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THE IMPACT OF ORGANIZATIONS

MEASUREMENT, MANAGEMENT AND CORPORATE REPORTING

Edited by
Cristiano Busco, Costanza Consolandi,
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ROUTLEDGE

The Impact of Organizations: Measurement, Management and Corporate Reporting contributes to the growing debate on the importance of measuring, managing, and reporting organizations' impact in the interest of companies, stakeholders, and policymakers. Through theoretical analysis, data analysis, case studies, and collaboration with academics and practitioners in the field, this book offers a comprehensive view of the topics covered and is structured into three main parts: i) from sustainability to impact evaluation and management: a corporate perspective; ii) financial sector, sustainability integration and impact management; iii) impact management to innovate the public institutions. The topics covered in this book contribute to the existing debate on the need to provide companies with tools to measure and manage impact effectively and address the need from businesses and investors for a simplified corporate reporting landscape. As such, this book represents a useful guide for academics who are investigating this field, for companies and practitioners working on measuring, managing, and communicating impact, as well as students and graduates who would like to pursue a career in the field of sustainability and impact.

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PREFACE

This handbook was written during a time of global sudden changes: from the pandemic emergency to international conflicts up to increasingly frequent climatic and social crises.

In this context, the issues of sustainability and impact are becoming central to the strategic planning of organizations as well as for the management and mitigation of emerging risks.

Therefore, for corporate and financial organizations as well as public institutions there is a growing need of methods, tools and approaches that can help them in the management processes connected to these issues.

This acceleration is accompanied by growth of complexity regarding these two topics due to the presence of many questions that are still open today: how is it possible to define sustainability and impact? What are the links between the two approaches? Accountability and evaluation, what connection? Which reporting standards for which stakeholder categories? How can the organization go beyond reporting, towards the integrated and sustainable management of business processes?

In this scenario, through this handbook we aimed to offer our contribution putting together academic evidence and concrete experiences, following the hybrid approach changed by the Governance of Innovation and Impact Management Observatory (founded by Italiacamp and Luiss Guido Carli University) which edited this publication.

The ambition is to be a bridge between the academia and the market sector, to return know-how and useful tools to help the organization to face this systemic change. We believe that, to do this, are essential heterogeneous and multilateral points of view, skills and approaches. It is not an easy challenge that requires an alignment of languages, methods, experiences.

In this perspective, the handbook is divided into three sessions where the empirical experiences showed emergent organizational models to address the issues of sustainability and impact and academic experience captured implications that the sustainable approach had on performance and organizational models and identified some trends and scenarios that are opening thanks to the present evidence.

The three macro-sections focused on sustainability and impact management for: corporate entities, financial sector and public institutions.

The hope is that this work could represent the starting point for the development of increasingly integrated and interconnected research, application and development processes.

The authors

Part 1

FROM SUSTAINABILITY TO IMPACT EVALUATION AND MANAGEMENT: CORPORATE PERSPECTIVE

Chapter 1

SUSTAINABILITY PERFORMANCE AND ESG FACTORS: A NEW CHALLENGE FOR SMALL AND MEDIUM SIZED ENTERPRISES (SMEs)

Roberto Tombolesi

Abstract: *Managing sustainability performance is an important component of companies' efforts to generate enterprise value.*

A growing body of research confirms this thesis, showing a positive relationship between sustainability performance and financial returns.

What began as a niche practice among values oriented and an effort to create a good reputation, improving own brand and positive impact while sacrificing financial returns, is now a mainstream practice where values and value have a direct and positive relationship.

ESG factors are becoming the almost of top mind for all companies and of necessity for all Small and Medium Sized Enterprises (SMEs).

All SMEs that want to maximize their ability to create market value and not only good reputation will need to develop a sustainable business strategy as opposed to a sustainability strategy. A sustainable business strategy and an ESG performance can reduce costs, improve workers productivity, mitigate risks potentials, create revenue-generating opportunities, can also impact cost of capital and contribute to success in the near, medium and long term.

But are Italian SMEs yet properly organized for this new challenge imposed by the market?

Keywords: Reputation – Sustainability – ESG factors – SMEs – Companies' market value – PNRR – Supply chains – ESG metrics – ESG Frameworks – Sustainable finance.

1. Introduction

The main objective of a company is the creation of value, traditionally considered only from a financial point of view and measured by comparing the invested capital and the return on investment. Cultural evolution and the raising of the level of civilization require companies to relate to the outside world dutifully considering that resources and goods are not infinite. In a sustainable economy, business value generation must be durable, repeatable over time and not based on the destruction of non-reproducible resources.

For the above reasons, a company must operate in harmony with the surrounding environment and can no longer limit itself to the allocation of *capital* and the use of production factors to achieve the economic objective, remunerating them on a lasting basis. The company, beyond to give an account in order the methods of remuneration of the production factors, must necessarily be concerned with the satisfaction and the requests of the stakeholders.

The social interest, from the perspective of shareholders and directors, must be balanced with the interests of the various stakeholders in what is called “the new paradigm” (Rolli, 2020). [1]

[1] R. Rolli (2020). *L’Impatto dei fattori ESG sull’impresa*. Il Mulino, Bologna. The reference is the document presented by Martin Lipton during the International Business Council of the World Economic Forum, 2 September 2016. The new paradigm, A Roadmap of an Implicit Corporate Governance Partnership, Between Corporations and Investors to Achieve Sustainable Long-Term Investment and Growth.

As matter of facts, the value of a company is today linked to its reputation, understood as ability to achieve the expectations and the value judgments of the stakeholders and the consequent level of appreciation (Pellegrini, 2020).

The sustainability extends to all ESG (Environmental, Social and Governance) factors and has acquired a significant impact also for small and medium sized enterprises (SMEs).

On the basis of these considerations’ questions arise.

What’s the impact of ESG factors in the world of SMEs?

Are Italian SMEs yet properly organized for this new challenge imposed by the market?

2. ESG and SMEs

SMEs play a central role in the Italian and European economy. According to recent data provided by the European Parliament [2] they make up 99% of EU companies. They provide two-thirds of jobs in the private sector and contribute to more than half of the total added value created by businesses in the Union.

[2] Thematic notes of the European Union: https://www.europarl.europa.eu.

Furthermore, the functioning of the supply chains of large companies is ensured precisely by the preponderant presence of SMEs which determine their overall level of sustainability.

On the other hand, numerous researches show that for different types of products and services the largest share of the environmental and social impact (up to 90%) is linked precisely to companies of this type. For these reasons, the Italian economy cannot achieve the global Sustainable Development Goals set out in the UN 2030 Agenda without actively involving SMEs in a process of introducing virtuous behaviours aimed at the implementation of sustainability factors and in general ESG dynamics.

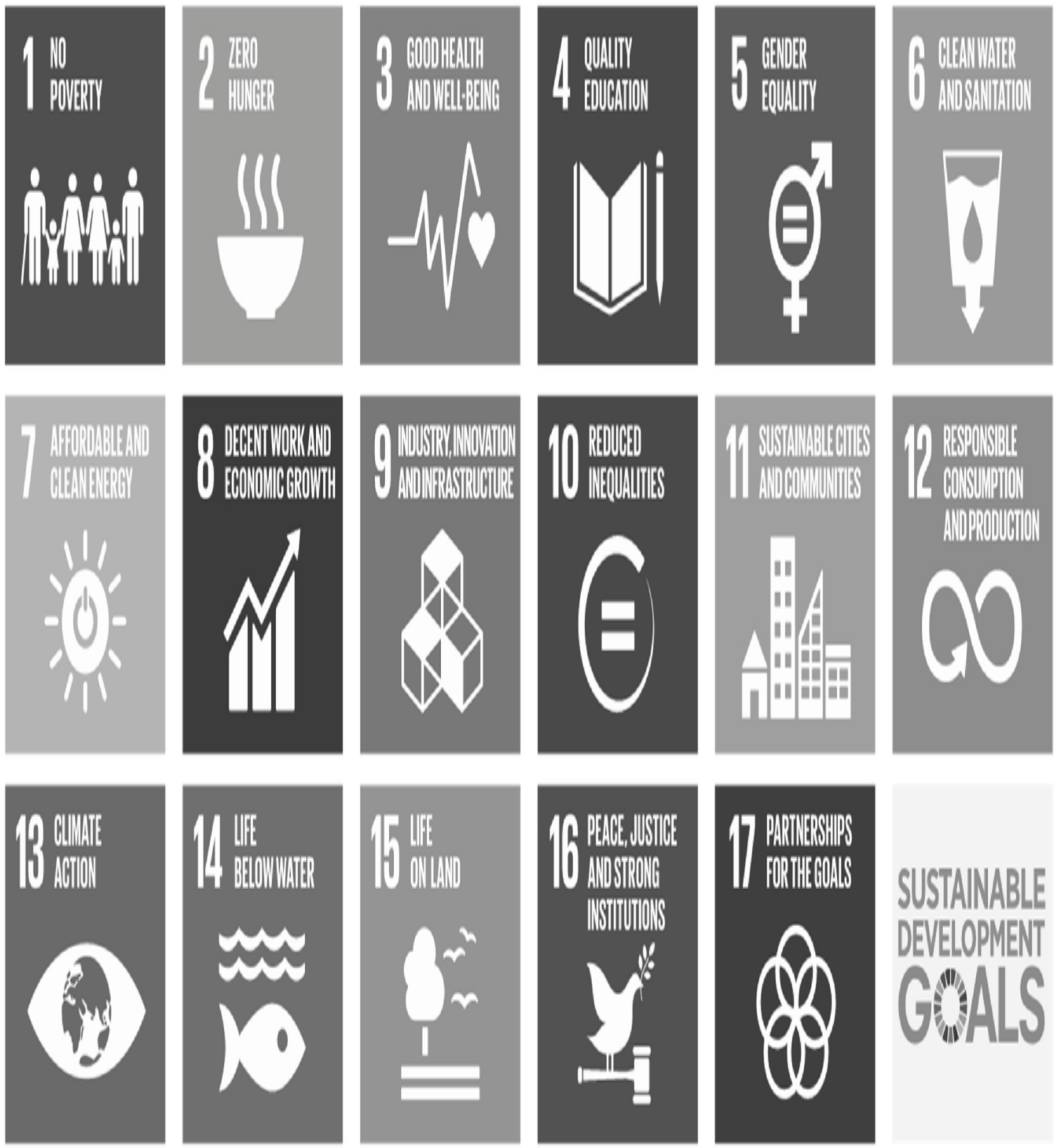

Figure 1. The 17 Sustainable Development Goals of the United Nations
Source: United Nations Foundation 2030 Agenda.

Without the full involvement of SMEs the transition would not occur: *"while those that don't, won't"* (Fundamentals of Sustainability Accounting Credential, 2021). [3] But for SMEs this challenge also represents also an incredible opportunity to acquire or consolidate their competitive advantage, not only for the innovative drive that a sustainable approach produces.

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[3] Study guide SASB *Fundamentals of sustainability accounting credential.*

The increase in the attention of consumers and the pressures of the financial community and other stakeholders, prompt companies to rethink current models and create new business models.

With a new approach of management based on sustainable business models, SMEs can guarantee access to certified supply chains, better conditions. Financing, strategic partnerships with public and private entities.

In addition, the dynamics of ESG must be respected by SMEs that want access to various action programs adopted and the funding adopted by the European Commission for their economic recovery, reconstruction and development following the impact of the Covid-19 pandemic (COM, 2020). [4]

[4] The Commission communications of 10 March 2020 entitled “A new industrial strategy for Europe” (COM (2020–0102) and “A SME strategy for a sustainable and digital Europe” (COM (2020–0103), included proposals to help SME operate, grow, and expand. In response to the impact of the coronavirus pandemic on industrial supply chains and SME, in the European Parliament passed a resolution on coordinated EU action to fight the COVID-19 pandemic and its consequences in April 2020. On 25th November 2020, MEP passed a resolution calling on the Commission to present a revised industrial strategy.

Therefore, in the current economic context, adopting sustainable business models is no longer a facade choice but has become an obligation to remain competitive on the market.

SMEs that want to maintain a competitive advantage and increase their value in the long term must adopt a new managerial model focused on ESG factors of strategic integration of environmental, social issues and governance and based on dialogue and relations with the subjects that are in relationship with the stakeholders.

3. The central role of stakeholders

A company that believes in sustainability attaches great importance to the relationship with its stakeholders and puts them at the centre of its strategies.

Some studies have highlighted that for the development of a company it cannot be separated from good relations with stakeholders and their involvement is necessary not only downstream, in the phase of presentation of results in non-financial reporting, but upstream, in the setting phase of the strategic sustainability plan.

For SMEs it can be hard to know whether ESG factors will have an impact on their business.

Despite this uncertainty in the use of standards, many SMEs will need to start tracking ESG metrics soon, even though they may never publish a full externally facing Sustainability Report.

Two important areas that will drive the adoption of tracking sustainability data are customer management in the supply chains and corporate finance. In both activities, having detailed and consistent ESG metrics will give executives an advantage over the competition of SMEs.

Despite the obvious relevance of the topic, it has been amply demonstrated that SMEs are lagging large companies on the path towards adopting sustainable models.

4. Customer management of SMEs in the supply chains of large companies

The multi-national customers of SMEs are beginning to play a larger role in driving the adoption of ESG metrics and sustainability tracking.

These large companies have been focused on their internal sustainability metrics for several years, but as they start to look at where they need to generate more impact to meet their defined risk mitigation many have realized that the greatest opportunities can now be found by looking outward at their supply chains.

Many large companies, in particular listed on the stock exchange or operating on international markets, who were the first to voluntarily adopt ESG principles, orienting their strategies towards sustainability, have activated very strict control systems for suppliers.

The supply chain can, in fact, be a weak point and the correct management of suppliers is therefore becoming increasingly strategic.

Choosing reliable suppliers means minimizing inefficiencies, avoiding the damage associated with incorrect partner behaviour, improving reputation and competitiveness.

In the analysis of the weak areas of the supply chain, particular attention is now paid to the risk of reputation and economic damage that can result from poor performance in terms of sustainability.

In this context, greater involvement is required from the perspective of sustainability of SMEs that operate as suppliers, often not yet ready to change their business in a sustainable way.

For these reasons, large companies can play a very important role in orienting the productive economic system quickly, involving SMEs in their supply chains and developing the conviction that sustainability is the only possible way.

This is especially true when SMEs, as suppliers, are faced with customers with high bargaining power who are therefore able to force them towards sustainable transition.

Therefore, if large companies are forced to rethink the supply chain in a sustainable key by the pressure of investors and consumers, even SMEs must necessarily change their strategies quickly, also because they will have to deal with increasingly stringent regulations that arrive from Europe.

Transparency and skill tracking are key factors in improving the control of the supply chain, one of the objectives that all companies should strive for.

Knowing that many SMEs lack resources and knowledge on ESG data management, some of the Italian larger companies (like ENI, ENEL, TIM, Illy, etc.) are creating novel training programs to support their SME vendors.

In the actual dynamic business environment, it is as critical as ever to not only be responsive to customers, but also to anticipate their needs. As the customers of SMEs focus more and more on their supply base to meet their sustainability goals, organizations that have taken a proactive approach to gather and manage ESG data will have a competitive advantage in both retaining customers and gaining Starting the process of identifying and tracking ESG data, if not already begun, is the best way to stay ahead of the coming set of expectations from customers, and will position SMEs for better long-term performance.

5. ESG and corporate finance of SMEs

The competitive relaunch of SMEs after the difficult years following the recent economic crises (the reference is to the financial crisis of 2008, plastically represented by the bankruptcy of Lehman Brothers) and the economic paralysis consequences of the Covid-19 pandemic, will have to be appropriately supported on a financial level.

In this regard, it is appropriate to consider that the gradual contraction of resources made available in recent years in Italy by the banking world will have to be overcome with new forms of financing and also through the subsidized finance sources made available by the states of the European Union.

The Italian financial model of recent years, which has seen the bank as its main interpreter (so-called "banca-centrico"), has produced negative effects on SMEs that are today undercapitalised and with low financial culture.

Furthermore, the banking financial system offers a limited number of financial means to expand the business of SMEs and in the last ten years it has recorded a sharp contraction in the amount of loans offered, from 894 to 657.8 billion euros (Gigli, 2021). [5]

[5] G. Gigli (2022). Non solo banca. Perché le PMI cercano nuovi strumenti di finanziamento. *Il Sole 24Ore*. 16 May.

For these reasons, today, this model is strongly questioned by lending platforms, whose diffusion has relaunched investments in the “*real economy*” for the benefit of SMEs.

From 2012 to 2021 there was an increase in the weight of the bond component – including minibonds that allow even SMEs to directly address the capital market (Development Decree No. 32/2012) [6] and other non-bank loans in favour of SMEs, especially the segment of fast-growing innovative companies.

[6] Minibonds are an innovative financing tool for non-listed companies. With this tool, companies can raise funds from investors by providing debt securities in exchange for those who want to believe in their project. The new bonds designed especially for liquidity-seeking SMEs are easy to issue, less complicated and less expensive. The regulations are contained in the D.L. No. 83 of 22 June 2012 (“Development Decree”) and in subsequent additions and amendments made by D.Lgs. 18 October 2012, No. 179 (“Development Decree Bis”), by D.L. 23 December 2013, No. 145 (“Destination Italy” plan) and in the most recent D.L. 24 June 2014, No. 91 (“Competitiveness Decree”).

Loans offered by other non-bank financial companies and bonds increased respectively from 151.1 to 208.6 billion euro and from 91 to 169.5 billion euro (of which 2.2 billion represented by minibonds).

This is due to the boom in fintech services which has been growing since the year of the pandemic. In 2021, loans to Italian SMEs and startups by fintech platforms amounted to 3.5 billion euros, + 60% compared to 2.3 billion in 2020.

In this context, today we can note the birth of the sustainable finance with a proliferation of news investment solutions that try to intercept the growing interest of savers and that require a new relationship between companies and investors who pay attention to ESG factors in their financial evaluation.

By sustainable finance we mean the application to financial activity of the concept of sustainable development which aims to create value in the long term, directing capital towards activities that not only generate economic surplus value, but are useful to society and do not have a negative impact on the environment. In recent years sustainable and responsible investments have established themselves worldwide and the offer of sustainable financial products has grown (Sobrero, 2022). [7]

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[7] R. Sobrero (2022). *Verde, Anzi Verdissimo*, Egea, Milano.

Investors increasingly want a sustainable and responsible investment: the demand for sustainability information from investors is increasing on a general scale, making it essential to consider ESG factors in the search for sources of capital by SMEs.

As Larry Fink (the chairman and CEO of Black Rock) writes in his letter to CEOs in 2022: "*We focus on sustainability not because we're environmentalists, but because we are capitalists and fiduciaries to our clients*" (Black Rock website). [8]

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[8] Regarding sustainable financing, Back Rock declares on its website: "In its role as fiduciary, BlackRock is committed to accompanying you through this transition and building more resilient portfolios, as well as seeking to achieve more stable and higher long-term returns. As sustainable investing has the potential to deliver better results, BlackRock is incorporating sustainability into risk management, portfolio construction, formulating new products and interacting with companies. We believe that sustainability must be our new investment standard."

Investors and banks are increasingly looking for these metrics to guide their own decision making within their portfolios. In a study of over 2,000 companies, reviewing over two decades of performance, those that made material improvements on ESG issues outperformed their competition in their industry. Corporate performance and impact like this are quite attractive to portfolio and investment managers, from community banks to private equity firms alike.

Many research confirms the positive relationship between sustainability performance and financial returns, and thus a means to help build stronger companies and capital markets. What began as a niche practice among values-oriented, socially responsible investors, and was largely viewed by the financial community as an effort to create positive impact while sacrificing financial returns (Eccles and Klimenko, 2019).

Is now a mainstream practice where “value” and “values” have a direct (and positive) relationship (Khan, Serafeim and Yoon, 2016). [9] The use of sustainability information continues to grow as investors express an increased appetite for the potential to achieve similar or better risk-adjusted returns in the long term while also achieving non-financial, sustainability related outcomes. As investors increasingly internalize sustainability information into core analysis and decision-making processes and adopt a longerterm view, companies are challenged to do the same (Eccles and Klimenko, 2019).

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[9] M. Khan, G. Serafeim and A. Yoon (2016). Corporate Sustainability: First Evidence of Materiality. *Accounting Review*. 91, No. 6.

Where companies once rarely received questions from investors about sustainability information, investor demand now significantly influences company considerations of sustainability. In fact, research into the perspectives and priorities of senior institutional investment executives demonstrates that ESG is almost universally top of mind.

Investing in a sustainable way means combining traditional financial analysis with an analysis of environmental, social, and good governance impacts. In essence, it is a potentially winning approach to investment both for returns and for the environment and society. The underlying idea is that the companies that are more attentive to environmental and social issues and characterized by good governance are, on average, less subject to risks deriving from the profound transformations of the economic system and, in addition to better managing the risk deriving from these factors, can turn it into opportunity.

The adoption of ESG principles in business strategies and the consequent non-financial reporting of the results achieved in this context will allow the SMEs to acquire a competitive advantage in the world of finance where an important change is taking place: for years it has been assessed the ability to repay the debt based on the past. If we take the banks as an example, for years the customer rating has been based on the analysis of the financial statements of previous years and not on a careful assessment of the soundness of the business plans presented or the entrepreneurial capacity of the subjects requesting access to credit. Today, finally, the world is changing in a direction in which the SMEs will be weighed on the ability to be ready for the future and no longer based on results obtained which represent what has been and not what will be. The capability of a company to grant a loan will be assessed on the business plan and the ESG factors adopted in its strategies, as parameters of the company's ability to handcuff its value in the medium and long term.

The adoption of the ESG factors is also relevant for SMEs to be able to draw on public financial resources. For example, the PNRR, within which resources of 60 billion are provided for the sustainable transition, imposes compliance with ESG factors as a condition of access.

6. Additional benefits for SMEs

As we have seen, having detailed and consistent ESG metrics will give executives an advantage over the competition of SMEs in customer management and in corporate finance.

But companies may have more than one primary purpose and different motivations for collecting, managing and reporting sustainability information.

The implementation of sustainable models can give important business opportunities.

The companies focusing on sustainability issues can reduce costs, improve worker productivity and engagement, mitigate risk potential, and create revenue-generating opportunities – among means of enhancing performance (Bendersky, Burks and Ferguson, 2019).

Some empirical studies have shown that companies that implement ESG criteria are re-committed with higher profits, lower cost of capital and a higher level of reputation (Fisch, 2018). [10]

[10] A recent study by Merrill Lynch reports that ESG factors are associated with a higher level of earnings and a lower risk of default. J.E. Fisch (2019). Making Sustainability Disclosure Sustainable. *Faculty Scholarship at Penn Carey Law*. 1998.

The adoption of ESG principles makes it possible to increase and consolidate the competitiveness of SMEs in the short and long term, obtaining concrete benefits including:

- - improvement of reputation and company performance (increase in rev-enues and margins, cost reduction, better risk management);
- - internal organizational benefits (employer branding by attracting and retaining the best talents, employee satisfaction and involvement);
- - improvement of relations with stakeholders;
- - improvement of relations with large companies (which increasingly base their collaboration choices on ESG criteria);
- - improvement of competitiveness as suppliers;
- - market differentiation;
- - reduction of costs;
- - generation of positive social impact; – creating stable links with the community.

7. Barriers for SMEs adopting ESG principles

Although the concept of sustainability can be easily understood, it becomes complex and not at all trivial to transform it into concrete actions, to measure it and to evaluate it (Tettamanzi and Minutiello, 2022). [11]

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[11] P. Tettamanzi and E.V. Minutiello (2022). *ESG: Bilanci di Sostenibilità e Integrated Reporting*, Ipsoa, Milano: “If everyone had had the same sensitivity and vision of

things, it probably would not have been necessary to talk about sustainability, since it would have been taken for granted that action and personal choices must always be weighed in terms of effects and impacts on the sphere of others, as well as on the environment.”

To date, the main research in the field of sustainability has focused on investigating the impacts of ESG factors in large companies, while studies conducted on SMEs are still limited.

To support SMEs in the transition to sustainable models, a careful analysis of this business sector is necessary to identify the current barriers to a full strategic integration of ESG factors.

One of the main barriers of SMEs towards the integration of sustainability has cultural and mental nature and is linked to the ownership and management approach, anchored to the logic of the past and not very open to change.

SMEs often change corporate strategies and behaviours only as a result of the introduction of formal and legal obligations. In these terms, sustainability is now perceived not as a real and substantial factor for voluntarily determining the strategic objectives of the company but as a legal obligation that currently only concerns large companies with respect to nonfinancial communication obligations.

However, the Covid-19 emergency may suggest a rethinking and the definition of new priorities and perspectives for companies to be adopted voluntarily to maintain and consolidate a competitive position on the market. The pandemic has highlighted the fragility of the system with respect to natural dynamics, creating awareness of how being in tune with the world outside the company leads to a lower risk profile, without compromising the position in which one operates.

Further obstacles to the adoption of sustainability strategies in SMEs can be identified on an operational level and are represented by the lack of specific KPIs and ESG frameworks for these companies, in the absence of specific internal skills trained on ESG issues and in the costs that these companies must support for the non-financial reporting.

8. Conclusions

Various tools and initiatives can support SMEs to remove the barriers that currently hinder the adoption of ESG principles in business strategies and the consequent non-financial reporting of the results achieved.

First of all, it is necessary to encourage a new corporate culture, sensitizing the management of SMEs to the transition to sustainable models, leveraging the increase in value that the company portrays in the medium and long term.

To overcome cultural obstacles, new governance models could be adopted for SMEs with the inclusion of external consultants with specific skills on ESG issues.

A further area of action is linked to the measurement and reporting of ESG performance to allow SMEs, through the monitoring, measurement and certification of the results achieved, to concretely evaluate the potential growth achieved on the market.

For SMEs, simplified KPIs and dedicated standards should be introduced.

The contribution that institutions can make in the transaction towards sustainable models is also relevant by introducing specific contributions and tax breaks to promote introduction, implementation, and reporting of ESG factors and to cover the costs that SMEs must incur for them.

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Chapter 2

THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON FINANCIAL PERFORMANCE AND FIRM VALUE

Luca Provaroni, Francesco Checcacci

Abstract: The relationship between sustainable practices and firm's value and performance is an open debate among practitioners and scholars, but there is still a lack of unanimous consensus. Thus, we decided to analyze the impact of Corporate Social Responsibility (CSR) on financial performance and on market value of firms: to do that, we employed a multivariate regression analysis with fixed effects, on a sample of companies corresponding to the constituents of the S&P 500 index, across a 13-year period, from 2009 to 2021. As measure of CSR performance, we adopted the ESG (Environmental, Social, and Governance) composite score, while we used the Return on Asset (ROA) as measure of financial performance and the q-ratio as a measure of firm's market value. Furthermore, we also investigated the impact each single ESG pillar on such financial metrics. For the data and information underlying the analysis mentioned above, we made reference to Refinitiv database. Results show that ESG is positively and strongly related with the firm's financial performance and value, acknowledging the value-enhancing role of CSR, thus supporting the stakeholder theory.

Keywords: CSR – ESG – Financial performance – Firm value.

1. Introduction

Corporate Social Responsibility is not a new-born concept. Despite being a trend highly popular nowadays on a worldwide basis, the roots of CSR can be traced back in the first industrial revolution era, when some British visionary entrepreneurs decided to build comfortable and safe homes for their employees. There is not a univocal definition of CSR because it is a broad concept, and all the theories about it are fragmented. The qualitative nature of CSR makes challenging its measurement: nowadays, one of the most famous “hard” indicators of CSR is the ESG score which is provided by several rating agencies. In recent years, ESG matters have been getting higher consideration, given (i) the related market expanding volume, (ii) the issuance of new regulations, and (iii) investors demanding more sustainable investments (i.e., increasing consideration of ESG inputs within portfolio management); according to Natixis (2021), around 71% of investors want to make an impact with their investments, and 81% of them want their investments to match their personal values. In addition, on January 28, 2019, the S&P 500 ESG index was launched: a broad-based, marketcap-weighted index, designed to measure the performance of securities meeting certain sustainability criteria, while maintaining similar overall industry group weights as the well-known S&P 500.

Indeed, according to the Commission of the European Communities, there are four factors which are driving the CSR trend: (i) new concerns and expectations from citizens, consumers, public authorities, and investors in the context of globalization and large scale industrial change; (ii) social criteria are increasingly influencing the investment decisions of individuals and institutions both as consumers and as investors; (iii) increased concern about damages caused by economic activity to the environment; (iv) transparency of business activities brought to light by media, modern information and communication technologies.

The interest in CSR has raised some thoughts about socially responsible companies being more valuable than socially irresponsible ones. Based on the existing literature (Cornell and Damodaran, 2020), on the one hand, ESG factors appear to reduce non-financial risks, such as reputation, political and regulatory risks: indeed, it seems that socially irresponsible firms tend to expose themselves to events such as consumer boycotts, environmental disasters or reputation scandals. On the other hand, concerning the impact of ESG on financial metrics (i.e., performance factors and estimates of value), we found controversial findings, mainly due to (i) limited availability of historical data and standardized reporting, (ii) frequent changes in methodologies to estimate ESG factors and (iii) “greenwashing” strategies and “creative” reporting implemented by firms worldwide.

Then, the main purpose of our analysis is to provide an answer to the following questions:

- do firms effectively benefit from adopting responsible practices? And, consequently, do investors benefit from building sustainable investment portfolios?

- does Corporate Social Responsibility (CSR) effectively have an impact on the values of the companies?

To do that, firstly, we investigated the correlation between (i) ESG scores and (ii) certain parameters measuring corporate financial performances (e.g., ROA) and then we tried to verify whether a statistically significant relationship can be found between such ESG scores and the value of companies.

