carried out in the theoretical framework. The analysis of the four issues of the social bonds launched by the ICO, will be carried out jointly as they are different issues but with the same objective. At the end, a table with different results will be presented.

<u>The first criteria</u> is met, as ICO bond issues have **improved welfare in an area of high social standing**. The objective of this operation is to finance SMEs in regions with a per capita GDP below the Spanish average that are economically disadvantaged, in order to help them maintain or create jobs, generating a positive social or environmental impact. Thus, over the years a reduction in GDP per capita has been seen.

The second criteria, **preventive intervention**, is met. The ICO has developed and implemented its own macroeconomic impact methodology based on the input-output analysis of national accounts, which is a standard methodology, generally accepted and used for carrying out this type of analysis, as well as statistical and econometric analyses to measure the impact of its activity on the Spanish economy.

The third criteria is **evidence of effectiveness** and is related to the external review report. The "responsible issuer" sustainability review document needed to launch "social bonds". This rating has been given by Sustainalytics, an external auditor specialising in the analysis of the social responsibility of companies that generate a positive social or environmental impact.
With the first social bond, the ICO consolidated its role as a reference issuer, being the first Spanish issuer to make a reference issue of "Social Bonds". Since then, the ICO, in addition to its internal opinion, also continues to obtain the second positive opinion from Sustainability. **Sustainability (2018).**

The fourth criteria is met, as it **measures impact**. The internal report discussed above is based on the recommended methodology for measuring the macroeconomic impact of ICO activity, prepared by Price Water House Coopers (PwC), at the request of the ICO, in December 2015. The ICO has developed an analysis for the quantification of the macroeconomic impact variables generated by its financing activity linked to the Social Bond. This methodology calculates the impact on created and/or maintained employment and also allows for the calculation of direct, indirect and induced impacts on employment in autonomous communities with a per capita income below the national average.

Some parts of the metric is when: the impact is direct, as for example, to identify the total volume of financing granted for productive investments. The input-output methodology is a standard technique, widely used to estimate the direct and indirect costs of the impact of production on GDP and employment.

The fifth criteria in terms of **savings are greater than costs** is not fully met, it is met in the third and fourth edition. The order book recorded a demand of more than 800 million euros, with a bond issue of 500 million euros. This allowed the transaction to close with a margin of 8 basis points above the benchmark Spanish treasury bond with the same maturity.

On the other hand, in the fourth issue the excess demand recorded in the order book finally exceeded 1,500 million euros, meaning that the transaction was finally closed at 1,000 million euros with a differential of 0.08% over the reference Spanish treasury for the same period. In the rest of the issues, in the absence of information, it cannot be concluded that the savings have been greater than the costs of the operation.

The sixth criteria is the reimbursement of money. Although the last two bonds have not ended, the nominal amount minus the coupons of each bond has been returned.

4.4 Results obtained from bonds with social impact ICO

Results obtained from Social Bonds ICO			
First Social Bond ICO	Second Social Bond	Third Social Bond ICO SEK	Third Social Bond ICO
This shows that 23.254 SMEs were financed with the funds raised in this transaction.	Global Capital SRI Awards 2016 Best Social Bond of the Year.	Higher demand of 1.2 billion euros	Sustainable bond market has experienced significant growth, with 120,000 million euros.
More than 6600 jobs have been created	More than 63398 jobs have been created	More than 60,300 jobs have been created	For the moment since 2015 the ICO has a total volume of more than 2,000 million euros.
Jobs maintained + 150.000	Jobs maintained more than 11,927		

SOURCE: Own work based on the analysis of different Social Bonds regarding web Ico.es,(2018) principles

Table 5 Results obtained from bonds with social impact ICO

Finally, the results of the SIB, according to internal studies of the ICO based on the information provided by the borrowers of its lines of financing, it is estimated that the data relating to bond issues with social impact in 2015 and 2016, are the funds collected by the ICO in these transactions in the amount of 1,500 million euros that have financed the projects of more than 35,100 SMEs. As a result of this activity, more than 225,400 jobs have been created or maintained. **Ico.es, (2018)** As for the second bonus, according to the Global Capital, an international magazine specialized in the analysis of financial markets, has awarded ICO its prize for the best social bond of the year". These issues have allowed ICO to strengthen its leadership in the international capital markets, particularly in the social bond markets, expanding its investment base, improving financing for Spanish companies and helping to create jobs. **Ico.es, (2016)**