2. The relationship between CSR and financial performance

2.1 Literature review

The relationship between *Corporate Social Responsibility* (CSR) and *Corporate Financial Performances* (CFPs) has been extensively analyzed by scholars and researchers, becoming a popular debated area in managerial as well as financial research. The two most know theories underlying the extensive literature are the ones of Friedman (1970) and Freeman (1984). The former suggests a negative correlation which underpins the neoclassical shareholder theory: engaging in social and environmental activities to satisfy the interests of all the stakeholders is detrimental to shareholders' wealth. The "*business is business*" philosophy claims that implementing CSR activities leads to a decrease in profitability due to increased costs. The latter, instead, claims a positive correlation supporting the stakeholder theory: profit maximization and ethical behaviors are not mutually exclusive. Indeed, Freeman believes that CSR activities positively affect shareholders' wealth by meeting multiple stakeholders' interests.

Focusing on the literature which sustains a positive relationship between CSR and CFP, some authors [1] believe that CSR practices can deliver a strong competitive advantage to companies. The main rationale behind that statement is that socially responsible companies, by engaging in CSR activities, can increase their financial performance through multiple channels: for example, firms putting efforts toward developing of a work environment focused on the well-being of employees can increase employees' satisfaction and productivity and, as a result, their operational efficiency. That latter effect may, on the one hand, reduce costs for the companies and, on the other hand, lead communities to attach a higher value to their products and services (thus, boosting their revenues).

1 Salvi et al., 2018; Misani, 2017.

2.2 Methodology

As mentioned in the Introduction, our focus was to find any empirical results that will add clarification in the context of ESG scoring. The first step in the analysis was to find a positive and statistically significant relationship between ESG scores and parameters which measure the financial performance of companies, and, in particular, the *Return On Assets* (ROA). The latter appears to be the variable with the strongest statistical significance among other analyzed proxies of financial performance (i.e., ROE and EBIT margin).

In order to test the relationship between ROA and ESG scores (considering both the overall ESG score and the single scores for the Environmental, Social, and Governance specific pillars), we employed a panel data regression based on 4,890 observations related to the S&P 500 constituents, covering the period from 2009 up until 2021. In addition, to enhance the quality of regression results, we added three control variables: EBIT margin, size factor and leverage ratio. Also, we decided to apply two fixed effects: relevant years and industries; such choice stems from the necessity to address potential hidden heterogeneities dictated by sectors and temporal mis-valuation, and macroeconomic shocks. We used the statistical software "Stata" to run the panel regression analysis mentioned above. We downloaded all the data from Refinitiv, a global provider of financial market data. Refinitiv calculates ESG scores with a global coverage for all historical fiscal periods dating back to 2002, measuring the company's ESG performance based on verifiable reported data in the public domain. Refinitiv captures and calculates over 630 company-level ESG measures, of which, a subset of the 186 most comparable and material ones for each industry power the overall company assessment and scoring process. Those 630 parameters are then grouped into 10 sub-categories that roll up into the three ESG pillar scores:

- Environmental: this pillar measures a company's impact on living and non-living natural systems, including air, land and water, as well as complete ecosystems. It reflects how well a company usus best management practices to avoid environmental risks and capitalize on environmental opportunities in order to generate long term shareholder value. The Environmental pillar is made up by three categories: (a) Resource use; (b) Emissions; and (c) Innovation.
- Social: this pillar measures a company's capacity to generate trust and loyalty with its workforce, customers, and society, through its use of best management practices. It reflects the company's reputation and the health of its license to operate, which are key factors in determining its ability to generate long term shareholder value. The social pillar is

composed of four categories: (a) Workforce; (b) Human rights; (c) Community; and (d) Product Responsibility.
- Governance: this pillar analyzes a company's systems and processes which ensure that its board members and executives act in the best interests of its long-term shareholders. It reflects a company's capacity, through its use of best management practices, to direct and control its rights and responsibilities through the creation of incentives, as well as checks and balances to generate long term shareholder value. The Governance pillar is composed of three categories: (a) Management; (b) Shareholders; and (c) CSR Strategy.

Such calculation structure reflects a company's ESG performance, commitment and effectiveness based on publicly reported information. Each specific pillar score is a relative sum of the category weights, which vary per industry for the environmental and social categories. Instead, scoring in the governance pillar is based on the country of incorporation because governance practices are more consistent across countries than industries.

Our main (independent) explanatory variable is the ESG factor, considered as either an overall score or as single scores for the three pillars (E, S, and G). Concerning the control variables, we considered the following ones which have been widely used by scholars in the relevant literature:

- EBIT margin: as measure of firm profitability (i.e., we expect that the higher the operating profitability, the higher the return on the asset);
- size factor: calculated as the natural logarithm of the average total assets. According to the relevant literature, the relationship between ROA and the size factor can be described by the so-called "inverted U-shape" which explains that larger firms will generate higher ROAs until a certain threshold after which the ROA starts decreasing (Parmar et al., 2012). Considering that our sample includes the largest US companies in terms of market cap (i.e., characterized, on average, by a high level of total assets), we expect our panel to lay on the right tail of the market inverted U-shape curve between ROA and size, leading to a negative relationship between the two variables;
- leverage ratio: calculated as the ratio between Net Financial Position (NFP) and EBITDA, we consider it to be a *proxy* of the firm's financial risk. We expect a negative relationship between leverage and ROA, due to higher interest payments lowering companies' returns.

The following model equation tests the relationship between ROA and ESG in our analysis:

$$ROA_{(i,\,t)} = \beta_0 + \beta_1 \cdot ESG_{(i,\,t)} + \beta_2 \cdot \; EBIT\ Margin_{(i,\,t)} + \beta_3 \cdot Size_{(i,\,t)} + \\ + \beta_4 \cdot Lev_{(i,\,t)} + Industry\ FE + Year\ FE + \varepsilon_{(i,\,t)}$$

ROA acts as the dependent variable in this study, as a measure to assess firm' efficiency and health; we have calculated the ROA as the ratio between (*i*) Net Income and (*ii*) average total assets (i.e., average of beginning-of-period and end-of-period values) in a given year.

In order to exclude potentially arising outliers, we have winsorized each variable, excluding the size factor, on the 5th and 95th percentiles: that should increase the accuracy of the regression by providing a closer-tonormal distribution of results. The summary statistics table below (Table 1), summarizes the winsorized data.

Table 1. CSR and financial performance: summary statistics

Variable	Obs.	Mean	Std. dev.	Min	Max
ROA	4,890	0.0687	0.0550	– 0.0051	0.1935
ESG	4,890	56.4795	18.6403	0.5986	95.1624
Environment Score	4,890	50.3739	27.5583	0.0000	98.0348
Social Score	4,890	58.6232	20.6216	1.0870	99.5642
Governance Score	4,890	58.7141	21.0472	0.6182	99.4355
EBIT Margin	4,890	0.1920	0.1092	0.0336	0.4255
Size	4,890	2.1122	2.2106	5.6733	15.0864
Leverage ratio	4,890	9.8460	1.4094	0.0000	7.6353

Source: STATA elaboration, Refinitiv Data.

2.3 Results

We report the findings obtained from the four regressions (already adjusted to correct for heteroskedasticity, as described later) in the following regression analysis table (Table 2).

Table 2. CSR and financial performance: regression analysis

	ESG Overall	Environmental	Social	Governance
Constant	0.1194*** (*0.0070*)	0.1294*** (*0.0074*)	0.1173*** (*0.0070*)	0.1053*** (*0.0069*)
ESG	0.0004*** (*0.0000*)	0.0003*** (*0.0000*)	0.0003*** (*0.0000*)	0.0002*** (*0.0000*)
Ebit Margin	0.2012*** (*0.0062*)	0.2007*** (*0.0062*)	0.1982*** (*0.0062*)	0.2006*** (*0.0063*)
Size factor	– 0.0104*** (*0.0006*)	– 0.0106*** (*0.0006*)	– 0.0099*** (*0.0006*)	– 0.0082*** (*0.0006*)
Leverage ratio	– 0.0087*** (*0.0003*)	– 0.0089*** (*0.0003*)	– 0.0089*** (*0.0003*)	– 0.0090*** (*0.0003*)
Observations	*4,890*	*4,890*	*4,890*	*4,890*
Industry FE	*Yes*	*Yes*	*Yes*	*Yes*
Year FE	*Yes*	*Yes*	*Yes*	*Yes*
F-test	*0.0000*	*0.0000*	*0.0000*	*0.0000*
R^2	*0.5182*	*0.5183*	*0.5163*	*0.5113*
Adj. R^2	*0.5157*	*0.5157*	*0.5137*	*0.5087*
VIF mean	*2.49*	*2.47*	*2.46*	*2.42*
VIF max	*4.27*	*4.22*	*4.25*	*4.16*

	ESG Overall	Environmental	Social	Governance
Hausman test	*0.0000*	*0.0000*	*0.0000*	*0.0000*
B-P test	*0.0000*	*0.0000*	*0.0000*	*0.0000*

Note: *** **, * indicate respectively a 0.1%, 1%, and 5% significance levels. Robustness standard error in parenthesis.

Source: STATA elaboration, Refinitiv Data.

The findings reported in the table above show an existing positive and statistically significant relationship between firm performances (ROA) and ESG scores: according to such relationship (significant at a 0.1% level), the higher their ESG score, the higher their corporate performances should be. Going more into details, a 10-point increase in the ESG score would lead to a 0.4% increase in ROA. Such coefficient decreases when moving to one-pillar regressions: + 0.3% ROA for Social-factor regression, + 0.3% for Environmental-factor regression, and + 0.2% ROA for Governancefactor regression.

In order to test the sample robustness, we tried to exclude data related to 2009, 2020, and 2021 given that they could include potential outliers due to (i) the global financial crisis (2009) and Covid-19 widespread (20202021) occurred during those years; such test confirmed the results previously obtained: indeed, the main independent variable, the ESG score, as well as each ESG-pillar score, maintains its sign and its confidence level (Table 3). Also, the coefficient of the ESG composite score is equal to that of the extended regressions (0.04%).

Table 3. CSR and financial performance: robustness test findings

	ESG Overall	**Environmental**	**Social**	**Governance**
Constant	0.1289*** (*0.0076*)	0.1389*** (*0.0080*)	0.1267*** (*0.0076*)	0.1144*** (*0.0075*)
ESG	0.0004*** (*0.0000*)	0.0003*** (*0.0000*)	0.0003*** (*0.0000*)	0.0002*** (*0.0000*)
Ebit Margin	0.2004*** (*0.0069*)	0.1998*** (*0.0069*)	0.1971*** (*0.0068*)	0.1999*** (*0.0070*)
Size factor	– 0.0106*** (*0.0007*)	– 0.0109*** (*0.0007*)	– 0.0102*** (*0.0007*)	– 0.0084*** (*0.0006*)
Leverage ratio	– 0.0089*** (*0.0004*)	– 0.0090*** (*0.0004*)	– 0.0090*** (*0.0004*)	– 0.0093*** (*0.0004*)
Observations	*3,897*	*3,897*	*3,897*	*3,897*
Industry FE	*Yes*	*Yes*	*Yes*	*Yes*
Year FE	*Yes*	*Yes*	*Yes*	*Yes*
F-test	*0.0000*	*0.0000*	*0.0000*	*0.0000*
R^2	*0.5256*	*0.5251*	*0.5238*	*0.5178*
Adj. R^2	*0.5228*	*0.5222*	*0.5210*	*0.5150*

Note: *** **, * indicate respectively a 0.1%, 1%, and 5% significance levels. Robustness standard error in parenthesis.

Source: STATA elaboration, Refinitiv Data.

The overall correctness of the models has been verified by performing the following tests: (i) Hausman test: used to check the model for any misspecification, in order to choose between a random-effect model or a fixedeffect model. This test determines how the industry and country variables are treated in the model, as fixed or random values. Under the current specification (i.e., fixed effects for year and industry), the p-value obtained from the test is less than 5% and the null hypothesis gets rejected. Thus, the fixed effects model is appropriate for the analysis; (ii) BreuschPagan/Cook-Weisberg test (hereinafter, also referred to as “B-P test”): employed to determine whether heteroskedasticity is present in the regression model. Heteroskedasticity occurs when the variance of regression errors differs across observations. The p-value obtained from this test is less than 5%, then we reject the null hypothesis and conclude that heteroscedasticity is present. In order to address that issue, we calculated and included “robust” standard errors in each regression model, thereby adjusting the standard errors of the regressions’ estimated coefficients to account for heteroskedasticity; (iii) Variance Inflation Factor (VIF): used to test the model for multicollinearity, which occurs when two or more independent variables are highly correlated or when there is an approximate linear relationship among independent variables. Since all the variables in the model do not exceed the generally perceived cut-off level of 10 for the VIF, we conclude that multicollinearity does not significantly affect our regression models.

As anticipated, the performed panel regression suggests that firms with high ESG scores experience positive and statistically significant impacts on their ROA (i.e., better Corporate Financial Performances).

3. The relationship between CSR and value

3.1 Literature review

Scholars and researchers have extensively analyzed the relationship between ESG factors and corporate valuation, in order to grasp whether CSR effectively contributes to the process of value creation. Some empirical studies (Fatemi et al., 2017) have found a direct positive relationship between CSR and firm value (represented by proxies such as q-ratio, stock return etc.). Other studies provide evidence of the relationship between CSR and firm’s value indirectly, stating that CSR affects value drivers, such as revenue growth, operating margin, investment efficiency, and risk (i.e., cost of capital and default risk).

Concerning the relationship between firm value and CSR, practitioners believe that CSR might influence both the systematic risk (by lowering the cost of capital and, thus, boosting valuations), as well as the idiosyncratic risk (by increasing profitability and lowering exposures to tail risk) (Giese et al., 2019). Thus, socially responsible firms may be characterized by lower costs of capital since investors would perceive them as less risky as compared to social irresponsible companies.

The final effect, on the equity value, would be that socially responsible companies can access capital markets more easily, and on the debt side, a better creditworthiness would reduce the cost of issuing bonds. For example, green bonds are characterized by a lower yield than vanilla bonds and such is called "*greenium*" (i.e., a compound of "*green premium*"). In addition, both banks and markets, on average, consider CSR-compliance as a dampener of default risk (Godfrey et al., 2009): indeed, several studies find that CSR works as a risk-reducing factor with lower perceived risk deriving from better disclosures of CSR practices (i.e., thereby increasing transparency and reducing both information asymmetries and agency costs).

Other scholars (Cornell and Damodaran, 2020) argue that CSR can be negatively related to firm value, being consistent with the shareholder view of CSR activities: indeed, overinvesting in CSR activities may divert resources from other more value-enhancing projects that can maximize shareholder's wealth, thus potentially reducing firms' overall values.

In conclusion, on the basis of the literature reviewed, it seems that no empirical analyses widely sustain the value-enhancing feature of CSR practices: slightly positive impacts have been detected during the years but, that strongly depends on the sample used in the analysis. Also, mostly theoretical and only partially empirical evidence support the risk-reducing feature of being environmentally and socially responsible.

3.2 Methodology

As mentioned in the Introduction, the second part of our analysis focused on demonstrating whether CSR-compliance positively affects the valuation of a firm, given the existing relationship between ESG factors and corporate financial performance demonstrated in the second paragraph. To do that, we firstly investigated the relationship between (i) firm market value and (ii) ESG factors, through a panel regression analysis similar to the one employed in the previous paragraph and based on the following equation:

$$Firm\,Value_{(i,\,t)} = \beta_0 + \beta_1 \cdot ESG_{(i,\,t)} + \beta_2 \cdot EBIT\ Margin_{(i,\,t)} + \beta_3 \cdot Size_{(i,\,t)} + \\ + \beta_4 \cdot Lev_{(i,\,t)}\, \beta_5 \cdot Beta_{(i,t)} + Industry\ FE + Year\ FE + \varepsilon_{(i,\,t)}$$

As a dependent variable (and proxy of corporate valuation), we chose the widely known Tobin's Q ratio, which corresponds to the ratio between firm market value and the replacement cost of its assets. Hence, Tobin's Q of each company in the sample was computed by dividing (i) the average market capitalization of a given year by (ii) the average Total Assets over the same period.

The same explanatory variables (ESG, E, S, and G), fixed effects (year and industry), and control variables (EBIT margin, size factor, leverage ratio) used in the previous regression were used. We added the Beta among the control variables due to its well-known influence on the cost of equity which, according to Gordon model, directly influences the share price of a generic firm: indeed, holding everything else constant, a higher beta should correspond to a higher required cost of equity by investors, thus lowering firm share prices and, consequently, market capitalizations. Therefore, we expect a negative relationship between Beta and Tobin's Q.

All the variables mentioned in this paragraph, excluding the beta and the size factor, have been winsorized at the 5th and 95th percentiles in order to remove any outliers.

The summary statistics of the winsorized data is presented in the Table 4.

Table 4. CSR and value: summary statistics

Variable	Obs.	Mean	Std. dev.	Min	Max
Firm Value	4,471	0.6564	0.5121	0.0480	1.8699
ESG	4,471	57.1769	18.5710	0.5986	95.1624
Environment Score	4,471	51.4418	27.4814	0.0000	98.5104
Social Score	4,471	59.1118	20.7023	1.0870	99.5642
Governance Score	4,471	59.4663	20.7905	0.6182	99.4355
EBIT Margin	4,471	0.1928	0.1092	0.0336	0.4258
Size factor	4,471	2.1368	2.2338	5.9329	15.0864
Leverage ratio	4,471	9.8766	1.4116	0.0000	7.7248
Beta	4,471	1.0223	0.4000	0.1656	2.4579

Source: STATA elaboration, Refinitiv Data.

3.3 Results

The regression analysis table (Table 5) reported below shows the findings of the four regressions adjusted to correct for heteroskedasticity.

Table 5. CSR and value: regression analysis

	ESG Overall	Environmental	Social	Governance
Constant	2.0151*** (*0.0682*)	2.1489*** (*0.0709*)	2.0089*** (*0.0678*)	1.7904*** (*0.0677*)
ESG	0.0059*** (*0.0004*)	0.0036*** (*0.0002*)	0.0053*** (*0.0003*)	0.0017*** (*0.0003*)
Ebit Margin	1.0872*** (*0.0602*)	1.0839*** (*0.0606*)	1.0423*** (*0.0602*)	1.0647*** (*0.0619*)
Size factor	– 0.1286*** (*0.0057*)	– 0.1291*** (*0.0059*)	– 0.1274*** (*0.0057*)	– 0.0913*** (*0.0053*)
Leverage ratio	– 0.0535*** (*0.0029*)	– 0.0556*** (*0.0028*)	– 0.0540*** (*0.0029*)	– 0.0587*** (*0.0029*)
Beta	– 0.1672*** (*0.0176*)	– 0.1750*** (*0.0179*)	– 0.1570*** (*0.0174*)	– 0.1621*** (*0.0179*)
Observations	*4,471*	*4,471*	*4,471*	*4,471*
Industry FE	*Yes*	*Yes*	*Yes*	*Yes*
Year FE	*Yes*	*Yes*	*Yes*	*Yes*
F-test	*0.0000*	*0.0000*	*0.0000*	*0.0000*
R^2	*0.5328*	*0.5279*	*0.5350*	*0.5089*
Adj. R^2	*0.5299*	*0.5251*	*0.5322*	*0.5059*
VIF mean	*2.60*	*2.59*	*2.58*	*2.54*

	ESG Overall	Environmental	Social	Governance
VIF max	*4.73*	*4.68*	*4.70*	*4.64*
Hausman test	*0.0000*	*0.0000*	*0.0000*	*0.0000*
B-P test	*0.0000*	*0.0000*	*0.0000*	*0.0000*

Note: *** **, * indicate respectively a 0.1%, 1%, and 5% significance levels. Robustness standard error in parenthesis.

Source: STATA elaboration, Refinitiv Data.

The results obtained with the panel regression show that a positive and statistically significant relationship between ESG scores and the Tobin's Q. In detail, a 10-unit increase of the ESG composite score, is reflected into an increase of the Tobin's Q ratio by 5.9%, and for each pillar 10-unit increase, the Tobin's Q ratio would change by respectively 3.6% (E-pillar), 5.3% (S-pillar), 1.7% (G-pillar).

Moreover, following the steps of the previous analysis, to test the robustness of the model, we tried to exclude data related to the 2009–2021 from the sample. The robustness test validated the results previously obtained: indeed, the ESG composite score (as well as each ESG-pillar score) and the other independent variables maintained its sign and confidence level as show in the robustness test findings table (Table 6).

Table 6. CSR and value: robustness test findings

	ESG Overall	Environmental	Social	Governance
Constant	1.9665*** (*0.0731*)	2.1077*** (*0.0758*)	1.9622*** (*0.0724*)	1.7273*** (*0.0727*)
ESG	0.0062*** (*0.0004*)	0.0038*** (*0.0003*)	0.0056*** (*0.0003*)	0.0019*** (*0.0003*)
Beta	– 0.1722*** (*0.0190*)	– 0.1810*** (*0.0194*)	– 0.1620*** (*0.0189*)	– 0.1673*** (*0.0194*)
Ebit Margin	1.1266*** (*0.0665*)	1.1228*** (*0.0671*)	1.0763*** (*0.0663*)	1.1036*** (*0.0691*)
Size factor	– 0.1299*** (*0.0061*)	– 0.1303*** (*0.0064*)	– 0.1289*** (*0.0062*)	– 0.0896*** (*0.0058*)
Leverage ratio	– 0.0549*** (*0.0032*)	– 0.0574*** (*0.0031*)	– 0.0551*** (*0.0031*)	– 0.0613*** (*0.0032*)
Observations	*3,561*	*3,561*	*3,561*	*3,561*
Industry FE	*Yes*	*Yes*	*Yes*	*Yes*
Year FE	*Yes*	*Yes*	*Yes*	*Yes*
F-test	*0.0000*	*0.0000*	*0.0000*	*0.0000*
R^2	*0.5405*	*0.5337*	*0.5437*	*0.5120*
Adj. R^2	*0.5374*	*0.5305*	*0.5406*	*0.5087*

Note: *** **, * indicate respectively a 0.1%, 1%, and 5% significance levels. Robustness standard error in parenthesis.

Source: STATA elaboration, Refinitiv Data.

As we did in the previous analysis, the statistical sanity of the relationship described above was tested to verify the correctness of the models by performing three tests: (i) Hausman test: employed to find any model misspecification, returned a p-value lower than 5%, thus the fixed effects model is appropriate for the analysis; (ii) Breusch-Pagan/Cook-Weisberg test: returned a p-value lower than 5%, therefore, heteroscedasticity presence is detected. As mentioned above, we calculated and included robust standard errors for the regression coefficients of each model; (iii) Variance Inflation Factor "VIF": since all the variables in the model did not exceed the generally perceived cut-off level of 10, it is possible to conclude that multicollinearity does not affect these models significantly.

In conclusion, the panel regressions performed, and the relative robustness' tests, provide evidence of a significant and positive impact of the ESG scores on firms' Tobin's Q. Therefore, from our point of view, it is reasonable to state that firms with high ESG scores does not only generate higher ROAs, but such higher ROAs (or better Corporate Financial Performance) will also make them more valuable, leading therefore to higher market capitalizations as scaled against the stock of average Total Assets.

4. Conclusion

The main objective of the present analysis was to test whether Corporate Social Responsibility (CSR) somehow affects the financial performance of a firm and its value. Previous studies made by different practitioners found discordant results, which makes this area one of the most debated in the business and finance field. For this purpose, we made a panel regression analysis over a sample of data related to S&P 500 constituents, with more than four thousand observations that span from 2009 to 2021. In our regression models, the key (independent) explanatory variable is the ESG composite score and the single scores for its three pillars (Environmental, Social, and Governance) since they are among the most widely adopted measures of CSR performance. Also, it is worth mentioning that only few studies in the literature have analyzed the impact of each single component of the ESG score on corporate performances and valuations. Our first research question investigated the relationship between ESG scores and the ROA, which is one of the most-used measure of CFPs in the extant literature. Concerning our second research question, we understood that most scholars and practitioners consider the q-ratio as a proxy of firm value, so we adopted it as the dependent variable. We added specific control variables to the regressions to address heterogeneity in both the analysis. The results obtained for both research questions showed high levels of statistical significance which stayed constant even after performing the robustness tests. The findings of the first research question showed a positive and strongly significant (at 0.1% level) relationship between the ESG score and the ROA. The same outcome was obtained when considering each ESG pillar. Regarding the second research question, the findings of this study show that CSR enhances value: indeed, the relationship between the Tobin's Q and ESG was positive and strongly significant (at 0.1% level), as well as the relationships between Tobin's Q and each ESG-pillar considered individually. Consequently, we expect firms with low ESG scores to be, in general, less profitable and to have lower implied valuations.

After having demonstrated, through the analyses performed, the positive impact of ESG scores (and so of CSR) on firm performance and value, the integration of those findings into investment practices is complex to address. As a first item, not all companies provide ESG reporting: for instance, ESG disclosure in the US is not mandatory, while in Europe it is mandatory only for listed firms with more than 500 employees. Thus, it is not easy to assess a proper relationship between firm value and ESG factors, especially for small and private companies which do not provide regulated ESG reporting. Additionally, some companies tend to provide their own ESG reports to obtain non-financial rewards (i.e., reputation advantage), and therefore some of those non-regulated self-made ESG reports can be manipulated. In this context, an information asymmetry exists between firms and investors: it is difficult for a generic market participant to gauge the reliability of ESG disclosure.

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Chapter 3

IMPACT EVALUATION AND SUSTAINABILITY REPORTING: A CASE STUDY OF AN INTEGRATED FRAMEWORK

Cristiano Busco, Elisabetta Scognamiglio, Irene Litardi, Ludovica Testa

Abstract: This chapter aims to analyse the evolution from Corporate Social Responsibility (CSR) to social impact, along with the evolution of non-financial reporting. We focus upon the framework that integrates the impact evaluation model and sustainability reporting standard. This is a unique model that can allow organisations to combine the typical approaches of sustainability with those typical of impact, finally giving a full representation of the intangible effect generated by an organisation. It identifies the elements of connection and defines a single approach: an 'impact integrated evaluation process and reporting'. This model, which evaluates the effect generated by an organisation, has *been applied by Luiss Guido Carli University, an Italian University located in Rome.*

Keyword: Impact – Evaluation – Accountability – Integrating reporting – Integrating thinking – Sustainability.

Summary:

1. Introduction

Public and private organisations have questioned their ability to reduce the negative impacts of the health, climate, energy, and socio-economic emergency in recent years and implement actions capable of generating positive value for the community and the environment. Furthermore, consumers and investors are paying increasingly more attention to the decisions made by organisations to maximise their impact and are therefore called upon to report transparently on the value they generate. In such a scenario, the adoption of evaluation and reporting systems and models that provide a space in which contemporary organisations capture, organise, and communicate the constituent elements of their ‘license to operate’ to their stakeholders, including current and potential investors, communities, employees, customers, suppliers, policy makers and society at large (Busco et al., 2022; Busco et al., 2013), it is of fundamental importance.

The organisations must respond to the pressure from stakeholders who want to know about the organisation’s impacts in the social and environmental spheres. In addition to companies, other actors that are the pillars of society (Etzkowitz and Leydesdorff, 2000), such as universities, are required to promote the achievement of the Sustainable Development Goals (SDGs) (Agenda 2030) and, in particular, the achievement of social cohesion.

In recent years, reporting on this aspect has become a priority tool in international and national agendas. It first began with the EU Directive 2014/95, which established new minimum reporting standards on environmental and social matters in relation to personnel management, respect for human rights, and the fight against active and passive corruption implemented in Italy with D.Lgs. No. 254 of 2016, and then with the new Corporate Sustainability Reporting Directive (CSRD), which will complement and replace the previous directive as well as some other European regulatory acts (Audit Directive and Regulation, the “Transparency Directive” and the Action Plan on Sustainable Finance with the introduction of the Taxonomy for Sustainable Finance-Regulation (EU) 2020/852). This regulatory tsunami highlights the speed with which countries are moving in this regard and the strong push for a radical change in the economic and social system. Many organisations, particularly SMEs and micro-enterprises, are required to respond to these changes, even if they are not ready. These cultural changes require not only the knowledge of specific tools, standards, and measurement capabilities but also internal planning within the company capable of involving and raising awareness at all levels of management.

This paper aims to analyse the evolution from Corporate Social Responsibility (CSR) to impact assessment and the evolution of non-financial reporting as the main reporting tool for impact assessment results. In this chapter, an evolution of the application of the integrated reporting model is presented, which sees in this approach the union of sustainability reporting standards and the impact assessment framework, in a model capable of complying with the assurance requirements provided by the regulations on non-financial reporting.

This combination represents, therefore, an innovation capable of responding contextually to several needs: that of producing a report that complies with the regulations but is able to present within it a more precise and specific definition (quantitative and monetary) of the impacts generated.

The model in question is applied in this case to the evaluation of Luiss Guido Carli University, an Italian university located in Rome.

2. Research methodology

After an analysis of the academic literature on the evolution from CSR to impact assessment, in parallel to the dichotomous analysis between nonfinancial reporting and impact assessment (see paragraph 3 and 4), the research focused on the analysis model designed by Italiacamp, which brings together the soul of reporting and that of impact assessment (paragraph 5), based on the "bricolage" approach and which fits well with the framework of integrated thinking.

Luiss Guido Carli University was identified as a case study, both for its historical commitment to reporting (Figure 1) and for the willingness of its governance to evolve and incorporate the impact assessment model, with the support of Italiacamp, in the process of analysis and production of the Integrated Report (paragraph 6), thus making it a pioneer compared to other universities and beyond.

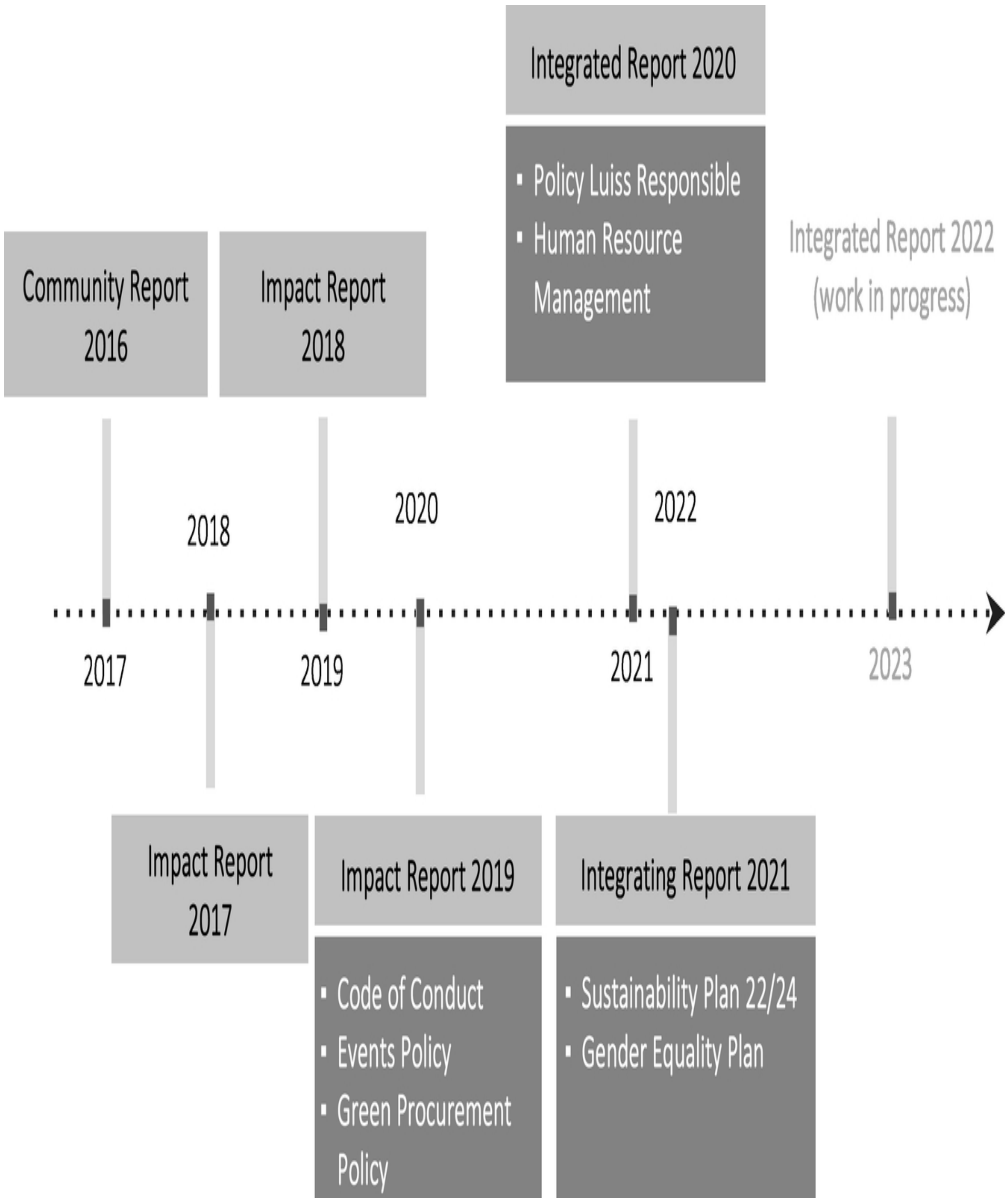


Figure 1. Timeline of Luiss Guido Carli non-financial reporting and sustainability documentation
Source: Authors' elaboration.

In fact, excluding the 31 non-state universities (out of a total of 98 public and private) and 12 telematic universities, only two private Italian universities publish non-financial reports. However, only Luiss produces the Integrated Report annually unlike its competitor. The analysis of Luiss' reports was carried out by applying a qualitative research methodology including document analysis for the review and evaluation of electronic public documents [1] (Bowen, 2009).

1 The sustainability documents available on the official Luiss website are as follows: Luiss Sustainability Plan 2022-24: Integrated Report 2021, Integrated Report 2020, Impact Report 2019, Gender Equality Plan, Code of Ethics, Policy events, Policy Green Procurement, Policy Luiss Responsible Human Resources Management (https://www.luiss.it/ateneo/sostenibilita-in-luiss/documenti-e-certificazioni).

3. From Corporate Social Responsibility to Social Impact: the evolution of evaluation and accountability

The spread of CSR as a corporate strategy (Green Paper, 2001) linked to the responsibility and ethicality of conducting business predates the spread of sustainability (Brundtland, 1987), even if the latter integrates CSR in its concept. It is only since the 1990s that concerns about climate change, environment, social inequalities, and everything that can be defined as the "common good" have gained momentum and spread throughout society, driven by national and international institutions and organisations, civil society, and the mass media. Simultaneously, there is a growing awareness among companies of the need to shift the focus of financial performance from a short-term to a long-term perspective through the implementation of sustainable strategies, the only way to ensure a stable and lasting future (Eccles and Krzus, 2012). From here emerges the tendency of organisations to have an impact-oriented management model as a synonym of positive change for its stakeholders and territory in the long term, through planning, management, and evaluation processes. Social impact is defined as the long-term sustainable change (positive or negative-primary or secondary) in people's conditions or in the environment that the intervention has partially contributed to achieve (Zamagni, 2015). Thus, the concept of value and stakeholders is broadened to include a plurality of stakeholders.

The three concepts of CSR, sustainability, and impact that follow one another over time, not only have different definitions and consider different perimeters of analysis but also have different performance assessment tools.

In CSR the assessment of organisations passes through reporting tools and techniques that lead to the production of reports of a qualitative nature in which the actions and some of the results achieved are described (Social Report).

In case of sustainability, different reporting standards have spread internationally, with the identification of specific qualitative and quantitative indicators for monitoring the results achieved. In fact, a series of voluntary reporting tools linked to extra-financial performance have been developed, thanks especially to the push for environmental issues. Thus, the first environmental, social, and sustainability reports were created; they include all tools with the clear objective of expanding internal and external information on the activities and responsibilities of the organisation, often published in separate documents and months after the annual financial reports, thus making comparison difficult (Eccles and Krzus, 2010). Therefore, the very integration that allows investors to understand how ESG performance and other aspects influence the value creation process (Eccles and Serafaim, 2014) is missing, in a diametrically opposed perspective to integrated thinking (Busco, Granà and Quattrone, 2017) that leads 'to integrated decisions and actions that consider the creation, preservation, or erosion of value in the short, medium, and long term' (International Reporting Framework, 2021). In other words, these instruments (sustainability report, social report, environmental report, etc.) are documents drafted and packaged ad-hoc for the respective stakeholders, limited to the perspective concerned by each of them, without adequate emphasis on the overall strategy, governance, and risk analysis. The definition of Integrated Report (IR) does not mean a combination of different types of report. According to the International Integrated Reporting Council (IIRC), an IR is "a concise communication about how an organisation's strategy, governance, performance, and prospects, in the context of its external environment, lead to the creation of value over the short, medium, and long term" (see paragraph 4).

In addition, there is also the fact that, although with appropriate differences, performance evaluation in both sustainability and CSR cases is more connected to accountability aimed at developing reports.

The impact paradigm, which comes from the financial context (from impact finance) considers as an approach for the emergence of value, the development of frameworks more oriented to the evaluation and definition of quantitative indicators than information standards.

Impact assessment models are based on approaches ranging from counterfactual statistical analyses, economic-monetary proxies, and created adhoc indicators to return the outcomes, that is, the effects that an activity or a project has on the reference stakeholders (Table 1). These processes, therefore, have a more evaluative connotation, which is often not encountered with sustainability accounting in the standard reporting systems recognised to date.

Table 1. Origin of different approaches

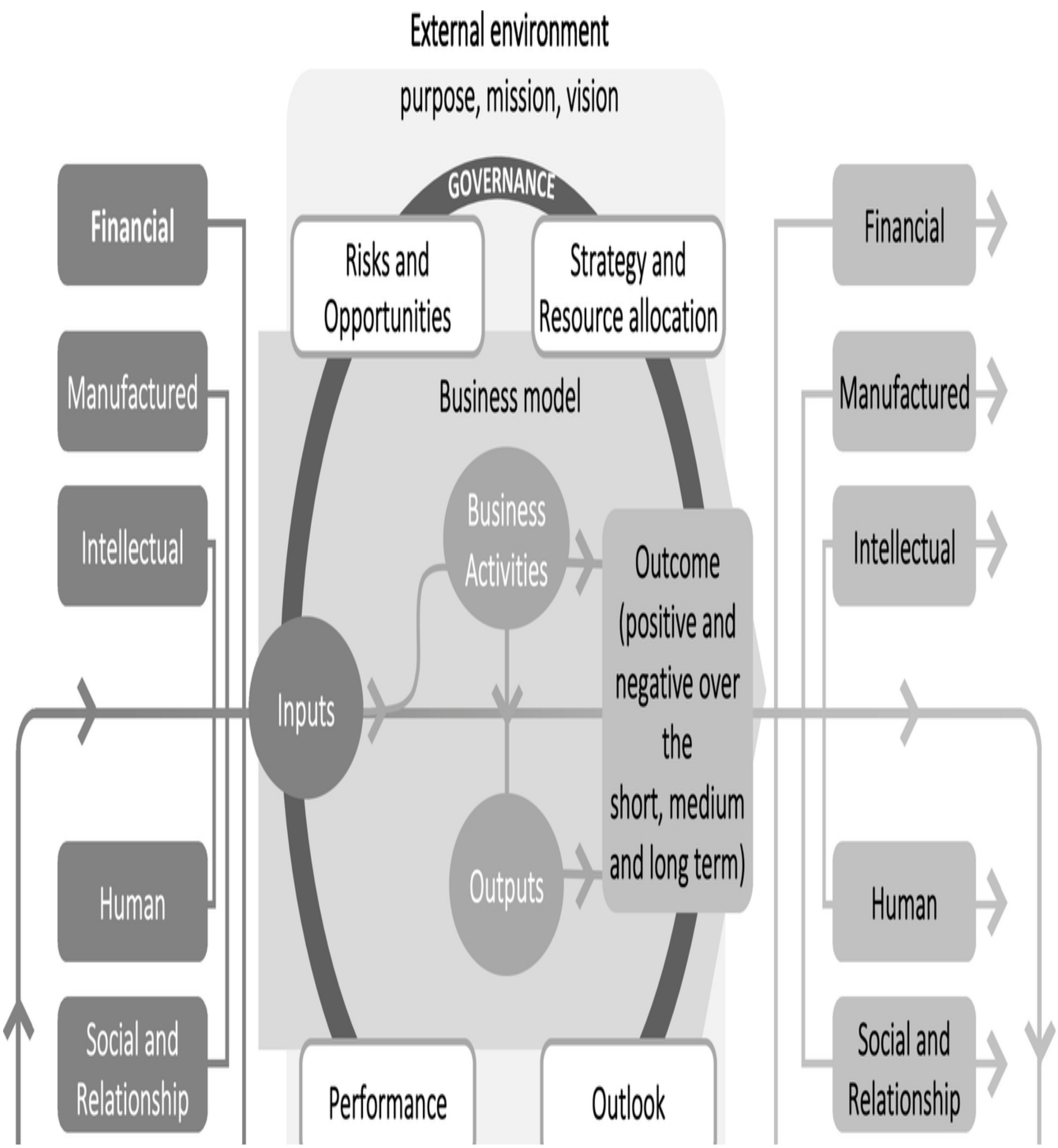
	Perimeter	Process	Effort
CSR	Organisation	Accountability	Output
Sustainability	Organisation Community Territory	Accountability	Output
Impact	Project	Evaluation	Outcon

Source: Authors' elaboration.

Due to this, the first step of the analysis was the attempt to hold together these different elements in a single reporting model as hypothesised in the theoretical and methodological framework that is presented in paragraph 5.

4. The Integrated Reporting Framework

The Integrated Reporting Framework was released by the IIRC – the International Integrated Reporting Council – in December 2013 and revised in 2021. The Framework suggests that the fundamental concepts of Integrated Thinking and Reporting are represented by the capitals that an organisation uses and affects, as well as the process of creating value over time (see Figure 2). This value is embodied in the capitals – also referred to as resources and relationships. As illustrated in the Framework, organisations depend on six different types of capitals, which are stores of value that, in one form or another, become inputs to an organisation's business model. They are: financial, manufactured, intellectual, human, social and relationship, and natural. The Framework doesn't require organisations to adopt the capitals, so they should be rather used as a benchmark to ensure an organisation doesn't overlook a capital that it uses or affects. Value is created or destroyed through the capitals within a company's business model, which represents the chosen system of inputs, business activities, outputs, and outcomes that aims to create value over the short, medium, and long term. Since these capitals and their value change over time as they are increased, decreased, or transformed through the activities and outputs of the organisation, it’s also important to understand how the outputs affect outcome.



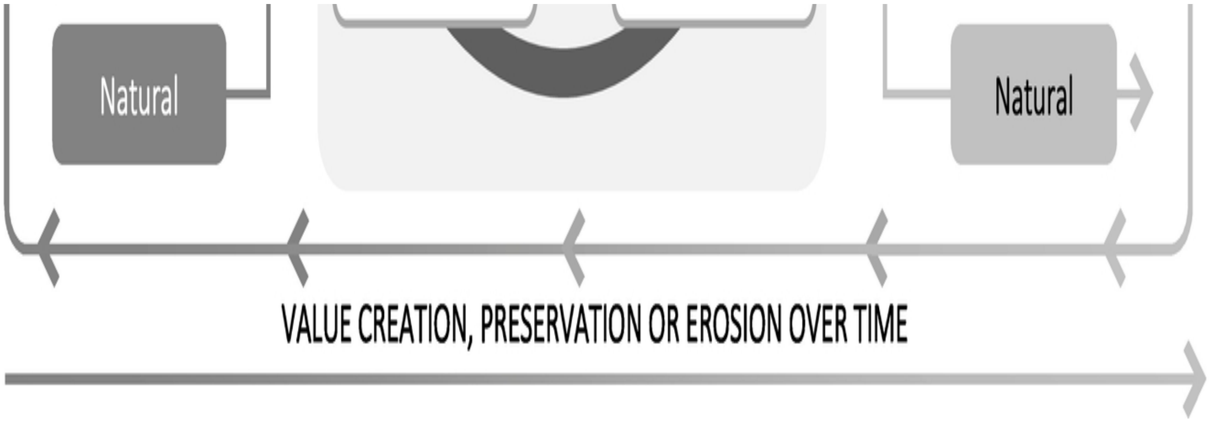


Figure 2. The Integrated Reporting Framework

Source: The IIRC, 2013.

Importantly, Integrated Reporting relies on Integrated Thinking. Presented as the active consideration by an organisation of the relationships between its various operating and functional units, and the capitals that the organisation uses or affects, Integrated Thinking leads to integrated decision making and actions that consider the creation, preservation or erosion of value over the short, medium and long term. Integrated thinking takes into account the connectivity and interdependencies between the range of factors that affect an organisation's ability to create value over time, including:

- the multiple financial and non-financial capitals that the organisation uses or affects;
- the critical interdependencies, including trade-offs, between these capi-tals;

- the capacity of the organisation to respond to key stakeholders' legiti-mate needs and interests;
- the way in which the organisation tailors its business model and strategy to respond to its external environment and the risks and opportunities it faces;
- the organisation's activities, performance (financial and other) and out-comes in terms of the past, present and future impact on the multiple capitals at stake.

5. Italiacamp framework

The need to integrate impact evaluation into non-financial reporting is increasingly emerging among both private and public sector organisations, which are more attentive to stakeholder requests for qualitative and quantitative information on the results generated over time by the organisations themselves. Impact evaluation does not have a standardised and preestablished methodology as is the case of reporting (paragraph 3), it was created to assess the effects of projects and activities of social enterprises that by their very nature are different from each other, requiring, therefore, most often an ad-hoc construction of the evaluation methodology capable of translating information into results and meeting the different needs of stakeholders (Nicholls, 2009; Molecke and

Pinkse,). Consequently, as the basis of the evaluation and reporting production model created by Italiacamp, we have a "bricolage" approach applied to impact evaluation (Nicholls, 2009), a method according to which social enterprises develop evaluation processes, which, although not standardised, are in line with the specific value creation activities (Di Domenico et al., 2010) and stakeholder demands. Based on previous research that compared more than 100 different methodologies for impact evaluation (Sammarco et al., 2018), Italiacamp produced a single procedural evaluation model by bringing together different standards (Figure 3), relying on the "bricolage" approach of strategically combining existing evaluation methods (Scognamiglio et al., 2019).

Figure 3. Italiacamp impact assessment model

Steps	Standard
1 | Internal and benchmark analysis Output: stakeholder map and business model	Standard GRI

Steps	Standard
2 | Construction Theory of Change Output: identification of impact areas and outcome	Logical framework Theory of change
3 | Stakeholder engagement Output: materiality matrix or quality effects assessment	Participatory process of impact definition
4 | Identification of socio-economic impact Output: social and economic impact indicators	Leontief model, SDGs, SROI approach

Source: Italiacamp, 2021.

In this way, it was possible to obtain a standardised process for the different steps of analysis to make the evaluation methodologically sound and, at the same time, sufficiently flexible in the definition of qualitative-quantitative and monetary indicators to be able to adapt to the needs and characteristics of individual organisations through the same operational path.

Beginning with this assumption, and from the point of view that sustainability and impact are two concepts that should not travel in parallel but rather integrate with each other, a value chain model was developed. This value chain model integrates impact and does not stop at output reporting but also reports internally and externally on the evaluation of the organisation’s outcomes (Figure 4).

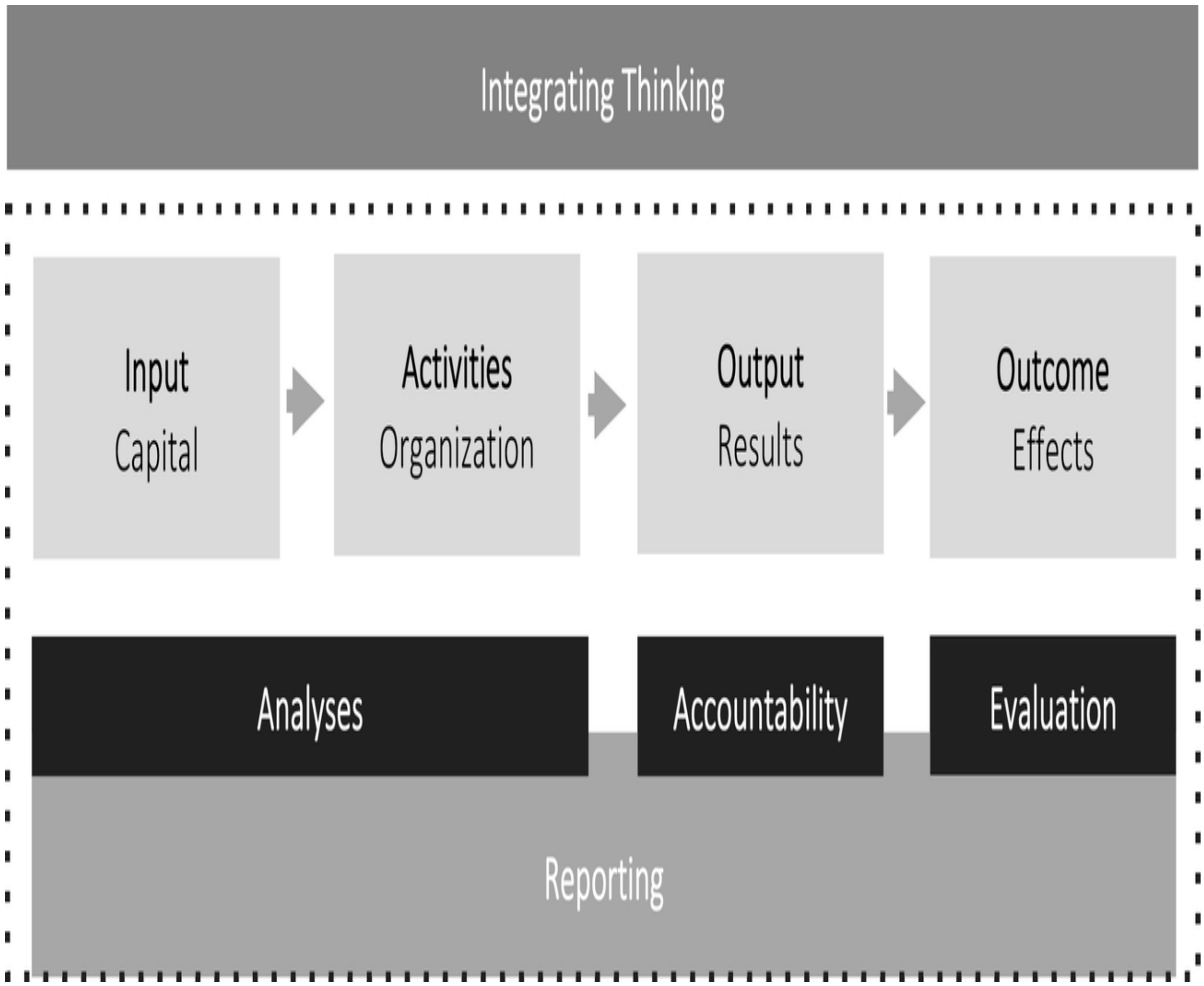


Figure 4. Italiacamp integrated framework

Source: Authors' elaboration.

This model of governance, in which sustainable strategies and social impact are integrated, is based on the concept of integrated thinking (paragraph 4). Integrated thinking is the planning of impact strategies to be integrated into the decision-making processes by management, reporting the effort of the activities in a single integrated report able to meet the expectations of shareholders, stakeholders, and communities through measurable, readable, and comparable qualitative and quantitative information on the ability of organisations to assess the impacts generated in terms of the value created.

6. Case study: application of Italiacamp framework to Luiss Guido Carli reporting

The path of impact evaluation has been undertaken by Luiss, in collaboration with Italiacamp, with the construction, drafting, and publication of the Impact Report (Figure 1), which represented the first case where a university institution embarked upon an impact assessment that went beyond the simple analysis of sustainability and investigated the added value, in both descriptive and economic terms. This approach, to evaluate the work of an academic organisation, has considered, along with the traditional economic and financial metrics, performance indicators aimed at measuring the ability to generate positive or negative impacts for the community of reference in terms of society, employment, environment, and culture. Unlike the Community Report, the first document drafted by Luiss in terms of reporting, the Impact Report shifts the focus of analysis from outputs to outcomes, that is, the effects of the actions implemented, and provides, within the assessment process, a direct involvement of stakeholders. In

2020, Luiss takes a step forward in its non-financial reporting by publishing its first Integrated Report, in which the theoretical structure of impact assessment used in previous reporting experiences is innovated and included in the broader perspective of a more structured Integrated Report. The Integrated Report represents the starting point of the cultural path of integrated thinking undertaken by the University, carried out with the joint work of the working group composed of internal faculty and external professionals on reporting and impact assessment. The declination of integrated thinking throughout the organisation is also evident in the Strategic Plan (2021–2024), in which one of the six strategic trajectories is sustainability, and with the design, implementation, and execution of the Sustainability Plan that declines the commitment to a model of sustainable value creation. The Sustainability Plan is a pillar of the integrated thinking approach of Luiss and allows the organisation to promote connectivity between financial and non-financial information, helping the organisation to fully understand the link between all its activities and the impact it generates on the external environment.

6.1 The evaluation framework

Considering the regulatory pressures, the evolution of contexts, and the needs of the market, Italiacamp has developed a **framework capable of combining sustainability reporting and impact evaluation**, and with which to represent the entire action of an organisation, bringing together many different needs and responding to the expectations and demands of multiple stakeholders. This ‘model’ allows, as mentioned above, to put together more information, points of view, and elements of analysis, whose knowledge is essential in any management process and even more for those organisations that want to apply impact management processes.

This is possible with integrated thinking and a bricolage approach, which is applied not only to impact evaluation but more generally to the entire sustainability reporting process.

In the case under analysis, the Luiss Integrated Report, a scientifically rigid approach, is used because different accredited standards and frameworks are considered both in reporting and evaluation; however, it is flexible, because the most appropriate way to integrate them is sought, returning a report capable of having elements of analysis, reporting, and evaluation. For reporting and accounting, the IR Framework and the GRI are taken into consideration, while the evaluation aspects are covered by the logical framework models, the SROI and the SDGs.

The Luiss Integrated Report starts with the ***analysis***, that is, the identification of the inputs, the resources it has, and the activities and ways in which it uses them.

It was made possible through a study of the University, starting from internal documents such as the Strategic Plan and economic, organisational, and operational documents, to which were added interviews and comparisons with different areas of the organisation. This led to the identification of capital, the input that makes developing and implementing the various activities possible, and the drivers that help create value: people, relationships, infrastructure, environmental heritage, and economic-financial resources. The activities were then mapped and summarised in macro-actions.

The results of this first process are:

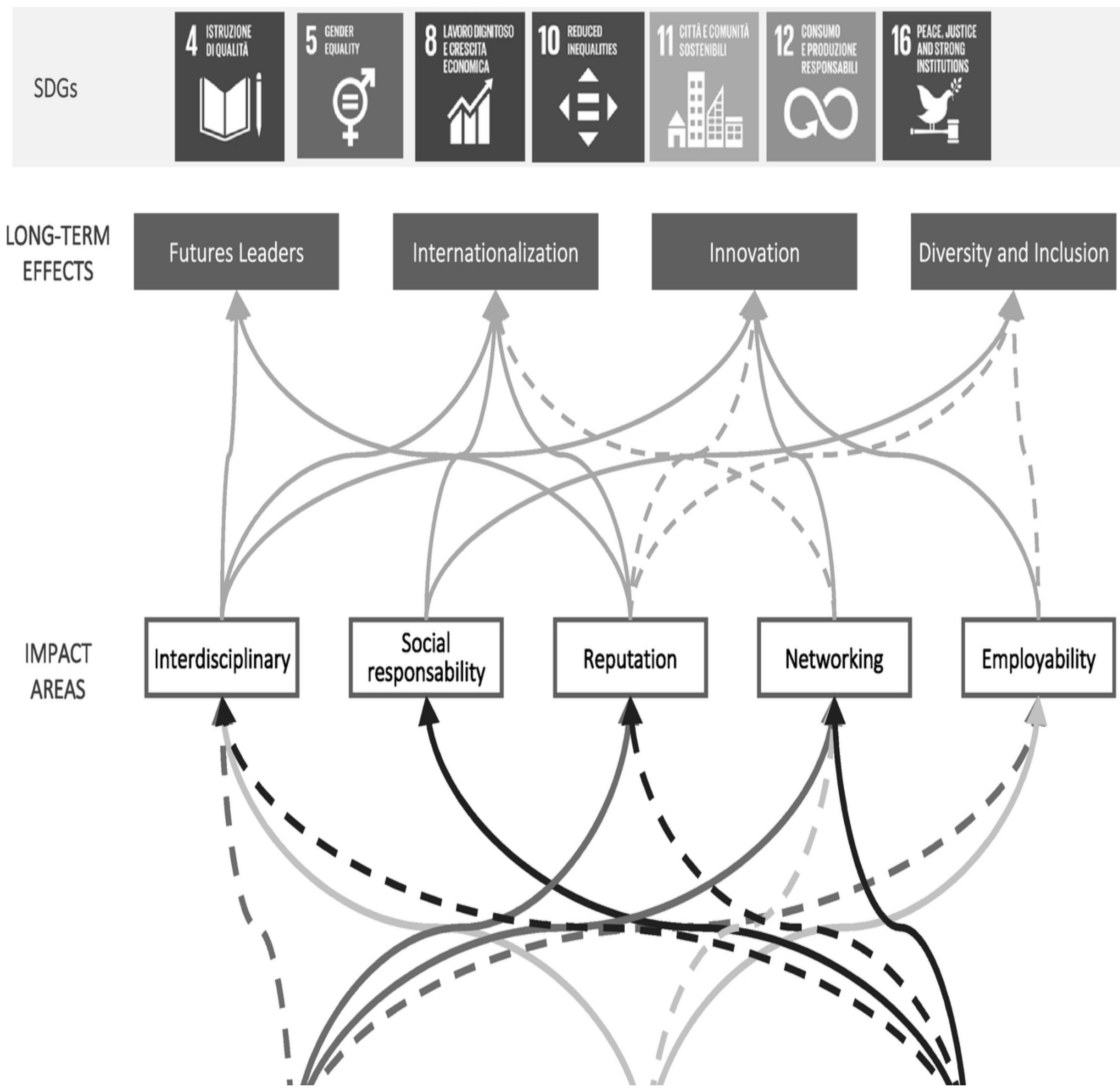
- The construction of the first part of the value chain. The value chain represents the pivotal, central element against which the entire report unfolds. The objective is to reconstruct the value chain, reporting every characteristic of the organisation and its actions.

- Subsequently, we move on to the phase of output ***reporting***, dealing with performance in the economic and financial spheres. We speak, for example, of a scientific production of excellence, an effective educational model, the strengthening of the international profile, and the achievement of economic and financial sustainability that ensures the creation of value.

Therefore, the GRI guidelines are taken into consideration, which make identifying the results in economic, governance, social and environmental terms through KPIs possible. This completes the value chain that is traditionally described in common reporting: input-action-output.

However, such reporting is no longer sufficient; it is no longer enough to fulfil information requests and represent actions and results. The context requires evaluating the consequences of action, especially for an organisation like Luiss. Being accountable, therefore, is no longer enough, and it is necessary to integrate analysis and evaluation; this represents the first innovative element promoted by the Italiacamp framework.