The third issue of the ICO bond, the public bank has financed more than 11,200 operations of SMEs located mainly in Galicia, Andalusia and the Valencian Community. It is estimated that this activity has generated or maintained more than 60,300 jobs, in addition to a greater demand of 1200 million euros. **Ico.es, (2017a)**

Finally, with four bond issues with social impact since 2015, the ICO has a total volume of more than 2,000 million euros. In addition, in the last year 2018, the market for sustainable bonds has experienced significant growth, with 120,000 million euros issued in 2017, representing an increase of 43% over 2016.participation of so-called "SRI accounts" was noteworthy; these accounts involve socially responsible policies in terms of investment decisions. **(Ico.es, 2018b)**

Figure 4 GDP Growth in Spain

As a result of ICO's metric interventions, these are the latest results obtained in investor newsletter nº 37 on recent macroeconomic developments.

According to estimates by the Statistics Office, Spanish Gross Gross Gross Domestic Product (GDP) grew by 0.6% quarter-on-quarter in the second quarter of 2018.

This economic expansion was supported by strong domestic growth in demand for labor, which was supported by improvements in the labor market. According to the labor force survey, the unemployment rate was 15.3% of the labor force in 2Q18, 1.9 p.p. less than one year. The available data on public finances (2Q18) show that the process of rebalancing the public accounts is ongoing: general the public deficit was reduced by 16% compared to the same period in the previous year 2017. **(Ico.es, 2018b)**

It is also remarkable that the activity carried out by the ICO in the third bond launched in 2017 for a value of 500 million kroner coins, contributes to achieving the goals defined in three of the "Sustainable Development Goals" (SDGs) defined by the United Nations: these are as follows. **(United Nations Sustainable Development, 2015)**

Objective 8. Decent work and economic growth

8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries.

8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.

Objective 9. Industry, innovation and infrastructure.

9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries

9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets

Objective 10. Reduction of inequalities.

10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status**. (United Nations Sustainable Development, 2015)**

In February 2017 Inuit Foundation signs a collaboration agreement with Creas Foundation, Social Finance Ltd and UpSocial Association for the creation and development of social impact bonds in Spain. This collaboration agreement, as well as the objectives and activities that will be developed in it, is called the BIS Spain Project**. (Inuitfundacion.com, 2017)**

5 Discussion and conclusions

The aim of this study is to ascertain the impact of social bonds in Spain and what differences exist with those abroad. After both analyses, some conclusions have been drawn.

Firstly, there is a big difference in the development of foreign bonds with respect to those of Spain. Given that the first social bond launched on the market was in 2010 in the United Kingdom, and in 2015 in Spain, there is an advantage in terms of the development of this instrument that is still relatively recent and innovative not only for Spain, but for many countries that have not yet issued.

As for the category of SIBs, the four issues made by Spain have the same objective and the same procedure, where countries such as the United Kingdom, United States... are developing not only social bonds in workforce development, if they do not assign those bonds to social bonds for health, criminal justice, welfare and child care.

Secondly, the volume of bonds issued by these countries is much greater than that issued so far by Spain. Spain is in full development and although it is obtaining very positive results, only in the last two bonds has it begun to have savings above operating costs, unlike, for example, the United States in the county of Santa Clara, which is the SIB that corresponds to the first analysis, with a similar duration of the ICO bonds has obtained a capital raising much higher than 6.9 million dollars.

The comparisons exposed in the analyses have been with social bonds of similar duration and conditions, since there are some social bonds, such as, for example, in the United States of America of South Carolina, a social bond for health, issued in 2016 with only 4 years and with a capital collection of 30 million dollars, thus observing the great progress that exists in these countries.

Thirdly, the impact on the launch of the third ICO SEK bond has opened up new horizons, as the ICO has started trading in other currencies, thus attracting new demands from foreign investors.

Subsequently, the search for information for empirical analysis has been quite complicated. In the Social Finance database appear the bonds that have been launched and those that are under development. Spain appears as a developing country, which has implied a disadvantage in the search for information in this study, It should be noted that the bonds analysed do not appear in the database, implying that information on the variables chosen (for the most part) has been obtained from the official website of the ICO.

In conclusion, the impact that these financial assets are having is proving to be positive. Unlike foreign bonds, the result was greater than that produced by the Spanish bond.

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