The integration of the impact evaluation process started from the value chain in which it was also possible to consider the outcomes and the effects generated by Luiss using the logical framework. Specifically, the Theory of Change (ToC), typically used in social impact evaluations, was applied. Starting from the information present in the value chain, through the first analysis and reporting activities, it is possible to report a graphical representation that identifies the effects starting from the main activities of the organisation highlighting the causal links between actions and changes (Figure 5).



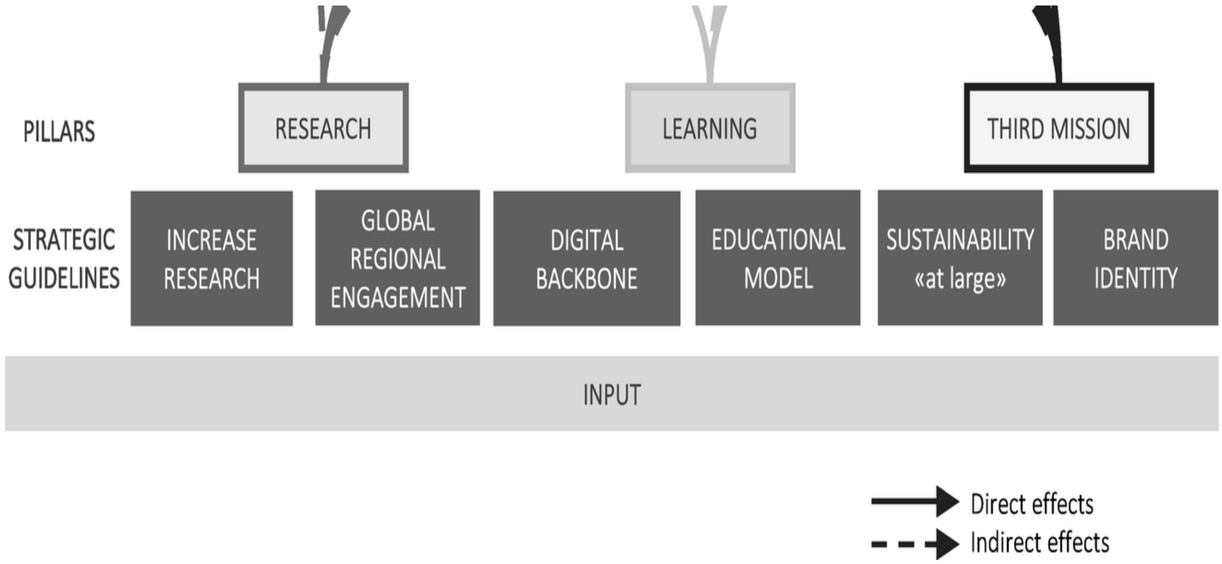
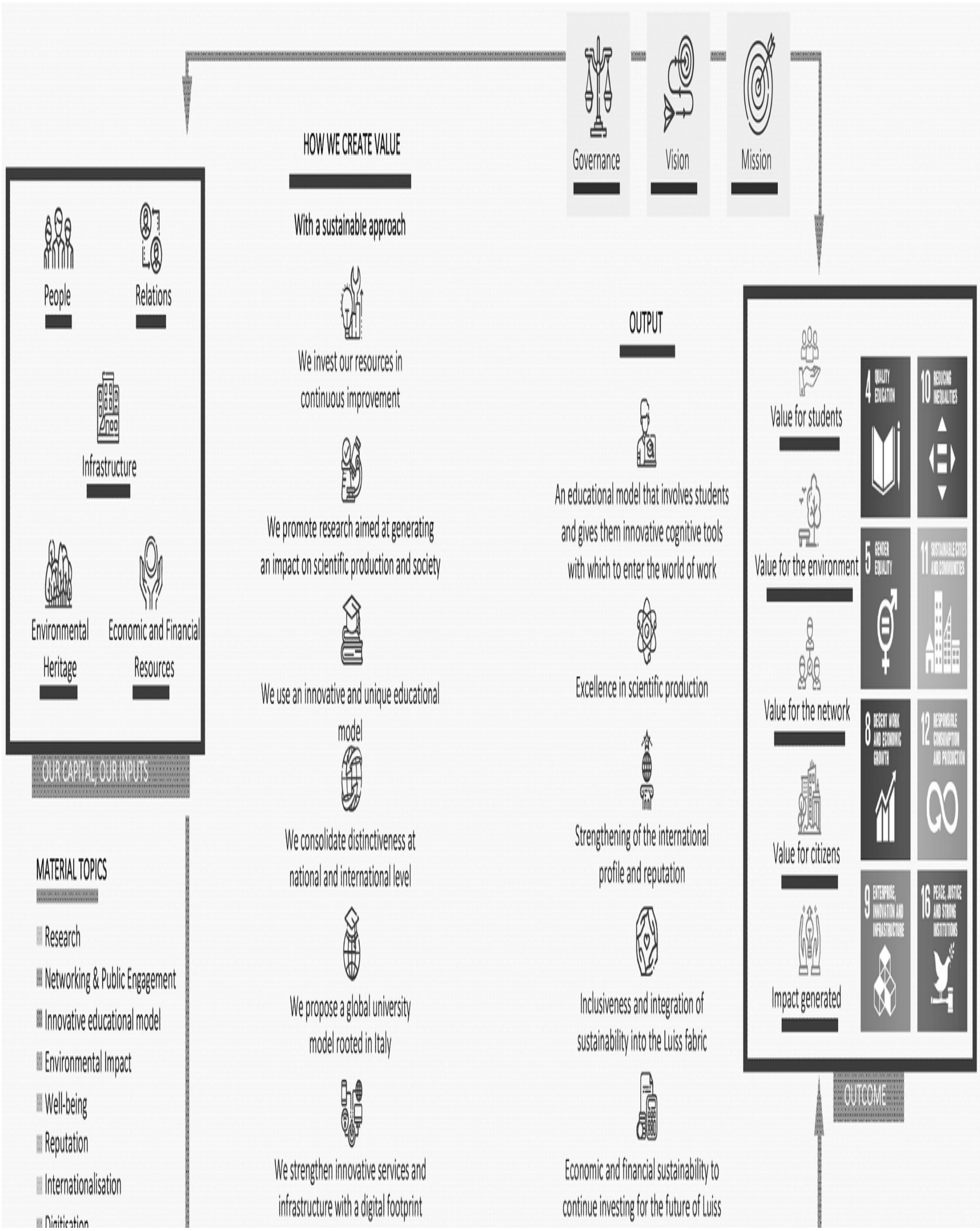


Figure 5. Luiss Guido Carli's Theory of Change

Source: Authors' elaboration.

Through this strategic tool, it is possible to represent the complexity of reality, showing how actions and effects are intertwined in multi-level relationships and how each change is generated by several different actions, in a more or less direct way. The Theory of Change also makes it possible to provide a representation of how the actions and related effects produced by an organisation contribute, with more or less intensity, to the achievement of sustainable objectives.

In this way, thanks to the integration of the impact assessment, a complete value chain is constructed, starting from the capital (inputs) to the medium- and long-term effects (Figure 6). Luiss' depends on five different types of capitals that become inputs to a university's integrating thinking model (paragraph 4). They are: people, relations, infrastructure, environmental heritage and economic and financial.



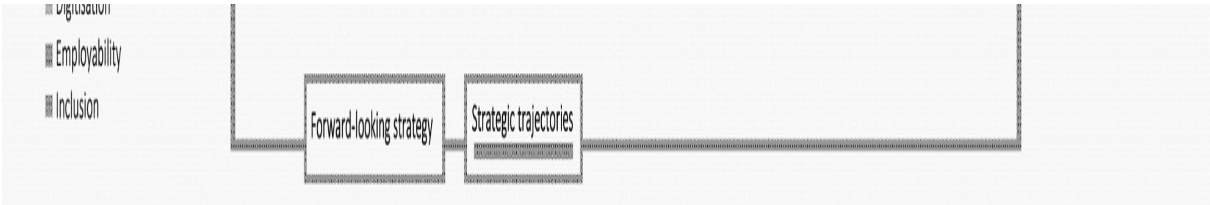


Figure 6. Luiss Guido Carli's value chain

Source: Luiss 2020 Integrated Report.

The results achieved by the University generate value for different categories of stakeholders.

Regarding students, they help with employability, improved interdisciplinarity and adaptability, and self-employability.

As far as network and relationships are concerned, the entire stakeholder network benefits from the associated reputational effects.

For citizens, towards whom the University carries out many actions in line with the objectives of the Third Mission, they provide enhancement and protection of common goods and donated time.

Regarding the environment, they help by saving waste and emissions through responsible paper use and more sustainable mobility.

After having identified the areas of impact, that is, the broad contexts in which the University generates value, and the outcomes (the punctual effects), the next step of the analysis of the impact evaluation process involves the definition of impact indicators and the identification of appropriate monetary proxies to be able to value the changes generated.

The indicators are constructed starting from solid benchmark analyses, which allow the identification of appropriate KPIs, are more or less, standardised and are capable of fully grasping the considered effect.

Details of the effects considered, the indicators applied, and the results are given in Table 2.

Table 2. Luiss Guido Carli 2021 impact assessment

Value for…	Impact area	Indicators description
Students	Employability	**Monetary value of the chage in the level of paid employability** of Luiss graduates at one year after graduation, compared to the national average

Value for...	Impact area	Indicators description
	Interdisciplinary imprint	**Adaptability:** monetary value of the soft skills mainly by the labour market and acquired by Luiss graduates through interdisciplinary learning
	Interdisciplinary imprint	**Self-entrepreneurship:** monetary value of the enterpreunerial skills acquired by Luiss students through interdisciplinary learning

Value for...	Impact area	Indicators description
Citizens	Social Responsibility	**Monetary value of the redevelopment of historic buildings** in the city of Rome
	Social Responsibility	**Monetary value associated with the protection and enhancement of commons assets** achieved through the maintenance and opening of spaces to the public

Value for...	Impact area	Indicators description
	Social Responsibility	**Value of the benefit generated by volunteering activities**
Network	Networking	**Monetary value of Luiss relational capital** generated by the dense network of relationship and exchanges between and with the University's various stakeholder

Value for…	Impact area	Indicators description
	Reputation	**Monetary value of Luiss’attractiviness** and the positive sentiment that the University generates for its stakeholders
	Social Responsibility	**Reduce** use of papers

Value for…	**Impact area**	**Indicators description**
Environment	Social Responsibility	**Environmental savings** due to no paper production
	Social Responsibility	**Reduce CO2 emission CO2**
The value of the Impact generated…		

Value for...	Impact area	Indicators description
Overall impact		Aggregate of the impact generated by Luiss and given by the sum of the Employability, Interdisciplinary Footprint, Social Responsibility, Reputation and Networking indicators listed above and combined following appropriate methods of discounting and summarising data
Impact value		**It express the value of the impact**

Value for…	Impact area	Indicators description
		generated by each euro invested by the University in the reference year. It is obtained by calculating the ratio between; • the value of the overall impact (numerator) • the Net Invested Capitol (denominator) i.e. the ammount of investments made to promote the activities that generated the valued change

Source: Authors' elaboration from Luiss 2021 Integrated Reporting.

The qualitative and quantitative impact assessment concluded with an overall representation of the value generated by Luiss through a summary indicator called Impact Value, which uses the typical approach of the SROI methodology.

This logic, which moves from the definition of the more traditional ROI, envisages relating the social value generated with the costs or investments sustained to develop the actions that produced those effects. The social value is given by the sum of the different outcomes measured through indicators that apply monetary proxies.

The second aspect of innovation brought by the Italiacamp framework and applied in the Luiss case study is related to the integration of the impact assessment elements just described with the reporting activity.

Non-financial reports that apply the GRI disclosure standard follow a guideline that covers the entire structure of the document, including in terms of storytelling. The information required is both quantitative and qualitative to provide an overall view of the entire organisational performance.

The structure of the Luiss Integrated Report, which specifically follows the core option of the GRI Standard, starts with a descriptive chapter on the University, in terms of vision, mission, values, strategies and objectives, followed by a qualitative/quantitative chapter on governance and direct engagement of stakeholders, which has as its final result the construction of the materiality matrix. Subsequently, the structure provides for the reporting of economic, environmental, and social aspects in terms of outputs produced by the University, according to the different requirements of GRI Standards. In this way, we arrive at the reporting of the value chain up to the outputs.

To report the long-term effects generated for the stakeholders, the GRI standard considers disclosure 413–1, which requires information to be reported on activities involving local community involvement, impact assessments, and development programmes, but does not specify the scope, methodologies, or type of expected results: "The organisation must report the following information*:* a. percentage of activities involving local community involvement, evaluations impact assessment and/or development programmes [....]”. [2]

2 Citation from Disclosure GRI 413-1.

In this case, the information required is primarily in terms of performance and storytelling rather than evaluation of long-term effects.

The impact assessment developed according to the Italiacamp framework and based on a bricolage approach provides an evaluative response to GRI’s information request, thus becoming part of a process in which analysis and evaluation become necessary to narrate and report on the value creation process.

Italiacamp has, therefore, responded to GRI disclosure 413–1 through the impact assessment of outcomes, effects, identified through the value chain.

The compliance of the impact assessment with GRI disclosure requirements was also validated by the company that handled the Assurance of the entire integrated reporting process of the University.

The auditor who verified the Luiss integrated report's compliance with the GRI standard, according to the Core option, also verified that the information reported in the impact assessment met the requirements of GRI 413–1.

The innovative integration of the reporting process has, therefore, also been recognised by third parties.

In short, analysis, reporting, and evaluation come together in the reporting process, which must not remain an accountability tool, but be integrated with the evaluation aspects; it represents a tool with which to make decisions, choices, and monitor oneself with respect to the value objectives that one intends to achieve.

7. Conclusion

Markets move due to information: more information on future prospects and on the company makes investors and stakeholders capable of making optimal choices and allocating capital efficiently, thus benefiting the entire market. From a company's point of view, not responding to this need for more complete communication can be risky. Values such as trust, reputation, and reliability have become increasingly important, and transparency, to which organisations are obliged to adapt, can turn from a burden into a new possibility, allowing to obtain competitive advantages. Therefore, organisations, private companies, as well as universities must seize and exploit the change in progress by moving from a reactive or adaptive attitude to a proactive commitment and using reporting and impact assessment as keys to success.

This study shows how there is a need to look at these issues in a univocal way and integrate the aspects of accountability and impact into a single integrated thought. The framework presented by Italiacamp, applied in the integrated report of Luiss, highlights the readiness of a model that anticipates the trajectories indicated in the dual materiality (GRI, 2022; EFRAG, 2022; GSSB, 2021; IIRC, 2013; ISSB, 2022; SASB, 2020), a concept that provides a dual look at the relevant issues for an organisation: the impact materiality perspective and the financial materiality perspective (OIBR, 2022). If the former (also known as environmental and social materiality) looks at sustainability as the significant impacts (positive or negative, actual, or potential) that an organisation has on people and/or the environment caused by the operations and investments implemented (inside-out approach), the latter, that is, financial materiality, considers important whether a sustainability issue causes or could cause relevant financial effects on the organisation (outside-in approach). Therefore, it is no longer possible to speak of reporting as only a method of restitution of what has been done externally; a synergic and dynamic approach that considers both the time space of the predictability of the risk and the impact that this risk has for the organisation and its stakeholders is required.

We are faced with the fact that the social, environmental, and economic spheres are priorities but on the same level overcoming the CSR theories of the last century, which placed these areas in a pyramid (Carroll, 1979; Wartick and Cochran, 1985; Wood, 1991). Therefore, all of us and the organisations in the first place are called to a new challenge of rethinking the corporate culture where the integrated report, defined with respect to the integrated thinking, and therefore, the concept of double materiality, has not only the task of pulling the strings of what has been done or not in environmental and social issues but also to guide the governance of the company by guiding the decision-making process, help to build an internal culture more oriented to sustainability, and have an impact in strategic planning both in terms of objectives and risk forecasting. This will give the organisation the opportunity to ride the change and create shared value. In fact, the Integrated Thinking model bases its cardinal principle on the importance of an organisation's capitals as interconnected input factors capable of influencing an organisation's ability to create value over time.

The experience in non-financial reporting of the Luiss Impact Report made it possible to include the impact-oriented logic in the Integrated Report both as a frame of the general and punctual analysis in the construction of the value chain and, as a separate chapter, responding to GRI disclosure 413–1 on impact assessment. In this way, it was possible to bring out the value related to the effects generated by the actions of the organisation, completing the representation of the value chain made in the entire Integrated Report. The latter represents for an academic organisation, a reporting tool that can provide, using capitals, information on resources, strategy, governance system and the results of the organisation, bringing out the links between input and performance represented in the value chain.

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Chapter 4
ACCOUNTABILITY AND THIRD-PARTY INDEPENDENT VERIFICATION IN IMPACT INVESTING: THE CASE OF BLUEMARK

Chiara Andreoli, Sandro Brunelli, Paolo Taticchi

Abstract: The financial community has increasingly adopted Impact investing to generate positive, measurable social and environmental impact alongside a financial return. Among the total amount of sustainable investments, $715 billion is the estimated market size of impact investments, and it is expected to increase exponentially over the next few years. However, to scale Impact investing with integrity, both universal standards for impact measurement and management and a reliable mechanism to verify impact claims and practices are needed. Labelling a project or investment as impactful without the actions and accountability to back it up is of no value. Regulations *development, concerns about the integrity of Impact investing, and the impact information gap are key drivers of the demand for independent impact verification of approaches to impact measurement, management and reporting. It is essential to have a third-party impact verification perspective on investors' impact actions, practices, and performance. This would increase the trust and accountability of social impact in the Impact investing market, similarly to independent assurance and third-party ratings in traditional financial markets. This chapter hinges on the social impact measurement literature to dive into the salient role of third-party impact verification, in light of the main issues in the Impact investing market, such as "impact washing". BlueMark, a leading provider of independent impact verification services for investors and organisations, will be presented as a single case study. It exemplifies the key role of third-party verification to hold investors and enterprises accountable for social impact. Primary data were collected through interviews with two directors of BlueMark and from the company website. These findings were combined with data gathered during the workshops of the IMmPACT project, held at UCL School of Management.*

Keywords: Social Impact – Accountability – Impact investing – Impact washing – Impact verification.

> *"Despite clear progress, this is no time for complacency. The work to scale the market with integrity is crucial if the world hopes to reverse the tide of climate change and address social inequity head on. All industry players have a role to play in ensuring that Impact investing meets the moment and fulfills its promise." Amit Bouri, Co-Founder & CEO of the Global Impact Investing Network (2022)*

1. Introduction

Companies do not live in a vacuum; they interact with the external environment and are actors of change in a world facing increasing environmental and social issues. Society has increasingly set the bar high in terms of expectations from businesses to combine profit with social impact by tackling entrenched societal problems (Kolk, 2016).

Not only in the world of nonprofit organizations, philanthropy and social enterprise but also in the for-profit (Molecke and Pinkse, 2017; Harji and Jackson, 2018), the measurement, management, and reporting of environmental and social impact play a key role in satisfying external accountability expectations, improving enterprises' actions, and measuring effectiveness in the light of increased societal challenges (Anderson and Abensour, 2017).

The debate around impact measurement and management represents a fundamental part of the practice of Impact investing, which represents an investment strategy aimed at generating social and environmental benefits while delivering financial returns (Global Impact Investing Network - GIIN, 2020). The European Venture Philanthropy Association (EVPA) makes a distinction between “Investing for impact” and

"Investing with impact" strategies. The first strategy "is followed by investors that adopt the venture philanthropy approach to support social purpose organisations, maximising their social impact. Their support is mostly non-financial (e.g. adding expertise in impact measurement within an organisation)" (EVPA, Glossary Terms, 2022). The second strategy is used by "investors that have access to large pools of resources and need to guarantee a certain financial return alongside the social impact they aim at generating" (*ibidem.*).

The refrain of accountability for social impact and the key role of impact measurement have been ascendant: more and more stakeholders are asking for transparency and scientific rigorousness in measuring and managing impact, both positive and negative (Knowledge at Wharton, 2022). In light of the growth of the Impact investing market, integrity should be protected (GIIN, 2022). Thus, projects and investments that are labelled as impactful should first seek third-party verification of impact data, processes, and reporting. More and more actors in the Impact investing system (and beyond) are requiring the independent impact verification of impact measurement, management and reporting, both to increase the trust and accountability of social impact in the Impact investing market, and decrease the risk of "impact washing" (GIIN, 2018). Impact washing "is when fund managers or bond issuers overstate or falsely claim an investment's positive impact on the environment or society. This can be a purposefully dishonest claim, an embellishment of the truth, or a mistake due to inadequate impact measurement", (Cote, 2022). This term stems from "green-washing", which refers to the false claims of an organization that describe its business practices or products as being sustainable when they aren't (ibid.).

This chapter hinges on academic and grey literature about Impact investing, and social impact measurement and management. BlueMark (BM), a leading provider of independent impact verification services for investors and organizations, has been chosen to develop a single case study. The company represents the fundamental role of third-party verification to let investors and enterprises embrace accountability for social impact and verify their impact claims and practices, by taking into consideration market standards. This case is considered peculiar given the first-mover and leading position of the company as third-party verification of impact in the Impact investing market. BM is unique in its approach to encourage investors to go beyond the compliance with ESG and impact practices: it provides consulting services not only by checking the results of impact reporting but giving advice also about the impact management process. The chapter is organized as follows: methodology, theoretical background and open issues, case study, and conclusion.

2. Methodology

This chapter adopts a single case study as the research strategy (Yin, 2014). The rationale behind this decision lies in the fact that it provides a unique opportunity to observe and analyze an interesting phenomenon that few have considered before in the same way. The born and development of third-party verification of social impact is an extremely actual case in the light of the Impact Revolution that is happening today (Cohen, 2022). In line with the exploratory nature of our study, two semi-structured inter-views are used as the data collection method. Tristan Hackett, director at BM in the U.S., and Paige Nicol, director at BM in Europe were interviewed between May and October 2022. Moreover, other data were collected during the workshops of the IMmPACT project [1] at the University College London (UCL) School of Management. In addition to interviews, data were gathered on the company website.

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[1] The IMmPACT project was founded in October 2021 at University College London School of Management in collaboration the John Ryder Memorial Trust. The project was launched to advance research around social impact measurement and management in the Impact investing ecosystem. The founders of the project, together with the external researcher, formed a “practice group”, called the “Social Impact

practice group", made of senior representatives from the investors (implementing both investing for and with impact strategies), banking, and enterprise community who shared the latest thinking and emerging practices on the topic of social impact measurement and Impact investing.

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3. Background of the research

3.1 What is Impact investing?

The term "Impact investing" was coined in the Rockefeller Foundation meeting in 2007, although Impact investing firms (e.g., Acumen Fund) have been operating since much earlier (Agrawal and Hockerts, 2021). Despite the huge growth of Impact investing initiatives at the global level, several players, both in industry and academia, confuse Impact investing with Socially Responsible Investing (SRI), venture philanthropy, and venture capital. In the most recent academic and practitioner reviews, the definitions are mainly mapped based on social and commercial performance functions. The working definition given by GIIN explicates the key ideas found across many definitions of Impact investing:

> *"Impact investments are investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return. Impact*

investments can be made in both emerging and developed markets, and target a range of returns from below market to market rate, depending on investors' strategic goals" (GIIN, 2021)

Notably, mainstream Impact investing and traditional or illiquid Impact investing exist in the same ecosystem. Traditional Impact investing targets low and mid-liquidity and maturity impact companies but also more innovative companies. These can impact society and the environment in a more disruptive way. Throughout the years, the more mainstream Impact investing targets listed equity firms and large privatelyowned companies that can be more attractive for institutional and traditional investors. In summary, the two types of impact investments operate symbiotically and complementary (United Nations Principles for Responsible Investing, UN PRI, 2018).

3.2 The market for Impact investing

In 2022, the size of the Impact investing market stands at USD 1.164 trillion in assets under management (GIIN, 2022). Almost 3349 organizations are currently involved in the market, with about a 50% increase from 2020, when the organisations were 1720. The survey found that a new collaborative effort among worldwide stakeholders has emerged, in order to foster the development of a high-functioning market. Thus, it is key to understand the ecosystem that governs the Impact investing practices.

The Impact investing ecosystem is usually described based on the demand and supply of impact capital, intermediaries, and government, as Figure 1 shows. Demand represents the actors who provide impact solutions and invest finances to achieve these solutions aiming for solving societal issues. Supply denotes the actors that deliver funding to impact businesses (e.g., institutional investors, individuals, retail investors, etc.). Intermediaries facilitate the exchange of impact between the supply and demand side, such as funds (e.g., venture capital, growth funds) or wholesalers and stock exchanges. The enablers are the actors that facilitate the impact ecosystem, as financial advisors and third-party verification of impact. Lastly, governments are able to catalyse the ecosystem through policymaking tools.

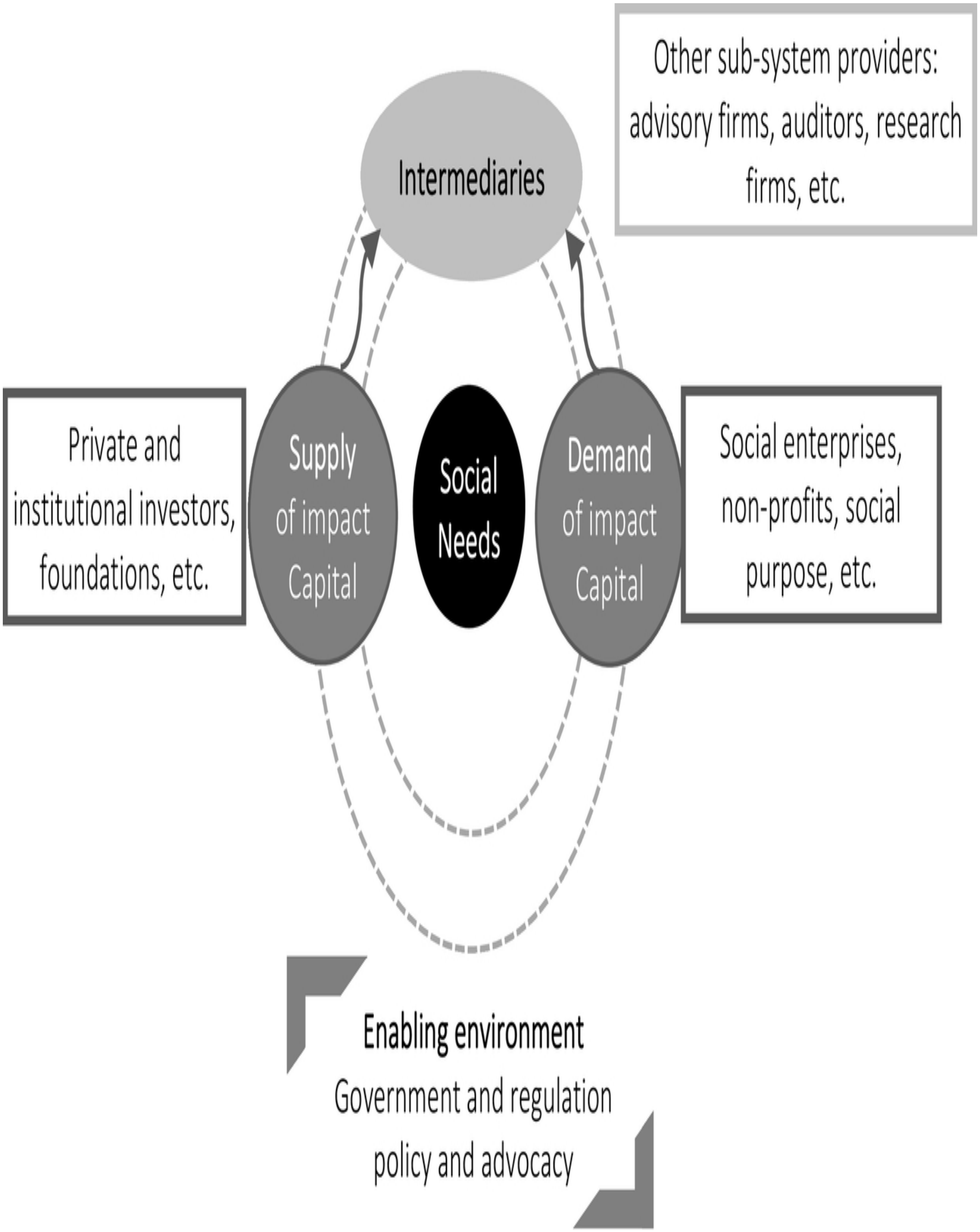

Figure 1. Impact investing ecosystem actors at a glance

Source: Authors' elaboration based on OECD, 2019.

3.3 Pillars of Impact investing

The term impact is tricky, and it is trivial to distinguish enterprise impact, investment impact, and nonmonetary impact. The enterprise impact refers to the impact that companies can have through their products and management practices. In addition, organizations can impact society with adhoc investments, which increase the quality and quantity of enterprise impact. Beyond the monetary impact, businesses can benefit stakeholders (e.g., investees) through nonmonetary benefits, such as finding new investors opportunities, technical and governance assistance to enterprises, and so forth (Brest and Born, 2013).

Without deeply understanding the four pillars of Impact investing, namely materiality, intentionality, additionality, and measurement, the market risks being contaminated by other, more traditional, financial strategies. Materiality refers to "an assessment made to determine the factors that are relevant, significant and material to include in a true account of the organisation's impact" (EVPA Glossary, 2022). For an investment or nonmonetary activity to have an impact, it must increase the social impact of companies beyond what would otherwise have occurred. This core concept is called "additionality" (Brest and Born, 2013). All investments have an impact, both positive and negative. The clear aim to yield also a financial return differentiates Impact investing from philanthropy, but the explicit goal of having a non-financial impact delimits Impact investing from traditional finance (EVPA, 2022). Intentionality denotes “an investor’s intention to have a positive social or environmental impact” (GIIN, 2022). Impact measurement, management, and reporting are fundamental to fulfilling external accountability (Molecke and Pinkse, 2017), comparing companies across sectors (Hehenberger et al., 2015) based on the social and environmental impact generated to allow a better understanding of their value creation (Anderson and Abensour, 2017). The measurement helps organisations work more effectively towards optimising or maximising social impact. This is key to understanding why the discourse has evolved from considering only the measurement to also including its management (Hehenberger and Harling, 2018).

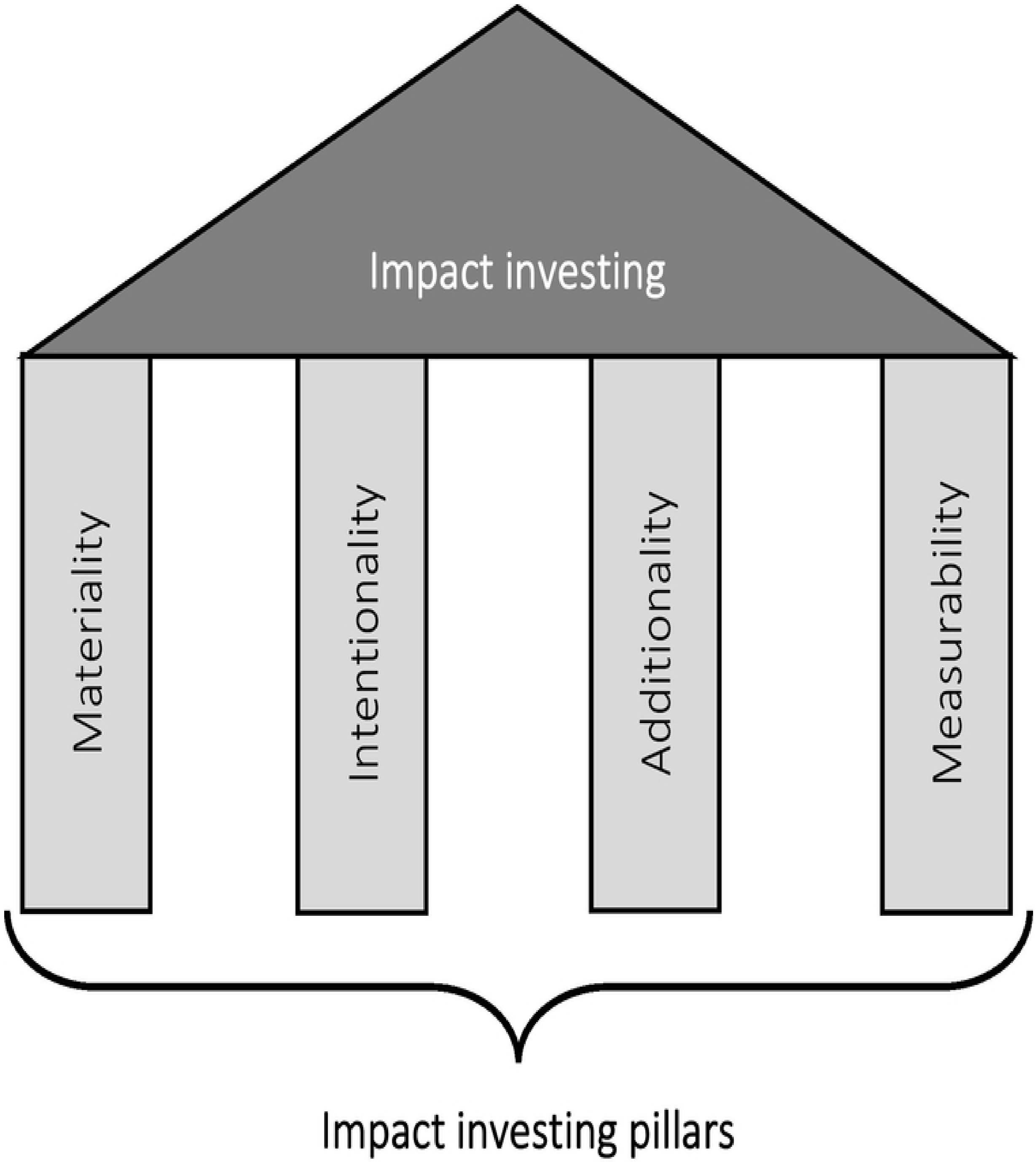

Figure 2. Impact investing pillars

Source: Authors´ elaboration.

3.4 What are the main issues in Impact investing?

The rise of Impact investing is undoubtedly positive in the face of increasing societal challenges. However, a better conceptualization of its constituencies and recognition of the specific roles of actors, institutions, laws, etc. are still needed. Impact investors generally recognize broad progress across key indicators of market growth but also some challenges to be overcome.

Firstly, each actor should be better understood in the system by having a specific role. The ultimate impact of each link in the chain strongly depends on the attitude, behaviour, and work of the other constituencies. Also, the success of each action is contingent on how collective the action is. Communities, businesses, and governments have a key role in creating and sustaining inclusive prosperity by coalescing and transforming it into a mass movement (Brill, Kell and Rasche, 2020) and greater coordination among them is needed to achieve specific goals.

Secondly, the capital devoted to Impact investing, although showcasing that socially responsible capitalism has made its way into the mainstream financial industry, is not able to demonstrate the transformative outcomes of societal challenges. One of the main Achilles' heels of Impact investing is measurement. The subjectivity of the criteria means that there is no simple measurement of impact clean and straightforward as Return on Investment (ROI), for instance. Despite the enormous growth of environmental, social and governance (ESG) data, there are still significant challenges related to the quality and comparability of these data and linking them to financial decision-making (Bril, Kell and Rasche, 2020; Chandler, 2021). The non-financial information disclosure procedures are not yet harmonized across continents. Making the measurement objective requires standardization across countries and industries, by taking into consideration relevant structural differences. Impact measurement, management, and reporting have increasingly become common practices in social and for-profit sectors (e.g., Ebrahim and Rangan, 2014). The measurability of impact is the fundamental concept that differentiates Impact investing from traditional forms of investment (e.g., GIIN, 2021). However, social impact measurement and management is a contested management practice due to a number of frictions (Moleske and Pinkse, 2017). For instance, there is a lack of definitional clarity about the social impact (Ebrahim and Rangan, 2014). Stakeholders have different perspectives on the social issues that should be measured (Rawhouser et al., 2019) and nonstandardized methodologies (Moleske and Pinkse, 2017). Stakeholders in the ecosystem have often dissimilar and contrasting expectations about the strategic actions to create positive and long-lasting social outcomes (Cohen, 2020). As consequence, there is often a lack of the right key performance indicators (KPIs) that measure and manage the social impact in the long term by adopting a system-lens approach to measurement. In this regard, it is pivotal to measure the impact at the investor, investee, and ecosystem levels (EVPA, 2022). In addition, impact investors often report only their success, rather than the negative impact too (Knowledge at Wharton, 2022). Table 1 reports a short glossary of all newly utilized terms when dealing with the social impact investment and measurement issues.

Table 1. Main definitions used in the chapter

Keyword	Definition	Source
Social Impact	The attribution of an organisation's activities to broader and longer-term outcomes, which are in turn defined as the changes, benefits, learnings, or other effects (positive or negative, both	EVPA

Keyword	Definition	Source
	long and short term) that result from an organisation’s activities. In academic terms, to accurately calculate social impact outcomes should be adjusted for: (i) what would have happened anyway (deadweight); (ii) the action of others (attribution); (iii) how far the outcome of the initial intervention is likely to be reduced over time (drop off); (iv) the extent to which the original situation was displaced elsewhere or outcomes displaced other potential positive outcomes (displacement); and for unintended consequences,	

Keyword	Definition	Source
	which could be negative or positive	
Impact investing	Impact investments are investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return. Impact investments can be made in both emerging and developed markets, and target a range of returns from below market to market rate, depending on investors’ strategic goals	GIIN

Keyword	Definition	Source
Investing for impact	Strategy followed by investors that adopt the venture philanthropy approach to support social purpose organisations, maximising their social impact. Their support is mostly non-financial (e.g. adding expertise in impact measurement within an organisation	EVPA
Investing with impact	Strategy used by investors that have access to large pools of resources and need to guarantee a certain financial return alongside the social impact they aim at generating	EVPA

Keyword	Definition	Source
Impact measurement	The commitment of the investor to measure and report the social and environmental performance and progress of underlying investments, ensuring transparency and accountability while informing the practice of Impact investing and building the field	GIIN

Keyword	Definition	Source
Impact management	Monitoring the change created by an organisation’s activities, and using the information/data to refine activities in order to increase positive outcomes and reduce potential negative ones (based on measurement)	Adapted from EVPA

Keyword	Definition	Source
Impact reporting	Once the data has been collected and analysed, an organisation needs to consider how to present and share this information. Depending on the stakeholders to whom an investor for impact is reporting, different formats will be required. Investors for impact report to funders on ad-hoc basis and usually make an extensive review yearly, which may be included in an impact report to be shared widely	EVPA

Keyword	Definition	Source
Impact washing	It is when fund managers or bond issuers overstate or falsely claim an investment's positive impact on the environment or society. This can be a purposefully dishonest claim, an embellishment of the truth, or a mistake due to inadequate impact measurement	Harvard Business Review (Cote, 2022)
Materiality	An assessment made to determine the factors that are relevant, significant and material to include in a true account of the organisation's impact	EVPA

Keyword	Definition	Source
Additionality	An intervention will lead, or has led, to effects which would not have occurred without it. In the impact context, it refers to achieving positive outcomes that are better than what would have happened without the investment. Additionality may result from: growth of new or undersupplied capital markets; provision of flexible capital, accepting disproportionate risk-adjusted returns; active engagement providing a wide range of non-financial services	EVPA

Keyword	Definition	Source
Intentionality	An investor's explicit intention to have a positive social or environmental impact	GIIN

Source: Authors' elaboration.

Given the challenges outlined, among others not mentioned at this stage, the risk of impact washing is always just around the corner. Reporting and communicating incomplete or false impact achievements make the market for Impact investing even more fragmented (UN PRI, 2018).

4. Diving into the role of third-party evaluation of impact: the case of BlueMark

In traditional financial markets, independent assurance and third-party ratings have a fundamental role, and so does impact verification in the Impact investing market. The role of third-party verification of impact can strengthen trust and accountability (Refinitiv, 2021). To tackle impact-washing, impact investors should be aligned with industry standards and claim their impact based on scientific evidence of real impact outcomes (Cote, 2022).

BM (here referred to as 'BM'), a Tideline company, is a leading provider of independent impact verification services for investors and companies. It was incubated and launched by Tideline, a women-owned Impact investing consultancy, founded by Christina Leijonhufvud, Ben Thornley, and Kim Wright-Violich, who brought around thirty years of Impact investing experience to the company.

Through dialogue with clients, managers in Tideline understood that the next essential step in the Impact investing development was performance verification. Thus, BM was founded with the mission "to strengthen trust in Impact investing by delivering independent, incisive verification services, enabling the market to scale with integrity" (BlueMark website, 2022). The company plays a key role in advancing best practices and letting the Impact investing industry grows with integrity.

BM's approach to independent verification is grounded in Impact investing industry standards, such as the Operating Principles for Impact Management ("Impact Principles") and the SDG Impact Standards ("SDG Impact"). BM also actively monitors the development of regulations and laws at the European Commission and SEC on impact and sustainability disclosure requirements. Its work is mainly based on the standards and tools published by Global Reporting Initiative (GRI), Impact Management Project (IMP), IRIS+, Impact Principles, Principles for Responsible Investment (PRI), Sustainability Accounting Standards Board (SASB), Sustainable Development Goals (SDGs), SDG Impact, and Taskforce on Climate-related Financial Disclosures (TCFD) (BlueMark website, 2022).

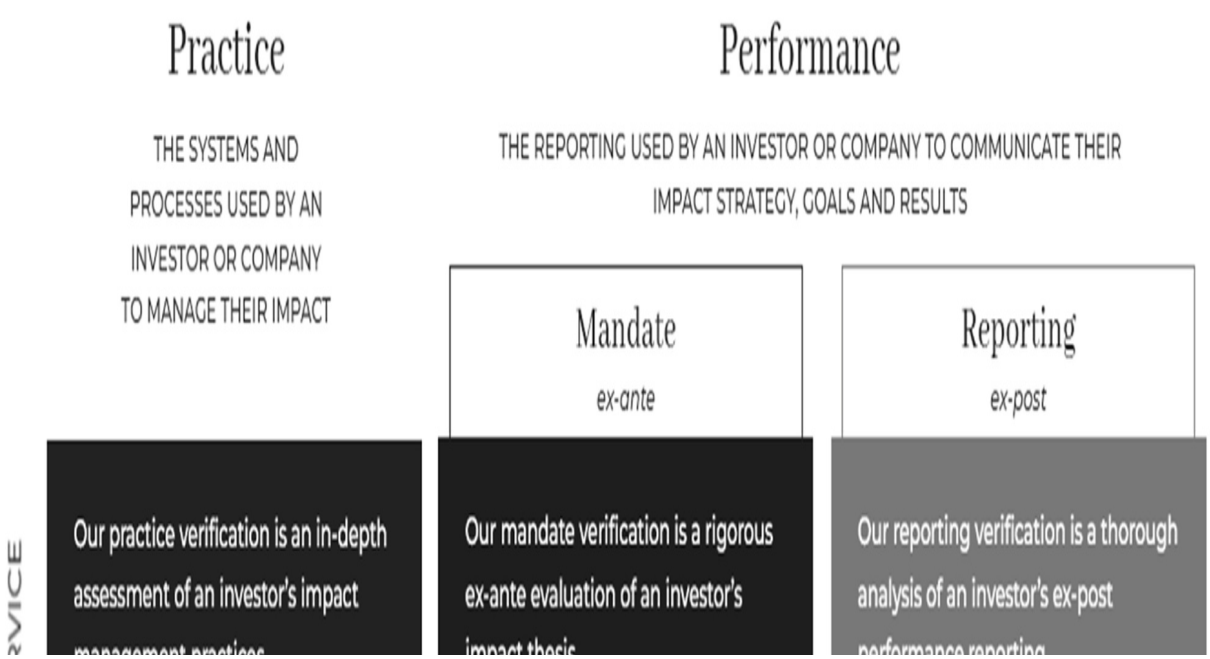

Figure 3. Overview of BlueMark's Impact Verification Services

Source: BlueMark website, 2022.

4.1 Accountability at the ecosystem level

BM's mission is to be able to strengthen trust in the impact label, and create more confidence around the claims investors are making around the impact that they are having. Thus, providing this sort of independent external assurance services is designed to bring more accountability to the market by definition. The uniqueness of BM as an impact verification provider is what they are trying to do at the ecosystem level: encouraging investors to go above and beyond minimum compliance with ESG and impact practices. A substantial portion of the market to date has been defined by voluntary standards, or better, standards that investors can choose to adhere to or not. However, there are a lack of strong accountability mechanisms to ensure that they are really doing what they said they would do with a voluntary standard. Thus, BM provides accountability assurance by looking at market standards, and what an investor is doing against those. The firm offers a consultative and rating-based approach. The rationale behind this is to give investors the instruments to understand not just how they are doing but also to be able to learn through the verification process and benchmark themselves again other market actors. Thus, in addition to providing the stamp of approval, BM offers ratings and consulting advice for investors to improve and go beyond minimum compliance. This mechanism helps investors to achieve more credibility and assurance in achieving the impact that they want to have on the ecosystem where they work. BM has a well-established public rating system for verification of impact management practices, which is largely in line with the Operating Principles for Impact Management. The rating system is explicative of BM's commitment to field building, and the results are shared every year as part of the “Making the Mark” [2] report together with the methodology used.

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[2] “Introduced in the 2021 Making the Mark report, the BlueMark Practice Benchmark categorizes practice ratings by quartile, providing a mechanism for investors to compare themselves to their peers and to learn from others in the market.” (BlueMark website, 2022).

4.2 Two pillars of accountability for impact: impact management practices and impact performance control

BM’s verification comprises an in-depth evaluation of an investor’s or company’s impact management practices and/or impact performance to assess the alignment with industry best practices, based on key industry standards, frameworks, and regulations. BM collects data in the form of documentation and interviews.

Specifically, BM services are structured around two pillars of accountability for impact – Impact Management Practice and Impact Performance. In terms of practice, they assess the systems and processes used by investors or companies to manage their impact. Concerning the second pillar, BM evaluates the reporting utilized to communicate impact strategy, goals, and results. All in all, BM services are designed to let clients increase their credibility with investors and meet expectations in terms of transparency. Moreover, BM considers each verification as a way to continuously let clients improve and learn from their impact processes and performance, thus going beyond a ‘check-the-box’ exercise. As part of the Impact Reporting Service, BM looks at both the intentions and the performance results. In this regard, there are often new investors that are setting up a new strategy and they want their intentions to be verified. Thus, BM looks at the robustness of clients´ Theory of Change [3] and the evidence underpinning that Theory of Change to credibly say that the investment strategy will realize the impact aimed for. For example, BM recently carried on a mandate verification for a circular economy fund’s impact thesis. A key screening criterion is the Theory of Change related to the improvement of the sustainable usage of certain products and services, to increase the confidence in that type of investment strategy. Thus, BM had to conduct evidence-based lifecycle assessments of these products and services, to verify the likelihood that impact would have been achieved through investments in these types of products. This is pivotal in early-stage companies or early-stage ideas, where the impact may not be realized for quite some time.

[3] Theory of Change (ToC): “A theory of change defines all building blocks required to bring about a given long-term goal. This set of connected building blocks is depicted on a map known as a pathway of change or change framework, which is a graphic representation of the change process.” (EVPA Glossary, 2022).

Even if there is often a conflation of terminologies in the market, and there is interchangeability across a wide variety of terms, including sustainability reports and impact reports, some differences should be highlighted. Sustainability reports are usually more ESG-focused and the scope is often internally-focused, thus reporting on operations around sustainability metrics. For instance, what the GHG footprint of an investment is and how it is aligned to net zero goals, whereas an impact report is often more focused on the results of the investment in terms of long-term outcomes, in relationship to the investment strategy.

4.3 Main differences and similarities between an impact verification company and traditional financial auditors

Although impact verification companies and traditional financial auditors share many similarities, there are some evident characteristics that differentiate those. Concerning the similarities, all verification companies share the objective of ensuring the accuracy and credibility of reported information, whether it is financial or impact audit. They share the type of process of fact-checking numbers to ensure that there are no misrepresentations. The two figures start to diverge when describing the type of financial and impact information audited. When verifying impact, auditors should collect several context-related information, that are often much more complex than financial information. Furthermore, if there is an agreement upon frameworks in the financial reporting world, to understand how results look, and how performance can be interpreted, performance reporting of impact is a lot more challenging to gauge. Thus, for an impact verification company, this means adding a lot more layers of contextual information into verification.

> *Beyond financial auditing, there is a completeness of information required around impact. For instance, an impact verification company should look at the negative impacts in addition to positive impacts, to both quantitative and qualitative information, especially in terms of the context where impact is created and benchmarks. Besides, the intentionality of an investor should be analysed, differently from a financial perspective. Tristan Hackett, Director at BM*

Moreover, auditors in the traditional financial industry usually undertake a “check the box” exercise, whereas an impact verification company should go beyond that. BM designed its verification methodology to build subject matter expertise and live the experience with clients. Thus, in addition to those types of statements, BM’s verifications result in an internal report on how to improve against a given standard or improve the reporting. The rating system developed by BM helps an investor to understand how they stack up relative to their peers and how they can improve. The mechanisms are quite distinct from typical traditional assurance processes.

4.4 The fight against impact washing through trust-building

> *Trust is all about having the assurance that the claims being made are authentic ones, and that the intentionality and the results that are being reported are authentic and credible as well. Impact washing is when there is a mismatch between the claims made that are not backed up with the investment strategy or the intentions of investors, or when the results being reported are misrepresenting what is actually happening. Tristan Hackett, Director at BM*

BM was designed to combat this challenge. Interestingly, impact washing is not only linked to a sinister investor, such as, for instance, creating marketing branding reports and inflating numbers. Impact washing is much more complex: it is driven by confusion in the market by actors that lack the knowledge and skills to report their impact results accurately and to manage their impact in a really robust way. Therefore, BM aims to improve the system and strategy of its clients for enhancing the education level in the market.

When dealing with the relationship between intentionality and disclosure, BM looks at the transparency of the impact claim. In concrete terms, if a firm broadly claims to be contributing to several SDGs, BM checks how investors classify their contribution to SDGs and how accurate and authentic the classification system is to help bring more credibility and accountability to the results achieved.

> *Are we reporting on and measuring things that matter? We know that's hard across a wide range of thematic focus areas and different ways of defining and measuring impact, but we must do it. Paige Nicol, Director Europe at BM*

Cautiously, BM is optimistic that some of the regulations will also help to bring more robust classification tools such as the

EU taxonomy, and the Sustainability Related Financial Disclosure Regulation (SFDR) articles, as well as other emerging regulations. A clear classification of impact is pivotal for the field to mature.

4.5 Impact washing: U.S. vs EU market

As the main markets for Impact investing, the North American and European countries present a considerable element of impact washing risk. However, some differences can be spotted.

First of all, the SFDR has certainly raised the risk concerns by investors and regulators in Europe.

> *I think people are feeling like 'I really could get caught out if we are making claims that we can't substantiate'. And it is probably a little bit further along in Europe than it is in the US. But it's definitely coming down the pike in the US as well with the SEC potential regulation. Paige Nicol, Director Europe at BM*

The other major difference is related to the ESG issue. The impact concept has been so politicized in the U.S., especially in the last few months that, it accelerates attention on impact washing, but it also maybe could perversely have a different effect as investors may be less inclined to make impact claims than they would have been before. Investors can be afraid of other kinds of backlash. Interestingly, this has not yet played out in data, but it is something to monitor in the news. According to BM, a number of investors really are impact investors and really do approach their strategy with a lot of intentionality, but they can be worried about the perception of impact washing, and therefore are more hesitant to make claims of the contributions that they are making.

> *More investors in the U.S. might even be classifying their funds or strategies as article eight rather than article nine of the SFDR as a sort of risk mitigation approach, and that might change over time: people dial down their claims than the opposite. Paige Nicol, Director Europe at BM*

4.6 The future of impact verification

The impact verification future is certainly evolving fast. One of the key challenges is how to make it happen at scale. One kind of way of thinking about impact verification would be to align it much more closely to what an auditor does, in providing assurance of the accuracy of information. And this an important role in an expanding Impact investing market, where more and more investors, even if they are not ESG or Impact investing focused, are considering sustainability factors or impact factors in their investment process. They are going to have disclosure requirements to meet, and a third party assurance is key. Not only in terms of outcomes achieved but also the process system, by considering impact through the whole investment lifecycle.

> *Verification of those practices is key to show credibility to the market, quite far from just pure assurance of numbers. And personally, I think that that's what the market needs right now, because everyone is still learning. Regarding the performance, the practice of verifying practices alone won't be enough, either. So when you ask about the future verification, I think it does need to go farther to the impact results being achieved. Paige Nicol, Director Europe at BM*

At the same time, impact verification should continue to check the accuracy of numbers reported. It is key to define what impact performance reporting verification should include, look in a detailed way at the completeness of the reporting and if companies report material information.

5. Conclusion

Impact measurement and management have become a cornerstone in both the nonprofit and for-profit sectors. With the growth of the Impact investing industry, a more accurate measurement of impact investment to decrease the concern about impact washing is needed. The third-party verification of impact reports has a fundamental role in the fight against impact washing and in holding investors and companies accountable for their impact on society. The case of BM clearly shows the pivotal position that third-party verification of impact has in the Impact ecosystem.

Moreover, it is clear that, alongside the development of environmental assurance patterns, the social impact paradigm is imposing the need for social ones as well. It would not be a surprise if, in a few years authorities, governments and financial markets will ask for comprehensive audit procedures aimed at assuring investors about impact, alongside the financial performance. No less important, shared standards of impact measuring, reporting and evaluation are needed. This would not necessarily imply the establishment of rules or standards enforced by the law but a sort of convergence towards shared practices acknowledged by the community of social and environmental spheres. Last, what is required from governments is to impose sanctions for those initiatives where, by adopting a certain and flexible degree of “social materiality”, it is discovered they have “washed themselves” in the name of impact investments.

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Chapter 5

IMPACT EVALUATION FOR PUBLIC INSTITUTION: THE CASE OF AN INVITALIA'S INCENTIVE

Marco Claudio Battarelli Martini

Abstract: Evaluating the socio-economic impacts of a government incentive is extremely important for Invitalia (Italian National Agency for Development), whose mission is to generate value for the country. In 2021, Invitalia developed its own distinctive impact evaluation framework based on "bricolage" approach, with the consultant support of Italiacamp.

This chapter presents the Invitalia journey that made possible to evaluate the combination of qualitative (social outputs and the multiple values for multiple stakeholders) and quantitative (financial, return of investment for the state treasury and the multiplier effect on the national economy) impacts generated by "Resto al Sud", an incentive *that supports the development of new business initiatives in depressed areas of southern Italy.*

The four phases of the evaluation framework, the related methodologies used in Italiacamp bricolage approach, and the results produced in each phase are illustrated, thus offering a view of the overall impacts generated and the effectiveness of the approach.

Keywords: Impact evaluation - Public finance - Entrepreneurship incentive - Depressed areas development - Evaluation framework.

1. Introduction

Invitalia is the Italian National Agency for Development, owned by the Ministry of the Economy. It favours the country's economic growth, focuses on strategic sectors for development and employment, participates in the revitalisation of crisis areas and operates mainly in southern Italy. It manages all State incentives (investments) of the national government that favour the creation of new businesses and innovative start-ups. It finances large and small projects, targeting entrepreneurs with concrete development plans, especially in innovative and high value-added sectors. It offers, also, services to the public administration to accelerate the spending of EU and national funds and for the valorisation of cultural assets.

Invitalia works to integrate the economic, social, and environmental dimensions into every project supporting businesses, individuals, and communities. Goals that can be traced back to those of sustainable development (SDGs) identified by the United Nations.[1]

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1 *Sustainable Development Goals (SDGs) Agenda 2030*. Available at: https://sdgs.un.org/.

Measuring and evaluating the socio-economic-environmental impacts of incentives managed by the Agency is becoming increasingly important for Invitalia, whose mission is to generate value for the country. There is a willingness to know the value produced by investments and to implement continuous improvement processes of incentives by monitoring the output produced “ongoing”.

In 2021, Invitalia decided to develop its own distinctive impact evaluation framework that could be applied to several incentives. The framework had to ensure modularity and scalability, but at the same time be unambiguous (applicable to different incentives) and adaptable (capable of capturing and enhancing the peculiar aspects of each incentive analysed).

Modularity allows to reuse metrics defined during the previous analyses of other incentives and to adapt them, with a reduced effort, to new ones. The model thus constructed provides an output based on the identified metrics. In this way, the effort required for analysing a new incentive can be reduced to the simple processing of the incentive data itself.

Invitalia is not new to impact analyses, but over time these evaluations have been produced by external consultants, on behalf of the ministry or in the context of EU funding, never through an internal ad-hoc and replicable evaluation approach.

In implementing our evaluation framework, we followed a step-bystep approach with a general modelling with a test model, and first prototype, on a specific incentive aimed to the development of entrepreneurship in southern Italy ("Resto al Sud"), to then proceed to the subsequent extension of the model to other measures. This allowed us to adapt the chosen methodology to the peculiarities of Invitalia organisation.

In the following paragraphs we will explore the Resto al Sud case, an ex-post social-economic impact analysis.

2. The methodological choice

Our goal was to adopt an evaluation framework that met the needs and characteristics of the Invitalia organisation in terms of resources, skills, and data available for evaluation. The breadth of the types of investment managed by Invitalia did not make it possible to identify a single methodology, capable of highlighting the peculiarities of each different incentive. Many incentives, however, have common characteristics that allowed to identify a unified approach. Once we defined the objectives and the expected results, it was possible to outline the requirements for a flexible and adaptable framework.

We identified the 'bricolage' approach, proposed by Nichols (Nichols, 2009), as the one best suited to our needs. This approach involves the use of the most suitable methodologies for the needs and characteristics of each incentive and with most likely to return useful, solid, and communicable information and data. In conducting the analysis, this approach allows for adaptation to what emerges from time to time during discussions with management and internal, external, and governmental stakeholders. The analysis focuses more on the social impact and qualitative aspects of incentive measurement, although the bricolage aspect still enables the quantification and, where possible, monetisation of results according to the logic of the social return on investment (SROI) methodology.

Moreover, this approach has the advantage of being able to carry out an impact assessment even when data sets are less available, which would be critical with other methodology (i.e., counterfactual analysis). This is a crucial aspect for Invitalia.

To implement the framework, we used the experience, advice, and support of Italiacamp, an external consultant, who led us to the realisation of the Resto al Sud impact analysis. Italiacamp adapted its impact assessment framework based on bricolage approach to Invitalia ecosystem and identified the methodologies compliant with the main international standards that best fit. This resulted in a four-stage evaluation process, each step associated with relevant methodological references (Table 1).

Table 1. The four steps of Resto al Sud evaluation process

	Step	Output	Methodological reference
I	Preliminary Analysis: Internal analysis and benchmark	Stakeholder map; Business model	GRI Standards[2]
II	Theory of change construction	Identification of impact areas and outcome	Logical Framework, Theory of Change[3]
III	Stakeholder engagement	Qualitative effects assessment	Participatory methods to measure changes

	Step	Output	Methodological reference
IV	Identification of socio-economic impact indicators	Social and economic impact evaluation	SROI,[4] SDGs,[5] Leontief input-output model

2 *Global Reporting International Standards*: https://www.globalreporting.org/.

3 A description of logic model and Theory of Change can be found in A. Nicholls, (2021), *Impact Measurement and Management in Sustainable Finance*. Asian Development Bank. 6–10.

4 SROI (Social Return On Investment): https://www.socialvalueint.org/guide-to-sroi.

5 *Sustainable Development Goals (SDGs) Agenda 2030*: https://sdgs.un.org.

Source: Resto al Sud – Valutazione di impatto, Italiacamp-Invitalia 2022.

3. Applying the framework on Resto al Sud impact analysis

Created in 2018, Resto al Sud[6] is a governmental incentive that supports the birth and development of new business initiatives started by entrepreneurs and freelancers. The goal is to be a development lever for areas of the country that are characterised by a significant unemployment rate, youth unemployment, high demographic decline combined with a high emigration rate, low development of innovative economic sectors and a strong presence of organised crime in the socio-economic context. In these southern Italian regions, there is also greater difficulty in accessing credit and its cost is higher than in northern regions.

6 The incentive name can be translated as “staying at south”, signifying the will to keep people in their native territories.

Resto al Sud mainly targets people aged between 18 and 55 who intend to start a new business activity or started it after June 2017. The geographical area of interest includes the eight regions of southern Italy (Abruzzo, Basilicata, Campania, Calabria, Molise, Puglia, Sardegna, and Sicilia), the earthquake crater areas of Central Italy (Lazio, Marche, and Umbria) and the smaller islands, sea lagoons and lakes of Central and Northern Italy. The total financial endowment envisaged for Resto al Sud is 1.250 billion €. Our impact analysis covers the period from the inception of the incentive to 31 December 2021, for a total of 7,589 companies financed.

The incentive provides “non-repayable” financing up to 50,000 € for each applicant, which can go up to 200,000 € in the case of companies composed of four partners. In addition, Invitalia pays the interest on the bank loans. Further financial contributions are envisaged but are not relevant in this context.

Step I: Preliminary analysis, internal analysis and benchmark

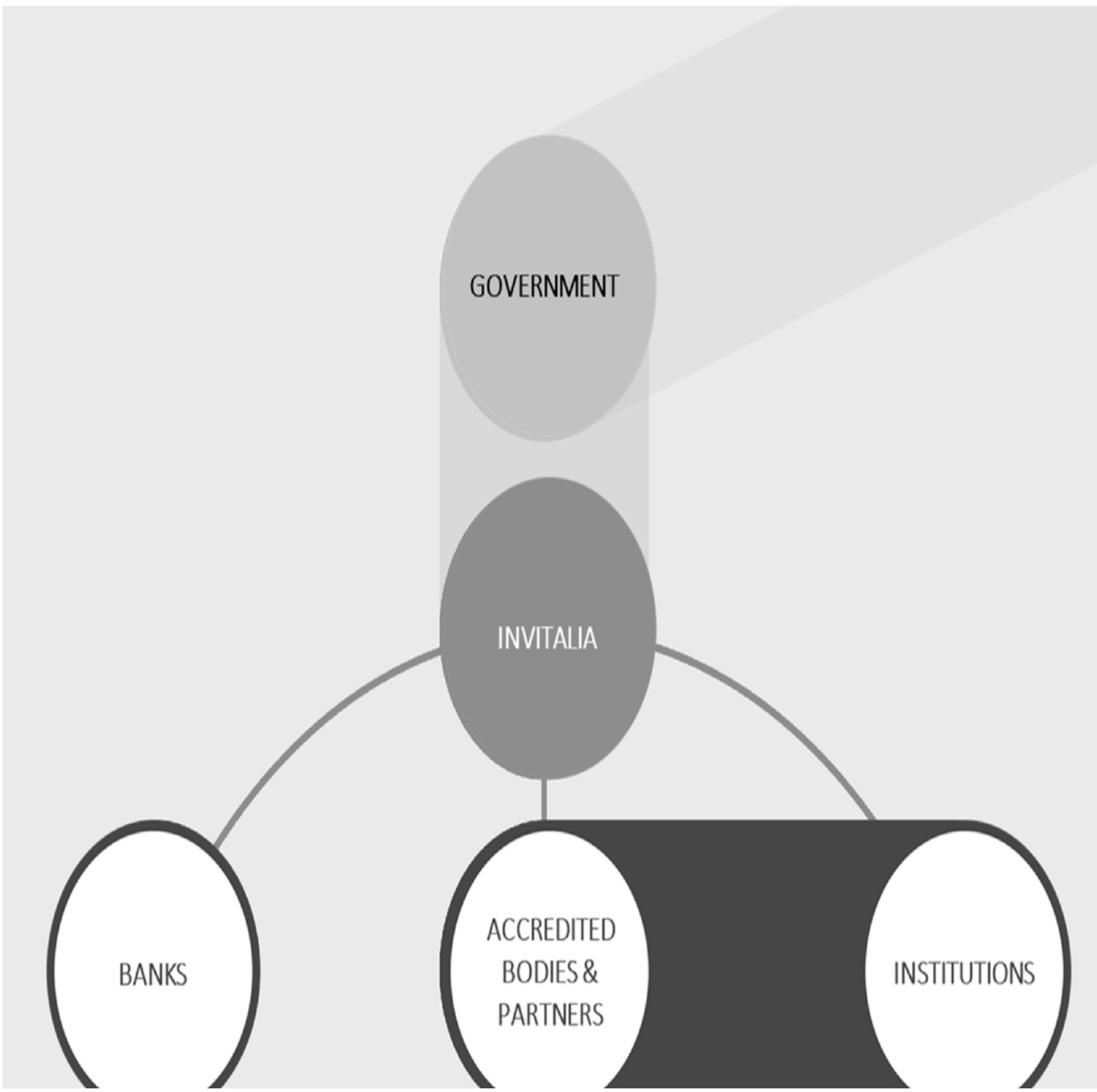
Internal analysis

The internal analysis consisted of studying the characteristics of the incentive (Resto al Sud), the legislation that regulates it, the operating model and identifying of the actors directly or indirectly involved.

Interviews were also conducted with the Invitalia management to better focus on the objectives and on process and methods of evaluating requests for funding.

This analysis process, consisting of desk research and interviews, produced as outputs the definition of the operating model and the mapping of stakeholders.

By drawing the stakeholder map (Figure 1), we have identified the macro-categories directly or indirectly affected by the effects of the measure:



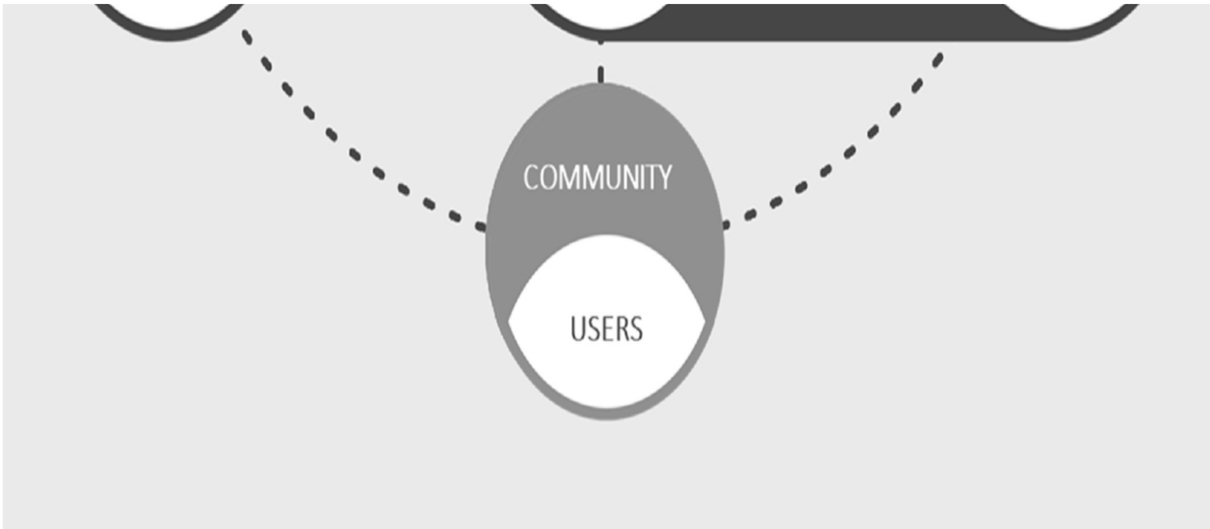


Figure 1. Resto al Sud stakeholder map

Source: Italiacamp (2022). Resto al Sud – Valutazione di impatto, promoted by Invitalia.

- **Users**, applicants for funding, whether granted or not.
- **Accredited Bodies and Partners**, such as accelerators, incubators, consultant that support locally the users (new entrepreneurs) in building their business model and request for funding.
- **Banks**, financial institutions that have concluded an agreement with the Invitalia for Resto al Sud.
- **Invitalia**, both organisation and professionals.
- **Institutions**, local authorities, trade associations, Universities, entrepreneurs' associations.
- **Community**, people in the area and socio-economic context.
- **Government**.

Benchmark

We conducted the external analysis (benchmark) with the aim of identifying impact assessment practices, where they exist, and effects for similar measures and incentives in Europe. It was carried out:

- the search for evaluations of similar measures in other European coun-tries identifying about 50 apparently comparable incentives;
- the search for evaluations of impact or socio-economic effects generated by similar incentives, which made it possible to identify about 60 effects, and related indicators, used for measurement purposes.

In our impact analysis, we included most of the KPIs (key performance indicators) identified in the benchmark, considering them applicable to our case as well.

Our impact analysis examined both the positive value generated for the direct beneficiaries and for the other categories of stakeholders involved, as we will see in the following paragraphs.

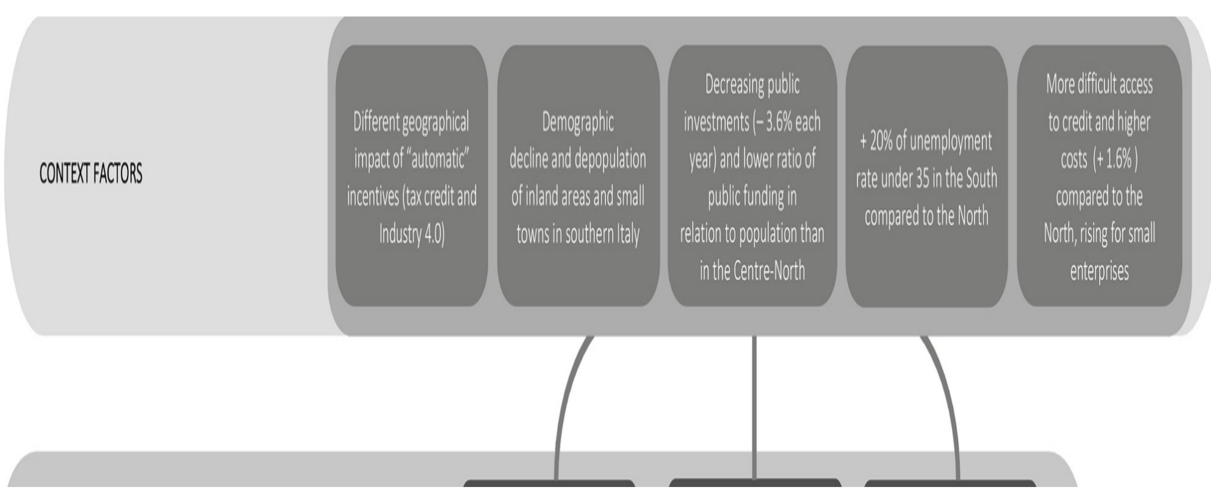
Step II: Theory of change construction

We used the logical model and the Theory of Change to conceptualise the process of impact creation (Nicholls, 2021).

The logical framework made it possible to clarify the purposes and effects of the incentive, and to understand the linear and causal link among inputs, processes, outputs, and outcomes at the end of the process.

With the Theory of Change (ToC) we descripted and illustrated the complexity of reality and reconstructed the value creation model of Resto al Sud, tracing the link between an action and the expected change in the long run.

From the internal analysis we took up the socio-economic context factors that led to the birth and development of the measure, and the actions (the way the process works). Starting from this evidence we defined the Theory of Change (Figure 2) that identifies:



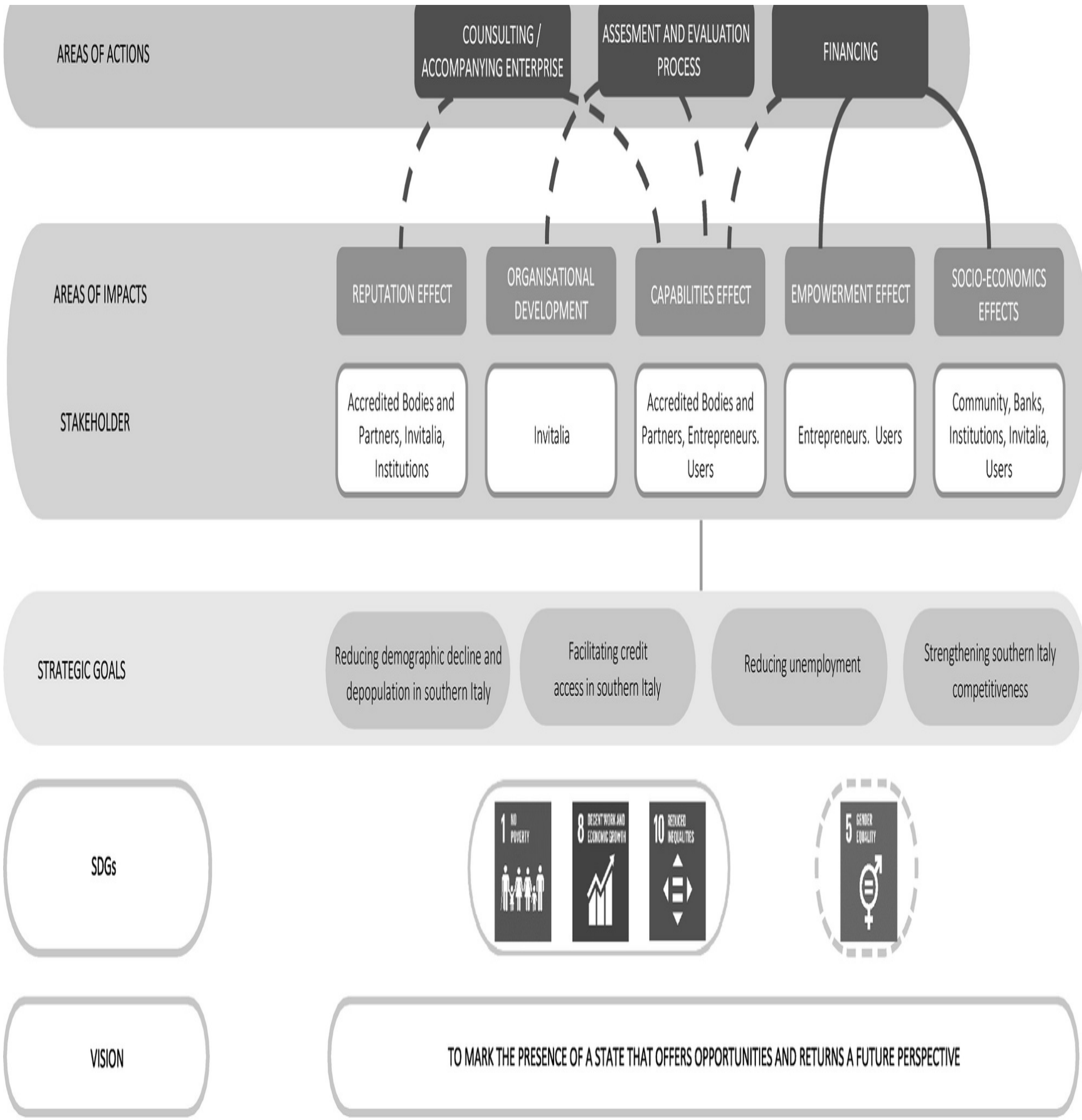


Figure 2. Resto al Sud Theory of Change

Source: Italiacamp (2022). Resto al Sud – Valutazione di impatto, promoted by Invitalia.

- the context factors in which the incentive fits in;
- the areas of action in which the incentive operates;

- the areas of impact, associated with the stakeholders;
- the strategic goals;
- the link with the SDGs (Sustainable Development Goals).

In Figure 2, the logical steps linking activities to areas of impact can be distinguished into direct effects (solid line) and indirect effects (dashed line). The representation gives a sense of how several actions can contribute to generate each change. As an example, the dashed line that connect consulting activities (a support to users to build their business case) shows an indirect effect both on *capabilities effect* for Accredited Bodies and Users and on the *reputation effect* for the stakeholders that deliver consultancy.

From the contextual effects and actions, we identified the contexts in which they generate value: the impact areas. Each impact area is associated with relevant stakeholders, those on whom the impact occurs. Different outcomes are related to impact areas (Table 2).

Table 2. Impact Areas - Outcomes - Stakeholders

Impact Area	Outcomes	Stakeholder

Impact Area	Outcomes	Stakeholder
REPUTATION EFFECT The set of reputational and visibility benefits generated for Invitalia, Institutions and Accredited entities through their relationship	• Reputation building and reinforcement	Accredited Bodies and Partners, Invitalia, Institutions

Impact Area	Outcomes	Stakeholder
ORGANISATIONAL DEVELOPMENT Benefits that impact, directly or indirectly, at an organisational level for the accredited bodies and the Agency that actively collaborate in the management of the Resto al Sud measure	• Process and roles improvement	Invitalia, Accredited Bodies and Partners
CAPABILITIES EFFECT Capabilities are the set of resources that a person has at	• Professional skills development • Additionality	Accredited Bodies and Partners, Users

Impact Area	Outcomes	Stakeholder
that a person has at his or her disposal in conjunction with his or her possibilities to make use of them. It includes not only the abilities and skills that are exclusive to the individual, but also the opportunities and means that society gives or denies to the individual. Socio-economic policy interventions should foster the creation of the necessary conditions for the utilisation of	(capacity of an action to generate effects that would not have occurred otherwise)	

individual capacities

Impact Area	Outcomes	Stakeholder
EMPOWERMENT EFFECT Effects related to the personal and professional growth and empowerment of individuals that are realised through the full inclusion of beneficiaries, both at work, financial and social levels	• Social inclusion • Work inclusion	Users
SOCIO-ECONOMIC EFFECTS Economic and social benefits for the various	• Personnel income change • New entrepreneurship	Community, Banks, Institutions, Invitalia, Users

Impact Area	Outcomes	Stakeholder
stakeholders involved	activities • Reduction of Public expenditure (minor unemployment benefit, etc.) • Stimulating sector trends • Increase in tax revenues • Economic impact on the whole national economy • new bank account holders • Interest revenue for banks • Brain gain	

Source: Italiacamp (2022). Resto al Sud – Valutazione di impatto, promoted by Invitalia.

The impact areas highlight the generated value changes, the sum of which produces the long-term transformations necessary to achieve the Resto al Sud impact vision, or purpose, which is the real additional value to be generated over time. This vision is outlined in “**TO MARK THE PRESENCE OF A STATE THAT OFFERS OPPORTUNITIES AND RETURNS A FUTURE PERSPECTIVE**”.

The long-term strategic goals that Resto al Sud intends to achieve were defined when the incentive was created, they can be summarized in:

- reducing demographic decline and depopulation in southern Italy,
- facilitating credit access in the area,
- reducing unemployment,
- strengthening the competitiveness of southern Italy.

In addition, Invitalia pays great attention to the contribution it makes to the achievement of the SDGs, which is why within the ToC we wanted to highlight which goals are related to the action of Resto al Sud. We identified 4 SDGs:

- ➢ SDG #1: No poverty;
- ➢ SDG #8: Decent work and economic growth;
- ➢ SDG #10: Reduce inequalities;
- ➢ SDG #5: Gender equality.

SDGs #1, #8 and #10 are part of the strategic goals of Resto al Sud, while gender equality (SDG #5) is a further goal on which the incentive has an effect.

Step III: Stakeholder engagement

The impact analysis included a structured process of involving subjects and organisations representing each category of stakeholders: we administered questionnaires and conducted interviews in order to identify the socio-economic effects generated by the incentive in relation to the areas of impact.

The questionnaires consisted of multiple-choice, Likert scale and openended questions. To obtain more accurate answers, within the stakeholder categories we have identified nine different actors (Table 3), each of whom received a dedicated questionnaire. We submitted over 7,000 questionnaires and received 2,000 responses, with a statistically significant average response rate of 28%.

Table 3. Stakeholders sub-categories

Stakeholder	Stakeholder Sub-category
Users	Applicants that obtained funding
Users	Applicants whose applications were rejected
Invitalia	Business Analysts, Invitalia employees who conduct the evaluation process of Resto al Sud applications submitted by users
Accredited Bodies and Partners	Partners that support locally the users in building their business model and request for funding
Accredited Bodies and Partners	A selection of Accredited Partners that are characterised by a strong, collaborative, and continuous relationship with Invitalia

Stakeholder	Stakeholder Sub-category
Community	Citizens, those citizens who had contact with Invitalia Contact Centre to request information about Resto al Sud but did not apply
Community	Citizens who contacted the accredited bodies for information on Resto al Sud
Banks	Banks, the financial institutions that signed the agreement with Invitalia. The top eleven banks were involved in terms of the number of loans approved and the amount disbursed
Institutions	A selection of Local Authorities, Trade Associations, Universities, entrepreneurs’ associations cooperating with the Agency for the promotion of Resto al Sud incentive

Source: Italiacamp (2022). Resto al Sud – Valutazione di impatto, promoted by Invitalia.

The questionnaires included various types of questions aimed at investigating: the demographic-social-professional and economic aspects of the users, before and after the request for the incentive; the feeling of the accredited partners, banks and local institutions regarding how the incentive is perceived in their organisations and in the area where they operate and how it has impacted on their operations; the sentiment of the citizens that have come into contact with Resto al Sud and the value they ascribe to it.

Through the statistical analysis of multiple responses and the study of open-ended answers, we were able to detect the social effects generated for the various actors and to identify the common factors that seem to characterise the incentive impacts.

Brain gain effects

Analysing the responses of the entrepreneurs who received funding (beneficiaries) confirms that the incentive contributes to countering demographic decline and depopulation, thus fulfilling one of its objectives. Resto al Sud retains talent and fosters the return of human capital (brain gain) by reducing the knowledge and skills gap in different territories (in line with SDG #10, Reducing inequalities). We have that:

- 15% of the beneficiaries returned to their region of origin after a period abroad or in another Italian region;
- 83% remained in their home territory in order to invest in their busi-ness activity;
- 58% of beneficiaries, in the absence of Resto al Sud, would have started the business initiative elsewhere.

Capabilities

The action model envisaged by the incentive, where Invitalia business analysts and Accredited Partners and Bodies carry out consultancy in support of the applicant, favours the entrepreneur in the development of the business project and enables the applicant to develop new skills and competences through collaboration with the experts. Skills and competences that are technical, organisational, entrepreneurial, and managerial.

What is most striking is that we have received positive feedback on this topic not only from users who have been granted funding, but also from those whose applications were rejected.

Moreover, among the stakeholders, even Accredited Partners and Organisations claim to have developed skills thanks to the action model and the Resto al Sud ecosystem, which includes talking with Invitalia professionals and participation in the various training and discussion events organised by the Agency.

- 63% of new entrepreneurs acquired new technical and organisational skills and business knowledge.
- 40% of rejected applicants recognise to have gained knowledge and technical skills then useful for subsequent professional development because of confrontation with experts.
- 50% of the entrepreneurs also claim to have strengthened their connec-tion with the local business ecosystem.
- 43% of Accredited Partners and Bodies developed managerial and technical skills.
- 31% of Accredited Partners and Bodies developed interpersonal skills.

Social and financial inclusion

The evaluation process of the incentive applications is based on the quality of the projects and does not require any capital requirements from the applicants. This granted the access to Resto al Sud funding to citizens who are generally considered as “non-bankable” according to common logic of banks criteria. The banks themselves confirm this. This offers the evidence that Resto al Sud contributes to the affirmation of citizenship rights and freedom of economic initiative, guaranteeing the strengthening of one’s economic and social condition, the possibility of a dignified life, the opportunity for development, fulfilment, and self-determination (SDG #10 and #1). Professional fulfilment and the improvement of economic conditions also generate a better perception of oneself and one’s role with respect to the socio-economic community of reference.

- 55% of entrepreneurs became financially autonomous as a result of the business activity they started and experienced an improvement in their income situation.
- 25% of entrepreneurs have opened their own current account for the first time in their life thanks to their economic condition’s improvement.
- 70% of new entrepreneurs were unemployed before getting the incen-tive, with 8% of them that received unemployment benefits.
- 68% of the start-upper experienced an improvement in their income situation.
- 80% of entrepreneurs manifest the feeling of fulfilment and satisfaction with the entrepreneurial path undertaken.

- For 70% of the cases emerge the perception of being part of the local economic community.

The value for the community

The model of action of the incentive and its widespread dissemination throughout the territory, through the collaboration of Invitalia with Institutions and Accredited Bodies and Partners, are distinctive factors of Resto al Sud that have strongly affected the perception and engagement of citizens. We measured the value of Resto al Sud for the community through the perceptions of different stakeholders operating in the area, and by asking citizens who contacted Invitalia Contact Centre or a selected number of Accredited Bodies. These citizens asked information about the incentive, then had the opportunity to evaluate the pros and cons of using it for starting a business venture. From the open questions to citizens, it clearly emerges that Resto al Sud improves the sense of trust and the perception of a present State to respond to the needs of the territory.

The increasing engagement of citizens in their area is highlighted by:

- 70% of Accredited Partners and Bodies;

- 80% of Institutional partners;
- 88% of Banks.

Resto al Sud is seen as a concrete manifestation of the State supporting the socio-economic development in critical areas by 85% of citizens.

Other stakeholders evaluate Resto al Sud as concrete opportunity for:

- socio-economic development of the area (93%);
- keeping young people in their local area (89%);
- talented people (84%).

Further feedback from users (approved and not approved applicants) confirmed the value of Resto al Sud in enabling them to start, or continue, their entrepreneurial activity:

- 97% of new entrepreneurs believe that without a Resto al Sud they would not have been able to start a business with the same time and financial availability;
- 58% of entrepreneurs who used the incentive to consolidate their busi-ness activities considered the measure essential for the technological strengthening, market positioning and consequent relaunch of companies that were in economic difficulty;

- 95% of non-beneficiary applicants recognise the additional value of the measure, even though 72% failed to start a business.

The sense of trust stimulated in the stakeholders and the strengthening of the attractiveness have positive reputational repercussions on Invitalia itself.

Step IV: Identification of socio-economic impact indicators

The analysis of stakeholder effects is also accompanied by an evaluation of the impacts of Resto al Sud on local ecosystems. We measured the impact on innovative but underdeveloped market sectors in the depressed areas of southern Italy and the supply chain mechanisms that were stimulated by the new entrepreneurial activities. We also calculated the incentive's multiplier effect for the whole Italian ecosystem and its ability to create value for the government by balancing the investment allocated to Resto al Sud. The final outputs return the quantitative and economic value generated by Resto al Sud.

The economic benefits are evaluated by reprocessing Invitalia internal data and public data sources.[7]

[7] Main data sources are Istat, Infocamere, INPS, Ministry of Economy.

Territorial and sectoral impacts

The analysis of the 7,589 enterprises financed over four years shows that 7,366 of them are still in business, with an average survival rate around 97%. It is fifteen percentage points higher than the national average. The number of jobs created is 28,166, mainly women and young people.

The contribution of Resto al Sud to the development of territorial economies was assessed by calculating the ratio between the enterprises financed by Resto al Sud and the variation in entrepreneurial activity in the target regions and in each sector, recorded between 2018 and 2021. We verified a significant impact on the growth of multiple market sectors (manufacturing and craft activities, ICT, construction, SME services, tourism and cultural activities, personal services) albeit with territorial differences. For some sectors that were facing a crisis phase, the incentive helped to counteract the contraction in the number of enterprises. This is the case for manufacturing and handicraft activities in Abruzzo, Puglia, and Sardegna, which have stopped the negative trend thanks to the financed activities.

Moreover, this analysis of the distribution by sectors and regions shows the significant contribution of Resto al Sud to innovative market sectors that had low growth levels in some regions. One of the main examples is the ICT sector in Calabria, Campania, and Sicilia, where the incentive led to up to 73% more new business in this market area.

Gender equality

Although not part of one of the strategic goals of Resto al Sud, the incentive contributes to the achievement of SDG #5, gender equality. Indeed, the female entrepreneurship rate was considered and compared, at national and regional level, with the rate recorded during the same period and was significantly higher, about 17 percentage points. Forty per cent of the Resto al Sud entrepreneurs are women, compared to 22.1% of women-owned businesses nationally and 23.7% in the regions favoured by the incentive.

Impact on the banking system

There were also positive effects for the banking sector, which benefited from the bankability of new entrepreneurs and the possibility of granting them additional credit over and above the amount of the incentive, with the associated increase in returns. There was an increase in the number of new current accounts of 7,366 and loans for 313.8 million € which generated 45.9 million € in interest income for the banks. Interest charged to Invitalia, as provided by the operation of Resto al Sud. The latter value, therefore, represents the economic benefit that Resto al Sud generated for the banking system.

Multiplier effect of public investment

The hybrid characteristic of Resto al Sud financing, part public grant and part bank financing, made it possible to channel private capital to applicants as well. A synthetic ‘index’ of the multiplier effect of public investment is derived from the ratio of private capital activated to the value of public subsidies granted.

We record that against 390.5 million € of Invitalia non-repayable funding, there was 313.8 million € of bank funding, meaning that for every public euro granted, 0.80 € of private capital was activated.

Sectoral Multiplier effect of public and private investments

Through the sectoral multipliers reworked from Leontief's input-output tables, it was possible to measure the multiplier capacity of investments in the different sectors. Considering the sectoral interdependencies, we calculated the value of the impact for the financed activities on the entire national ecosystem.

The total investment amount activated in the various sectors (by Invitalia and by the banking system) over four years was 525.6 million €, which, considering the sectoral multipliers, produces an overall economic impact of 993 million €.

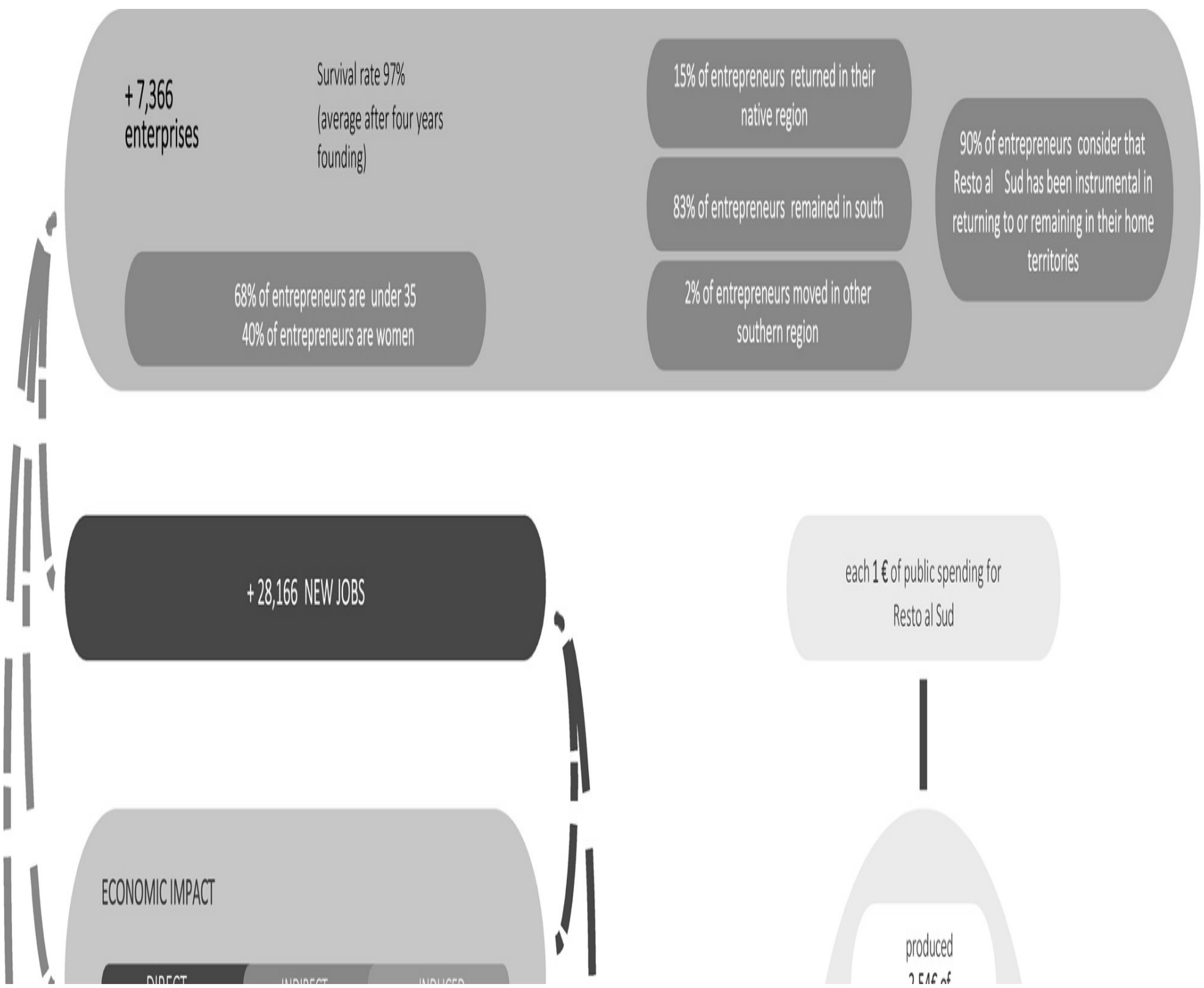
Comparing these two values yields a synthetic index of 1.89 €. That is, through the sectoral supply chains, 1.89 € is generated for the economic system for every euro of financing provided. If we consider only the amount of public funding (390.5 million €), the value generated by public spending is 2.54 €.

Public spending payback

A particularly interesting quantitative measurement is given by the balance between public expenditure, to finance Resto al Sud, and the returns to the public treasury in the form of higher tax revenues for new enterprises and labour income, and lower subsidies paid. Conservatively, we calculated:

- tax revenue from new business activities 160.8 million €;
- tax revenue from employee income for new jobs created 238 million €;
- lower subsidies to support jobless citizens 8.9 million €.

The total public spending payback is 407.7, million €, compared with 390.5 million € in funding granted by Invitalia. The synthetic payback index is equal to 1.04 €, every euro invested has returned to the state treasury with a slightly increased value (Figure 3).



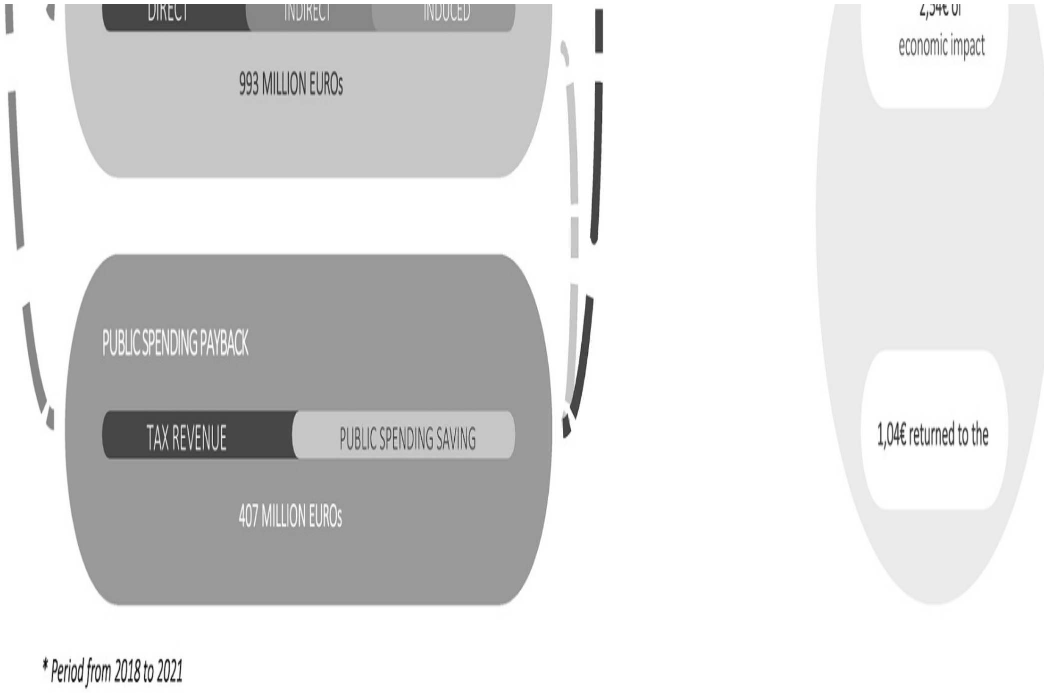


Figure 3. Quantitative impact evaluation highlights

Source: Italiacamp (2022). Resto al Sud – Valutazione di impatto, promoted by Invitalia.

4. Project management e governance

The objectives and characteristics of the project which saw the implementation of an impact analysis framework for Invitalia (applicability of the model over several incentives), and the flexibility of the 'bricolage' methodological approach used in the Resto al Sud analysis also require flexibility and adaptability in the project management of the evaluation process and its governance.

Indeed, it was necessary to guarantee during the project's life cycle the optimal management of requirements and scope changes in the face of the uncertainty of the available resources, the contingencies of Invitalia organisation, the evolving scenarios, and strategic desiderata, as well as the results of the analysis that were gradually emerging that required to focus on additional aspects of the analysis. This flexibility and adaptability of project management was applied at two levels:

- within the work team and the organisation;
- in the collaboration with the consulting company (Italiacamp), where it was possible to overcome the traditional client-supplier logic and contractual rigidities, to focus on the objective, establishing a real partnership.

Thus, there were no formal-institutional moments (e.g., steering committee), no layering of contacts and relationships, but full decision-making autonomy was given to the mixed project team, ensuring an iterative and adaptive execution of the project, in which strong collaboration among all team members prevailed.

De facto, an Agile approach to project management was applied[8] where values, behaviours and practices prevailed

(Gogate et al., 2017; Gregory and Taylor, 2019), with the project team that: shared a clear, compelling, and inspiring objective focusing on results that matter to all stakeholders; manifested trust and transparency - loyalty, integrity and commitment to transparency, openness and honesty in relationships and day-to-day work; was flexible in adapting easily to change and always striving for continuous improvement.

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8 For an in-depth look at Agile methodology applied in the business environment see Agile Business Consortium https://www.agilebusiness.org/.

This type of Agile approach to project governance and the empowerment of the project team, as opposed to the greater rigidity of formalinstitutional steps, had been identified as optimal in the initial phase of supplier selection given the characteristics of the 'bricolage' model where the choice of the most appropriate techniques and methods is adapted to the characteristics of the object to be analysed. We wanted to apply it without emphasising the 'Agile' label, without flaunting that the Agile approach was being adopted, based on the principle that 'being Agile' is a mindset and is different from saying one is 'doing Agile'.

5. Lesson learned and conclusions

The bricolage methodological approach allowed us to use the most appropriate methodologies to Invitalia and incentive characteristics, allowing us to significantly highlight both qualitative and quantitative impacts. Together, these provide a snapshot of the tangible and intangible value generated by the Resto al Sud incentive. These impacts are social and economic, intentional, measurable, and additional.

The framework flexibility granted us to quickly adapt to what was emerging during the evaluation process, to delve into specific aspects and identify the need to apply additional tools and indicators. Flexibility in project management helped to optimise this process. Transparency, collaboration and trustworthy in team members were ones of the successful keys.

The results of the analysis showed that detected changes are a direct effect of the Resto al Sud incentive, and that Resto al Sud is not only a tool to support entrepreneurship but has multiple facets: multiple direct and indirect, intentional, and induced objectives, just as the dimensions on which the incentive goes to act are diverse. The ability of Resto al Sud to promote gender equality or to create skills even in those who have had their applications rejected are two examples of unexpected impacts that confirm its versatility.

The incentive's initial vision of "**marking the presence of a state that offers opportunities and restores a perspective of the future**" seems to be realised:

- for the citizen it takes the form of the right to a dignified, professionally satisfying and economically sustainable life, lived in the territories of origin;
- for territorial economies, it leads to the strengthening of the entrepre-neurial ecosystem, through the birth of thousands of new and solid activities (witnessed by the high survival rate) and the development of skills and business culture;
- it represents a support for declining sectors (such as craftsmanship and manufacturing) and a driving force for the development of innovative market areas in the southern regions (ICT).

In addition to the positive impact for the entire national economic system, pertaining to the new business activities and the related supply chain mechanisms, the quantitative evaluation made it possible to highlight how the changes were essentially achieved at zero cost for the government, where every euro invested went back into the public treasury in the form of lower unemployment subsidies paid out and higher revenues from taxes and contributions.

The Resto al Sud impact analysis also made it possible to identify several guidelines to improve the operation of the incentive. First, strengthening the relationship with partners, especially the most active ones, by providing them with additional services to support their activities. The role of partners was found to be fundamental at the local level in providing value and supporting the development of new enterprises in the incentive application phase, as it was highlighted by the answers of users (beneficiaries and nonbeneficiaries) regarding the skills acquired. Second, implementing some technical improvements in the size of funding, for certain types of expenditure. Then, ensuring the convergence of Resto al Sud with the development trajectories of the National Recovery and Resilience Plan (NRRP).

The bricolage framework adaptability to Invitalia needs and incentives characteristics has been further tested in the economic-social impact analysis for a further incentive, “Cultura Crea”,[9] dedicated to promoting cultural and tourist enterprises in Southern Italy. On the one hand, value was given to the work carried out in the preliminary analysis of Resto al Sud, taking up the factors and KPI they have in common; on the other hand, a specific element of analysis was added, the “audience development”. Audience development is the ability to contribute to the development of existing cultural demand and to generate new forms of demand for cultural heritage. The measure of the impact of companies operating in the cultural tourism sector lies, in fact, in their ability to reach individuals, communities and to impact them.

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9 It can be translated as “Create Culture”.

This capability of the impact analysis framework to catch different dimensions confirms the opportunity offered by the bricolage approach and its value for organisations, such as Invitalia, that have to create real value for the country, measurable qualitatively, as the impact on people’s lives and on the social dynamics of communities and territories, and quantitatively also in terms of economic return on public investment and sustainability for public spending.

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Chapter 6

IMPACT EVALUATION FOR AN IMPACT PROJECT: #RICUCIAMO

Ludovica Testa, Irene Litardi and Vincenzo Lo Cascio

Abstract: This chapter describes the impact evaluation process of #Ricuciamo, a project aimed at responding promptly to the emergency crisis of Covid-19 and that initiated the production of personal protective equipment (PPE) inside the prison, with the contribution of the prisoners. Through an effective public private partnership, involving the DAP (Department of Penitentiary Administration), the Extraordinary Commissioner for Emergency Covid-19 and other private partners, this impact project was carried out in March 2020; in addition to responding to the emergency, it has generated economic value for the country and full social and labor inclusion of prisoners. The chapter also offers an assessment of the social and economic impact identifying additional perspectives and benefits that could come from the project scalability or the development of other similar projects within the Prison Economy.

Keywords: Impact investing – Social enterprise – Prison economy.

1. Introduction

In Italy, in the first quarter of 2022, there were 54,609 inmates in 190[1] penitentiary institutions – an increase of approximately 2,000 individuals compared to 2020. Of these, 38% were serving their first incarceration and 62% had already been in prison at least once – of the latter, 18% had been in prison at least five times (Antigone, 2022). These data imply several critical issues of overcrowding in Italian prisons. As shown by previous studies (Schnepel, 2018; Sedgley et al., 2008), these issues indicate a close interconnection between recidivism and the engagement of a prisoner in vocational training and work, both directly by the prison administration and, in particular, by a third party (e.g. cooperatives). In fact, "recidivism in inmates who do not participate in reintegration programmes is close to 90%, whereas among inmates reintegrated in a social-work context, it drops to 10%", as indicated by Giuseppe Guerini, president of Alleanza Cooperative Sociali, during a 2015 event titled, “To re-educate a prisoner it takes a village”. Work, as a resocialising and empowering activity, can, therefore, affect recidivism in a positive manner (Antigone, 2017). The commitment of public expenditure can be flanked by private initiatives that, in projects and partnerships appropriately defined and modelled, can simultaneously accelerate the processes of social and work reintegration and ensure savings in public spending as well as be a fiscal asset for companies. Many organizations are already operating in this sense: third sector organizations that start work placement paths outside prison or locate production processes in prison. The number of these experiences, however, is still low and can only consider 2,130 prisoners out of 17,957 workers, that is, 12% of the latter – and if we consider the total number of prisoners, this value drops to below 4%. Therefore, in 2019, Italiacamp started thinking about a project on prison economies with the Department of Penitentiary Administration of the Ministry of Justice with the aim of creating an ecosystem between already existing realities and, above all, experimenting with virtuous public–private partnership models that are potentially scalable and replicable. Although the expenditure of the prison administration has had an increase of 23% from 2.6 billion € in 2017 (Antigone, 2017) to 3.2 billion in 2022, the item of expenditure related to ‘Reception, penitentiary treatment, and reintegration’, which includes the actual costs of prisoner maintenance, including training and work, is just 9.8% of the total expenditure in 2022, with an increase of just 1% compared to 2017. More money contributed to this item would imply more opportunities to prisoners, resulting in a reduction in recidivism and a saving of 210 million € for the state (Guerini, G., during a 2015 event titled, “To re-educate a prisoner it takes a village”). Recidivism, therefore, presents itself as a fair parameter to measure the success of re-educative policies (Leonardi, 2007).

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[1] Please refer to the Ministry of Justice website https://www.giustizia.it/giustizia/it/mg_2_3_2.page, for the full list.

Therefore, this chapter aims to highlight some typical characteristics of impact management processes applied to prison economics, in particular, to the #Ricuciamo project (paragraph 2), which aims at the social and labour inclusion of prisoners and is promoted by a network of partners from the for-profit and institutional sectors. The analysis describes the planning process and the subsequent impact assessment that represent the essential steps for the management of the project as they highlight the benefits generated for the stakeholders involved and the effectiveness of the project in terms of its economic nature (paragraph 3).

2. #Ricuciamo: vision, objectives, and features of the project

The #Ricuciamo project was launched in March 2020, just a few weeks after the start of the global Covid-19 pandemic that has significantly affected global systems but also, as often happens during major crises, activated virtuous resilience processes.

#Ricuciamo is one of the projects promoted within the *Prison Economy* I-Team developed by Italiacamp. The I-Team is a model of project partnership with positive social impact on selected challenges for the country, open to the participation of individuals or organisations wishing to bring into play skills and resources on qualified projects of value for society.

The purpose of the *Prison Economy* I-Team is the creation of a network of initiatives and coordinated projects to promote work and social inclusion through the interaction of the prison system with external companies or organisations, ready to welcome inmates as employees or to develop ad hoc insertion programmes.

The advent of the pandemic in the midst of the planning phase led to a first concrete declination of the worksite in an action that could simultaneously represent a response to the emergency, through the production of individual devices, and maintain the connotation of a path of labour inclusion.

Network

Before the start of the pandemic, Italiacamp and the Department of Prison Administration of the Ministry of Justice (DAP) were actively working on the theme of the Prison Economy. The aim of the collaboration was to create the first network of initiatives and projects of an “industrial” nature that would evolve the already established cooperative logic for labour and social inclusion, with the interaction between the prison system, companies, and organisations interested in accepting prisoners as employees or in developing ad-hoc integration programmes.

The outbreak of the pandemic, combined with the lack of surgical masks (PPE), for prisoners and prison employees, was an opportunity to take up the challenge of implementing advanced work inclusion activities in the prison system.

The proposed initiative was welcomed by the Ministry of Justice, which has taken steps to develop it through an effective public-private partnership.

In this sense, the first partner involved was the structure of the Italian Extraordinary Commissioner for the Covid-19 emergency which, convinced of the significance of the project, handled everything necessary to start the activities – from the purchase and installation of machinery to the supply of raw materials and connection with the Civil Protection network.

The other project partners who contributed to the implementation are:

Establishment and development of production plants

Three penitentiary institutes in the country were involved in the production of masks:

- Bollate Prison (Milan);
- Rebibbia Prison Complex (Rome);
- Salerno Prison (Salerno).

Industrial production plants had been set up at these sites where inmates could work after a preliminary training course. The management and coordination of production had been entrusted to qualified external personnel.

At all sites, first and foremost, the production areas were upgraded to make them suitable for the presence of machinery, inmates, and external personnel. Each production plant had been equipped with everything necessary to meet production requirements and certification standards. Based on requirements, ventilation systems, warehouses, sanitation systems, and changing rooms for personnel were set up. The inmates were also involved in this preliminary phase of site preparation.

At the same time as setting up the sites, machines were purchased and imported from China for the production of Personal Protective Equipment (PPE – respiratory protection devices), to be placed in the three production sites. Specifically, **the eight machines purchased** were distributed as follows: four to Bollate and two each to Rebibbia and Salerno.

The people

Consistent with the size of the three plants, personnel from outside the prison facilities were selected to coordinate production activities.

On the basis of the initial design, Manpower identified **10 people to** take on the roles of production manager (three people) and shift manager (seven people) distributed across the different institutes as follows:

- Bollate: five people;
- Rebibbia: three people;
- Salerno: two people.

The selection of the 62 inmates involved was conducted by the pedagogical managers of the institutes and the criteria were different in all three cases according to different contexts, specific pedagogical aims and legal conditions of inmates. Before starting work, the inmates were trained through a short preparatory course necessary to illustrate to them the main tasks to be performed.

The results

The individual protection devices produced include surgical masks (Type I) with a filtering capacity of 95%. To be able to distribute a safe product within the penitentiary system, the masks were subjected to a conformity verification process by the deputed Italian institution. Istituto Superiore della Sanità (ISS). The ISS certification obtained is valid only until the end of the national state of emergency, after which CE certification will be required, for which bureaucratic procedures are already in place.

Table 2 shows the results in summary of the production data that refer to a second review that occurred in 2022, subsequent to the impact assessment produced in 2021.

Table 2. Project elements on 15 March 2022

Penitentiary Institute	Machinery	N. Masks (in millions)	Prisoners
Bollate	4	13.445.900	22
Rebibbia	2	2.352.700	14
Salerno	2	8.460.000	26
3 institutes	***8***	***24.258.600***	***62***

Source: Authors' elaboration.

3. The impact generated

The impact assessment of #Ricuciamo, developed by Italiacamp, has a twofold objective:

- valorise the social impact generated, highlighting the benefits for the people involved in the project, especially for the prisoners;
- measure the effectiveness of the project, identifying the economic bene-fits by comparing the costs incurred to launch the project with the economic benefits associated with the cost savings obtained.

The evaluation model

The impact assessment process used for #Ricuciamo is an application of the framework developed by Italiacamp based on the bricolage approach (Nicholls, 2009).

The stages of analysis are as follows:

Table 3. Steps in the impact assessment process

1 | Preliminary analysis	Study of the project and operating model, and benchmark analysis with similar realities

2 | Theory of change application	Through which it is possible to identify the contexts in which value is generated and, therefore, map the effects subject to evaluation
3 | Stakeholder engagement	It is necessary to involve them to make them aware and to detect the changes generated for each one, the expectations and needs
4 | Quantitative and strategic analyses	Qualitative and, where possible, quantitative analyses of the non-tangible effects generated

Source: Authors' elaboration.

Stakeholders involved

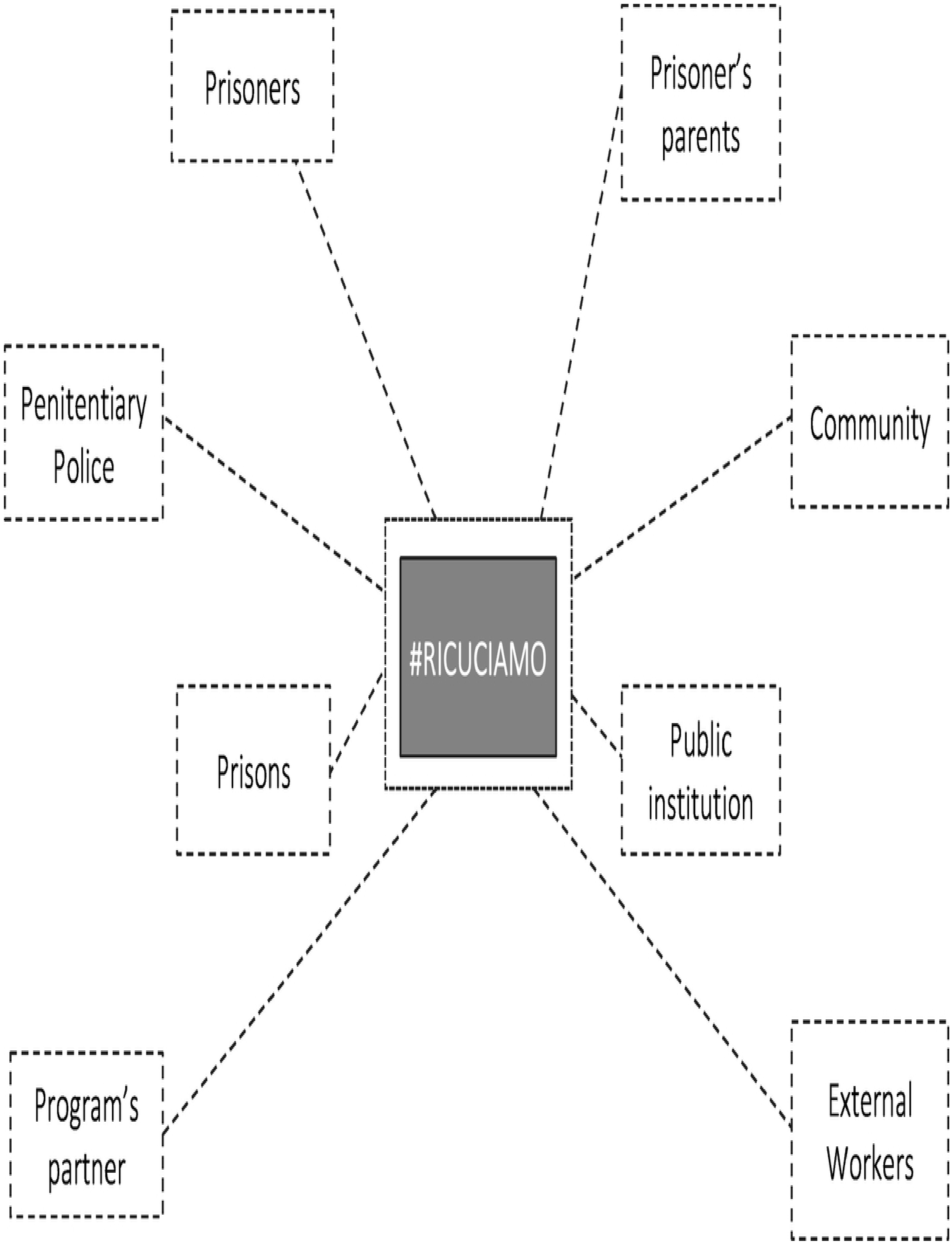

Figure 1. Stakeholders map

The project directly and indirectly has involved numerous actors (Jeffrey, 2009) – the public sector, private sector, and civil society—based on the model of the quintuple propeller (Carayannis and Campbell, 2009; Barth Carayannis, Barth and Campbell, 2012) as an approach to a governance of social innovation (Iaione and Nictolis, 2016) with the aim of creating shared value (Porter and Kramer, 2011) both economically and in terms of social benefits. Indeed, the possibility of extending the initiative to other penitentiaries is expected. In addition to inmates, the key stakeholders of the project (Mitchel et al., 1997), the other stakeholders within the prison system that have been involved, are the prison police of the Bollate, Rebibbia, and Salerno institutes and external stakeholders such as the families of inmates, both public and private project partners (see Table 1), subjects included from outside the prisons, and the community of reference. The inmate is undoubtedly the central stakeholder of #Ricuciamo, but the project involves multiple actors, both inside and outside the prison system.

Table 1. Project partners

Project partners	Role

Project partners	Role
Presidency of the Council of Ministers (Structure of the Special Commissioner for the Covid-19 emergency)	• Purchase of machinery, raw materials, and support material • Ongoing project management
Ministry of Justice Department of Penitentiary Administration (DAP)	• Start-up of production sites
Manpower	• Recruitment and training of external staff

<table>
<tr><th>Project partners</th><th>Role</th></tr>
<tr><td>Comau - FCA</td><td>Machine installation, commissioning, and skills transfer
Technical assistance</td></tr>
<tr><td>Boston Consulting Group</td><td>Project management kick-off
Operations and sourcing support</td></tr>
</table>

Project partners	Role
Italiacamp	- Concept - Scouting Partner - Training - Ongoing project management - Economic and social impact assessment

Source: Authors' elaboration.

The Theory of Change and evaluated effects

The Theory of Change (ToC) is a logical framework (Elevati, 2017) that, through a graphical representation, facilitates highlighting all the effects generated by #Ricuciamo, indicating the causal links between actions and changes produced. In this way, it is possible to detect in a punctual manner the potential project outcomes, and then, associate with them, relevant indicators for evaluation.

Table 4 shows which effects can be connected to the two core actions of the project, with reference to the main categories of stakeholders involved.

Table 4. Theory of Change of the #Ricuciamo project

PURPOSE	**Respond to a need of the country (mas employment inclusion of prisoners**		
OUTCOME	**Individual empowerment**	**Cost savings**	**Acqui of skil**
	Professional empowerment		**Incre**
FOR WHICH STAKEHOLDER	Prisoners	Public institutions	Extern
ACTION	Intramural work activity		Involv

	worke
PURPOSE	**Respond to a need of the country (mas** **employment inclusion of prisoners**

Source: Authors' elaboration.

The effects thus identified are summarised in the table below:

Table 5. The identified effects

For prisoners	Individual empowerment, which manifests through: Personal growth– • Increased self-esteem and improved self-perception, due to an enhanced sense of usefulness • Improved conduct, fostered by self-discipline and respect for rules • Improved social relationships and enhanced integration
	Professional empowerment through:

	Acquisition and development of knowledge, technical skills, and soft skills – Increased income
For external staff	**Acquisition and development of competences**, understood as knowledge, technical skills, and transversal skills
	Increased income through reintegration into work
For the country	**Cost savings** generated by a lower IPR production cost than the purchase cost and by feeding the Fine Fund

Source: Authors' elaboration.

Information collection methods

Interviews (McNamara, 1999) were conducted with different stakeholders to identify intangible effects:

- **Semi-structured interviews with inmates** to understand whether there were perceptions of improvements, awareness, self-esteem, and sense of usefulness.
- **Semi-structured interviews and evaluation forms for the** pedagogical managers to assess the improvements observed in the inmates and highlight the strengths and levers for improvement.
- With the same aim, **semi-structured interviews** were conducted **and evaluation forms were administered to production managers and shift leaders**, whose focus, with respect to the inmates' improvements, was time oriented to assess the possibility that the inmates had acquired technical and transversal skills because of the work activity performed.

Thanks to the willingness and cooperation of the institutes, Italiacamp **interviewed 56 out of 62 inmates** (20 in Bollate, 11 in Rebibbia, 26 in Salerno), as well as 10 day-captains and three pedagogical managers **through video calls**.

The results obtained

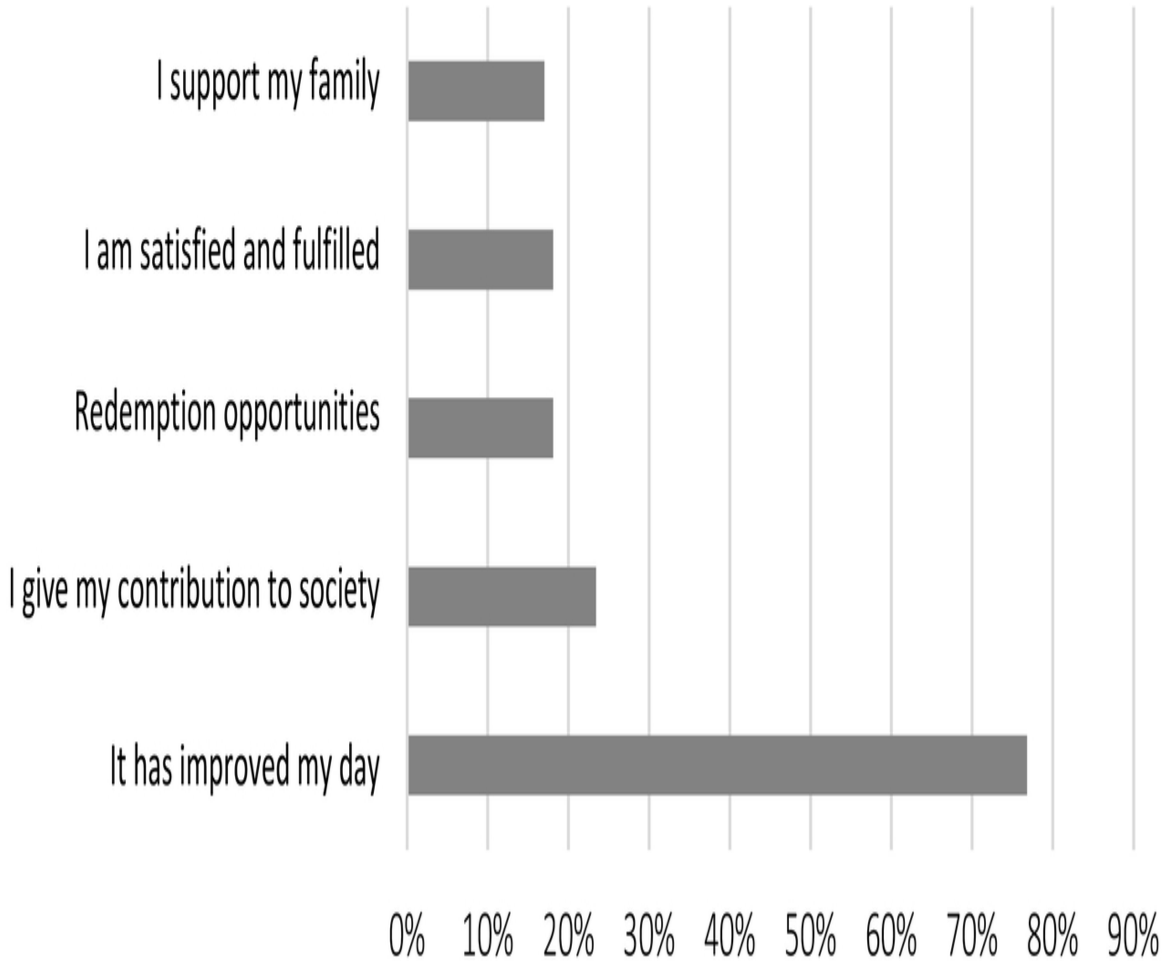

Figure 2. Individual prisoner empowerment

Source: Authors' elaboration.

Relative to this impact area, as can be seen from the graph:

- **23% of respondents said they actually felt useful** and can contribute for the benefit of the country.
- **17%** felt they were **again a support for their** family.

- **76% believed that the work experience had significantly improved their day by helping them to effectively manage its rhythm.** The work experience allowed them to live a typical day in the outside world, where multiple daily commitments coexist, such as the management of work-school (for those who attend it), the organisation of the activities assigned in the section, and the planning of meals together with their roommates.

This aspect of the work is also formative for them in view of their new life outside the institutes, especially considering that many of them declared that they had never worked and that the project introduced them to a different way of life.

Additionally, 18% of prisoners considered #**Ricuciamo as an opportunity for redemption and change**.

Thanks to this role, inmates felt **fulfilled and satisfied**, which significantly contributed to the improvement of their self-esteem, a fundamental incentive in the path of re-education and reintegration into society and an opportunity to see oneself anew.

The improvement perceived by the inmates with respect to their own person is also confirmed by the officials who noted in the inmates:

- more serenity and balance;
- new and proactive attitudes;
- improved behaviour outside work hours.

Relational aspects

In this path of personal growth, the relational aspect plays a crucial role. Through the work activity, the prisoner can acquire or regain the relational ability that the prison experience limits. At all three sites, shifts are structured by involving inmates who stay in the same area and know each other. In the initial phase, this facilitates professional collaboration and subsequently generates a virtuous circle in which the relationship and synergy created within the work area positively influences the relationship even outside the work area.

However, the most distinctive element of the project is the strong relational bond that is established with people who come from outside—the production manager and the shift leaders. For inmates, relating to them implies an initial connection to the outside world, a chance to interface with the community outside their ecosystem.

Thanks to this experience, a relationship of mutual respect and trust has developed. Prisoners consider them fundamental not only for their work activity but, above all, for the relational and human aspect. On their part, the shift leaders observed that interactions significantly improved over time, rating the relational component as the main soft skill implemented by all detainees, with a score of 4.8 (on a scale of 1 to 5).

Additionally, the captains interviewed stated being positively impressed by the bond of mutual respect and trust created between the inmates and external personnel.

Professional enhancement

In addition to the aspects related to self-esteem and sense of usefulness, the evaluation investigated the possibility that, thanks to the activities performed, the inmates acquired new technical and transversal skills, which can be reused in other work activities both inside and outside the institution.

Regarding these aspects, more than 50% of the inmates interviewed believe that they have learnt to perform new tasks. A significant proportion of those interviewed had never worked or had no experience of working in an industrial environment. Those who possessed certain technical skills could apply them in the project and also help their novice companions, especially in the initial stage of the project.

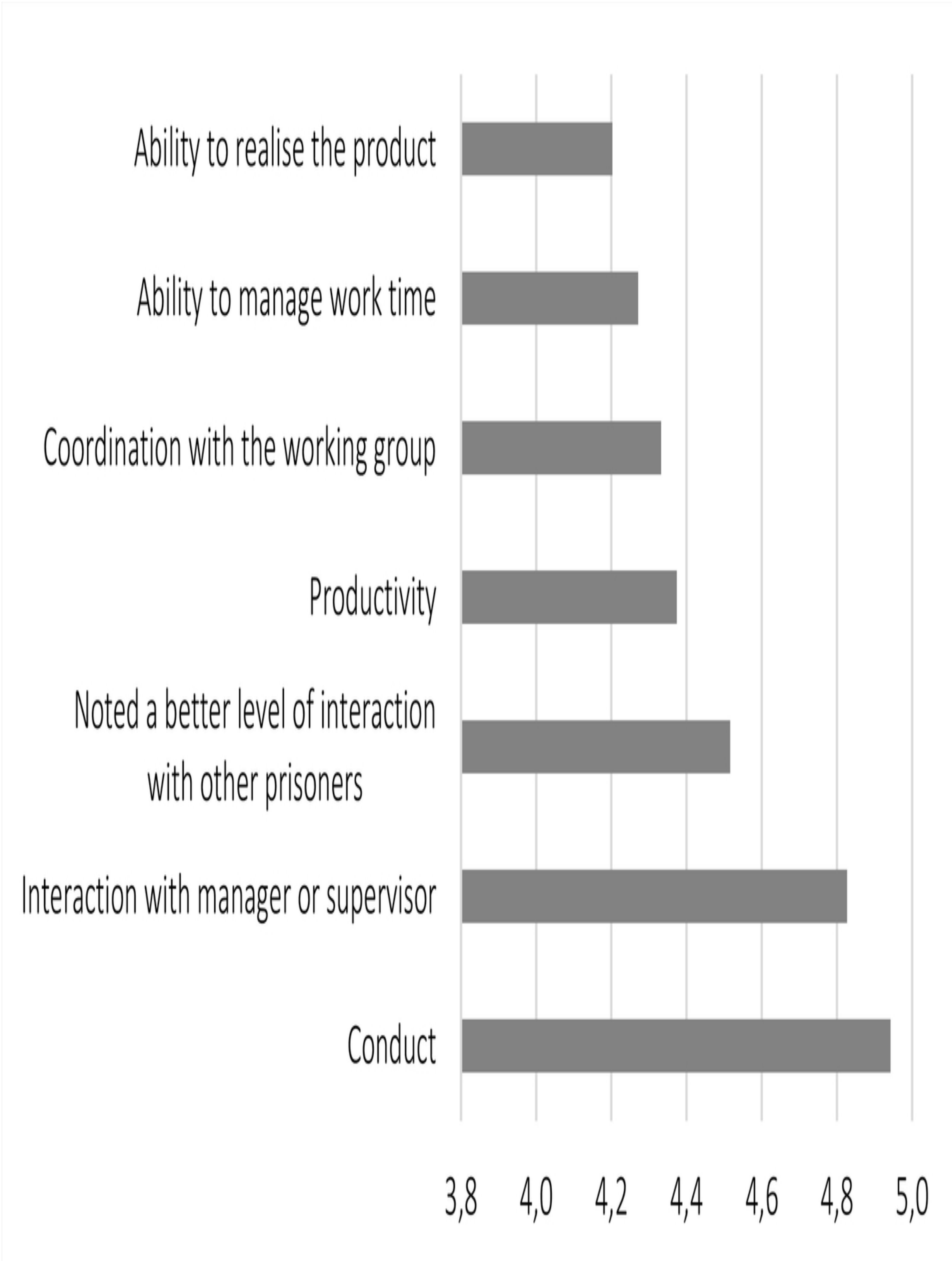

Figure 3. Main skills developed by inmates, according to the chapters

Source: Authors' elaboration.

From the intersection of the inmates' perceptions with the assessments of the shift leaders shown in Figure 4, it is possible to note that the hard skills that the inmates developed were in line with what was required by the tasks at hand. Their proactive attitude and the desire to get actively involved was also noted by the pedagogical officers, even outside the work environment.

A part of this positive effect is due to the healthy working relationship between the colleagues and the professionalism of the team leaders who were able to create a positive team atmosphere. A total of 63% of the workers think they have understood teamwork much better and 77% think they have improved the management of their supervisors' instructions.

Benefits for external staff

Staff hired from outside, as production managers or shift leaders, are the second category of stakeholders who have benefited from the labour inclusion process promoted by #Ricuciamo.

From the interviews, it emerged that 80% of people had been looking for work for less than a year and 20% for about 2 years.

Senior figures were selected, with valid and long previous experience in manufacturing and industry.

Therefore #Ricuciamo represented an opportunity to improve one's employment conditions and to have a certain source of income. With respect to the acquisition of competences, as confirmed by the workers, the required tasks are simple compared to their level of expertise. In these terms the valid know-how possessed represents a strong added value for the project. On the one hand, it is important in terms of skills transfer to the inmates and, therefore, of teaching. On the other hand, the knowledge of external staff could be put to use for the development and expansion of the project. The suggestions made during the interview were also useful in assessing the economic impact of #Ricuciamo.

Economic benefits for the public system

The assessment also considers the economic benefits to the State. Specifically, reference is made to:

- **saving in public expenditure related to the purchase of masks to the tune of 1,068,499 €.**[2] This value is the differential that is obtained by considering the costs sustained for the #Ricuciamo project and those that would have been sustained for the external purchase of the same number of templates produced in the period of time considered;

- **positive effect related to the expenditure incurred by the DAP, for the remuneration of the inmates employed in the project**. According to Article 188 of the Penal Code, inmates are obliged to reimburse the State Treasury for the costs of their maintenance in the penitentiary where they have served their sentence. In the case of people who work in prison, the prison administration withholds the cost of living expenses. This also applies to inmates included in #Ricuciamo. Their remuneration generates, therefore, a double advantage: for the inmates themselves, who otherwise would have had to pay their debt by burdening their families or at the end of their sentence, and for the State, which sees part of the amount paid by the DAP as a contribution to the Cassa Ammende (an institution that develops programs for the reintegration of prisoners, consisting in the activation of pathways of employment and training, integration programs, or prison construction). It **triggers, therefore, a virtuous circle in which a part of the benefit generated by the project is equal, at this moment, to 26,292 €[3] and can be used for new actions with social impact**;

- additional economic benefit related to the social impact generated.

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[2] For the evaluation of the economic benefit, the costs incurred to launch the project and the eventual benefits, understood in terms of cost savings, were compared. The public administration incurred different types of costs to initiate the project, such as:

- the initial investments for the purchase of machinery and related transport and installation costs;
- costs for upgrading production facilities and certifications;
- the purchase of materials;
- the manpower, both inmates and external staff.

Based on the elaboration of the costs incurred for the production of the 8.2 million masks, it was possible to estimate a unit production cost of approximately €0.13.

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[3] The maintenance value set by Circular GDAP-PU-0298924 (dated 7 September 2015) of 112.36 € per month was considered.

The analysis conducted, starting from the information collected through the 56 interviews and the evaluation forms, showed how the working activity generated positive effects both in professional and personal terms for the inmates. These results are very often achieved through ad hoc pedagogical paths that employ a part of the time spent by the dedicated staff and which in this way can be used for other functional activities of the institutes. In this sense, replacing these paths with #Ricuciamo has generated a **cost saving of 59,070 €**.[4]

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[4] The value was elaborated considering as an economic proxy the cost of counselling and psychotherapy needed to achieve the same results and was applied to the number of inmates for whom the evaluation forms showed improvements (source: Ordine degli Psicologi della Lombardia, https://www.opl.it/public/files/1436-Elenco_minimi-massimi.pdf).

Overall, therefore, the economic benefit generated by the project is equal to 1,153,862 €.

Considering the value generated and the costs incurred,[5] it is possible to state that each euro invested in #**Ricuciamo has generated an economic value related to social benefits and cost savings of 0,82 € for the community**.[6]

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[5] In the first year about 1,4 €/Mln.

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[6] SROI (Social Return On Investment) is a measurement approach that seeks to measure the socio-environmental return of an activity for the beneficiaries and the community against the resources invested. Link: https://socialvalueint.org/wp-content/uploads/2018/05/SROI-Guide_ITA_completa.pdf.

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4. Lessons learned

Italy is founded on the principles of work and the re-education of the convicted (Articles 4 and 27 of the Constitution). It is a democracy that aims at sustainable development through the achievement of the 17 sustainable development goals promoted by the 2030 Agenda, in particular goal 16 of ‘Peace, Justice and Strong Institutions’ that aims to “promote peaceful and inclusive societies for sustainable development, ensure access to justice for all, and create effective, accountable and inclusive institutions at all levels” (Cavotta and Rossini, 2021). For a civilized country, therefore, it is necessary to have a prison and justice system that creates opportunities for alternative routes to detention, acquisition of skills for prisoners, reintegration into society of individuals with integrity, decrease in recidivism, and saving public money for the benefit of society.

The results achieved by the #Ricuciamo Project present, first of all, a model of good practice that can be replicated according to three fundamental principles:

- The impact purpose (Craig, and Snook, 2014), which outlines the inten-tionally impact-driven nature of the initiative with a clear definition of outcome and impact goals.

- The involvement of a multi-stakeholder network (Hemmati, 2002; Rol-off, 2008; Belloni, 2013), comprising public actors and private organisations.
- The definition of a monitoring model and evaluation of the effects one year after the start of the activity.

The results achieved by #Ricuciamo are in line with what has already been indicated in other studies (Mastrobuoni and Terlizzese, 2014): a project of prison economy and inclusion (Maglia, 2019) and socio-work economy does not have the mere aim of keeping the prisoner "busy" but can create economic value and benefits for a plurality of stakeholders. For the penitentiary administration through the reduction of costs related to the lowering of recidivism rates; for the entrepreneurial fabric through tax breaks and tax relief; for society by way of reduction in public spending and in the creation of new jobs for professional profiles to work alongside prisoners; for the prisoners themselves who can acquire soft and hard skills that will facilitate better insertion and inclusion in the post-prison society, helping them not remain an economic burden on their family and rather support it when possible (Zancan et al., 2021), and improve their emotional state, as shown in other studies.

It is, therefore, a model that can be replicated and which, with appropriate sustainable integrations, creates a win-win situation for inmates and communities, thereby generating positive social and economic value.

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Chapter 7
WHAT ARE THE UPCOMING CHALLENGES IN IMPACT MANAGEMENT?

Lavinia Pastore and Luigi Corvo

Abstract: In this chapter, the authors would like to highlight few essential point about impact management approaches and theories addressing three critical issues. The first one regards the evaluative object and the distinctions between impact models dedicated to organizations and those dedicated to projects/activities. The second issue concerns the relationship between impact schemes and sustainability metrics, with a focus on the overlapped, blurred, and frequently confused boundaries, as well as their developmental trajectory. Finally, the third issue concerns the various evolutionary stages of social and environmental impact, as well as the associated developmental trajectories and consequences at the implementation level. These three issues represent future lines of academic research and experimental ground for action-research projects.

Keyword: Impact management – Sustainability – ESG – Blended value – Measurement.

1. Introduction

In recent years, the term "impact" has been used more frequently in public discourse, particularly on a global scale (Stiglitz et al., 2009; Manetti, 2014; OECD, 2015; Hervieux and Voltan, 2019). This term is frequently followed by an adjective (economic, social, environmental, etc.), and it is increasingly incorporated into what appears to be a broader evocation of the concept of sustainability. *What do we mean when we talk about impact?*

The debate can be summarized as follows: during the development and establishment of the industrial production model, aversion to complexity has led to the reduction of value to its monetary equivalent. Impact discourse's primary goal is to "legalize" value in all of its complexity, which is far beyond what can be gauged through financial criteria (Emerson, 2003; Bozeman, 2007; Porter and Kramer, 2011; Porter et al., 2012; Donati and Archer, 2015; Sancino et al., 2018). Assessing impact entails collecting and disseminating a set of information that can improve and extend understanding of the value generated and better inform decision-making at various levels (Arvidson and Lyon, 2014; Nicholls, 2018; Corvo et al., 2021).

In this chapter, we will concentrate on three key issues that relate to the evolution of impact: the variations in impact models and the objects that get evaluated; the connection between impact and sustainability frameworks and metrics; and the varied evolution of environmental and social impact measurement and its practical implications.

2. Impact fundamental theoretical background

To delve deeper into the functions of impact, it is essential to focus on who and what are affected by it. One of the issues that would benefit from clarification is the “what” to evaluate. Evaluating an organization’s products, services, and projects (which we will refer to as “activities”) and evaluating the organization that produces them are not the same thing. This distinction stems from a different way of understanding the essence and function of an organization: whereas in Anglo-Saxon approaches, what an organization is can be equated with the set of activities it performs (Nicholls, 2009; Klemelä, 2016), in the Mediterranean approach (Giordano, 2021), the organization is inherently a biological organism that generates intrinsic worth by being “in the world” (i.e., being in society).

This explains why there are discussions about the impact of activities and the impact of organizations that overlap. To confuse the two plans would be both a theoretical and empirical mistake. One activity, such as a project, can be conducted by several organizations, and at the same time, one organization can co-lead several projects.

Social impact measurment of all organizations (public, profit and nonprofit), is recognized as one of the most critical and necessary components of addressing the complex challenges facing the contemporary world. For this reason, “*the notion of social impact has become so mainstream that governments and their leaders at the highest levels, including the G8 countries and the Pope, are promoting the creation of institutions that can provide guidance about social impact*” (Florman et al., 2016, 3).

While the international debate on social impact assessment (SIA) is highly developed and heterogeneous with regard to the social impact of projects (Grieco et al., 2015; Corvo et al., 2021), in contrast a debate on the social value that the organization is able to generate, not referable to projects, appears to be lacking to date. An interesting reconstruction on the topic of the evaluation of organizations, which goes beyond the summation of project SIAs, was carried out by Zamagni et al. (2015) concerning Third sector organizations, in particular Social Enterprises. In the model proposed by the authors and called Social Enterprise Impact Evaluation (SEIE), the goal is not to quantify the outcome of action, that is, the "what is done" (the projects) but to evaluate the model, that is, the "how it is done" (the identity dimension of the organization). In this view, it turns out to be a combination of the territorial relations established in the place where the organization operates and the relationship with the stakeholders and the communities with which it comes into contact (Maiolini et al., 2013).

It is in this perspective that social enterprise assumes a central role in creating territorial relationships and building inclusive productive fabrics towards communities (Nichols, 2015). The definition of impact and its measurement then becomes more complex, as it is to be understood as social enterprise's marginal contribution to the rebalancing of society (see H. Mintzberg, "The Plural Sector").

The theoretical framework just described, and the cultural context in which we operate, what Giordano (2021) would define as the Mediterranean way to social innovation, helped Open Impact[1] developed a model for assessing organizational impact of social enterprises. The potential to generate social impact on individuals, the community, and society is represented by enabling elements such as how an organization operates, how it defines its existence in society, and the decisions it makes when establishing relationships with both internal and external parties. It follows that social enterprises create social value since they can provide information on a region's wellbeing, capacity for governance, social innovation, and degree of territorial cohesiveness. The approach described, however, has a critical flaw. It is difficult to actually implement a dual and non-dichotomous impact assessment between:

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[1] Open Impact is an innovative start-up and accredited spin-off of the University of Milano-Bicocca that provides services and develops digital products for the measurement, enhancement and management of impacts in a perspective of integrated sustainability.

- the activities, or what an organization does (its projects, programs, and, in the particular case of public administration, its policies);

- what an organization is (its identity, its way of being in society and being a part of it connected with the rest of the social fabric).

While evaluating the social impact of the activities carried out by an organization returns a more defined evaluative possibility because of the more circumscribed and "visible" in space and time, confining the evaluation here leads to a misleading assimilation. One would, in fact, make the impact of an organization coincide with the reasoned sum of the impact evaluations of individual activities. Wanting to summarize, the organization would be equated with the mission it intends to achieve according to the SAAs (Strategic Activity Areas) undertaken. However, the Mediterranean way has placed at the center of business theory the so-called organizational "delta," i.e., that distinctive trait referable to the history, the relations with places, and the distinctive genetic code of the undertaking. For this reason, several authors consider the firm a "common good" in itself, regardless of the activities it performs (see Di Carlo et al., 2019).

Aside from research strands that are specific to social enterprises and face the challenges described above, we could say that the emerging orientation appears to be directing the evaluation of what an organization is toward Enviromental

Social and Governance (ESG) analysis and the evaluation of what an organization does toward impact evaluation.

The second question, who is affected by the impact discourse, appears to be simpler. Because, in the short term, every organization generates effects of positive or negative change that can affect the well-being of people, the community, and society. Everyone is affected, but to varying degrees of urgency and relevance. Although we do not intend to rank them here, we cannot ignore the fact that the main stakeholder in impact assessment is the government. It should be noted that the emphasis on policy impact fits within public management studies, going further to reinforce the theoretical and empirical strands critical of new public management and giving substance to the public governance paradigm (see in this regard literature on public value, new public governance and collaborative governance, for instance Bryson et al., 2014; Esposito and Ricci, 2015; Sancino et al., 2018; Brown et al., 2021). When we say that the first stakeholder in impact assessment is the Public Administration (PA), we mean all stakeholders with whom the PA establishes relationships in order to create public value, whether directly or indirectly. The Third Sector Organizations to which the PA has delegated the delivery of social services play a significant role among these stakeholders due to the evolutionary path of Welfare State (Pasi and Misuraca 2020). In fact, the literature on social enterprises provides a steady stream of studies and theorization of impact evaluation frameworks (Emerson et al., 2000; Dart, 2004; Bagnoli and Megali, 2009; Ebrahim and Rangan, 2010; Clark and Brennan, 2012; Nicholls, 2018).

Impact also increasingly affects for-profit companies and private banking institutions at the same time. The former have long since started a transition that challenges the Corporate Social Responsibility paradigm and aims to identify the circumstances of intentionality in producing positive impacts for society and the environment, with varying degrees of depth and many differences related to geographic context and production scope (Emerson, 2003; Porter and Kramer, 2011; Porter et al., 2012). Due to the growing need for accountability from small and medium-sized savers and investors, the latter are gradually beginning to link impact with compliance initiatives known as ESG – Environmental, Social, Governance (MSCI, 2011; Busch et al., 2016; Yan et al., 2019).

In a redrawn geography of value, where boundaries and distinctions are no longer delineated by purely formal features but rather by various views, purposes, and values, we discover impact as a link between various organizational configurations. In the impact viewpoint, organizations are not classified according to their legal status, such as for-profit versus nonprofit, but rather based on their performances both in terms of impact and economic dimension.

There are four major motivations identified in the literature (Arvidson and Lyon, 2014; Klemelä, 2016; Nicholls, 2018; Corvo et al., 2021) that are driving an increasing number of organizations to undertake impact measurement and evaluation processes: (1) a cultural shift in the issue of accountability; (2) a scenario charactirized by scarcity of resources; (3) new international regulatory developments; (4) an increase in investor interest in environmental and social issues. Furthermore, the impact assessment process can be useful both internally as a tool for ex-ante planning and monitoring of intermediate results, and externally as a tool for communicating results to stakeholders (direct and indirect). The impact assessment process serves two purposes (Grieco et al., 2015; Nicholls, 2018; Hervieux and Voltan, 2019):

- an internal function aimed at identifying strategic lines and criteria, crit-ical factors, and areas for improvement, triggering a prior definition process;
- an external function that places the organization in relation with stake-holders and prompts it to communicate the effectiveness of its work within the relevant community.

Organizations that rigorously and systematically incorporate impact assessment into their strategies can thus reap a variety of benefits, including long-term benefits. Certainly, evaluation carries risks for the organization because it exposes it to its stakeholders and requires more investment due to the need for specific expertise for proper impact measurement.

3. Impact and sustainability: where is the link?

Impact and sustainability are two often interrelated keywords whose distinction and measurement methods overlap. If we think about impact measurement models and the previous distinction related to "what" is being assessed some considerations can be developed with respect to the relationship between impact and sustainability.

Indeed, there are various methodologies for measuring impact, which are often tailored to the specific organization that employs them, based on the activities, objectives, and characteristics of the impact being measured. Because of the diversity of the many facets of impact and the lack of a single, shared definition, a plethora of evaluation methodologies have been developed (Grieco et al., 2015). In this sense, the lack of a shared vision leads to not only confusion in selecting the most appropriate methodology by those who must evaluate, but also great difficulty in comparing the results of different measurement paths (Hervieux and Voltan, 2019). In 2021 we conducted a study to identify the main existing methodologies for assessing impact (Corvo et al., 2021). 98 measurement models were found and classified into four clusters:

- models based on performance and management studies, where the most widely used is the Eco-Management and Audit Scheme (EMAS);
- models based on quality systems, where the most used is the European Foundation for Quality Management (EFQM);
- monetization models, where the most widely used is the Social Return on Investment (SROI);
- models related to the world of sustainability and the Global reporting Initiatives (GRIs).

What interests our discussion is the last group of models, those related to sustainability and its standards and taxonomies link Sustainable Development Goals (SDGs) metrics or GRI. So, within the impact literature, sustainability measurement models are included that are focused on attempting to quantify the social and environmental dimensions generated by organizations (here we relate to the discussion regarding the difficulty of finding assessment models strictly dedicated to the organization itself).

The two processes, known as sustainability management and reporting in the first case and impact assessment in the second, are useful in establishing new points of contact between production processes and financial flows: ESG investments (also known as sustainable investments or responsible investments) typically use the sustainability cycle as a signal to guide financial flows, whereas impact investing uses the message that emerges from impact assessment as a signal.

According to the International Finance Corporation (IFC), many analysts consider ESG investing and impact strategies to be part of a larger category of ‘sustainable’ investments. Investopedia classifies, “*socially responsible investing and one of its subtypes, impact investing, accounted for more than one out of every four dollars under professional management in the United States*.” It’s interesting to see that impact investing is explicitly stated to be a subset of socially responsible investing, regardless of the number. Social responsible investing is, of course, a component of something else (call it general or traditional, or profit-led investing). Experts in the industry have developed dozens of potential representations for how various investment methodologies, ideologies, and practices connect to one another.

The majority of common projects in this field share the spectrum approach, which is predicated on the idea that there is continuity along a subordinate variable. According to Jess Daggers, “*representing matters on a spectrum assumes that the objects on the spectrum share some common property, and that this trait varies in a linear fashion from one extreme to the other, whether it is stated explicitly or not*.” As a result, the spectrum approach frequently depicts capital by using predicted return levels as the underlying variable. The two extremes are philanthropy and conventional investment seeking market-rate returns.

APPROACH	TRADITIONAL INVESTMENT	RESPONSIBLE & ETHICAL INVESTMENT							PHILANTHROPY
		ESG Integration	Exclusionary/ negative screening	Norms-based screening	Corporate engagement and shareholder action	Positive / best-in-class screening	Sustainability-themed investing	Impact investing	
METHOD	Providing limited or no regard for environmental, social, governance and ethical factors in investment	Explicitly including ESG risks and opportunities into financial analysis and investment decisions based on a systematic process and	Excluding certain sectors, companies, countries or issuers based on activities considered not investable due principally to	Screening of companies and issuers that do not meet minimum standards of business practice based on international norms and	Executing shareholder rights and fulfilling fiduciary duties to signal desired corporate behaviours - includes corporate engagement and filing or co-filing	Intentionally tilting a proportion of a portfolio towards solutions; or targeting companies or industries assessed to have better ESG performance	Specifically targeting investment themes e.g. sustainable agriculture, green property, 'low carbon', Paris or SDG-aligned	Investing to achieve positive social and environmental impacts - requires measuring and reporting against these, demonstrating the intentionality	Using grants to target positive social and environmental outcomes with no direct financial return

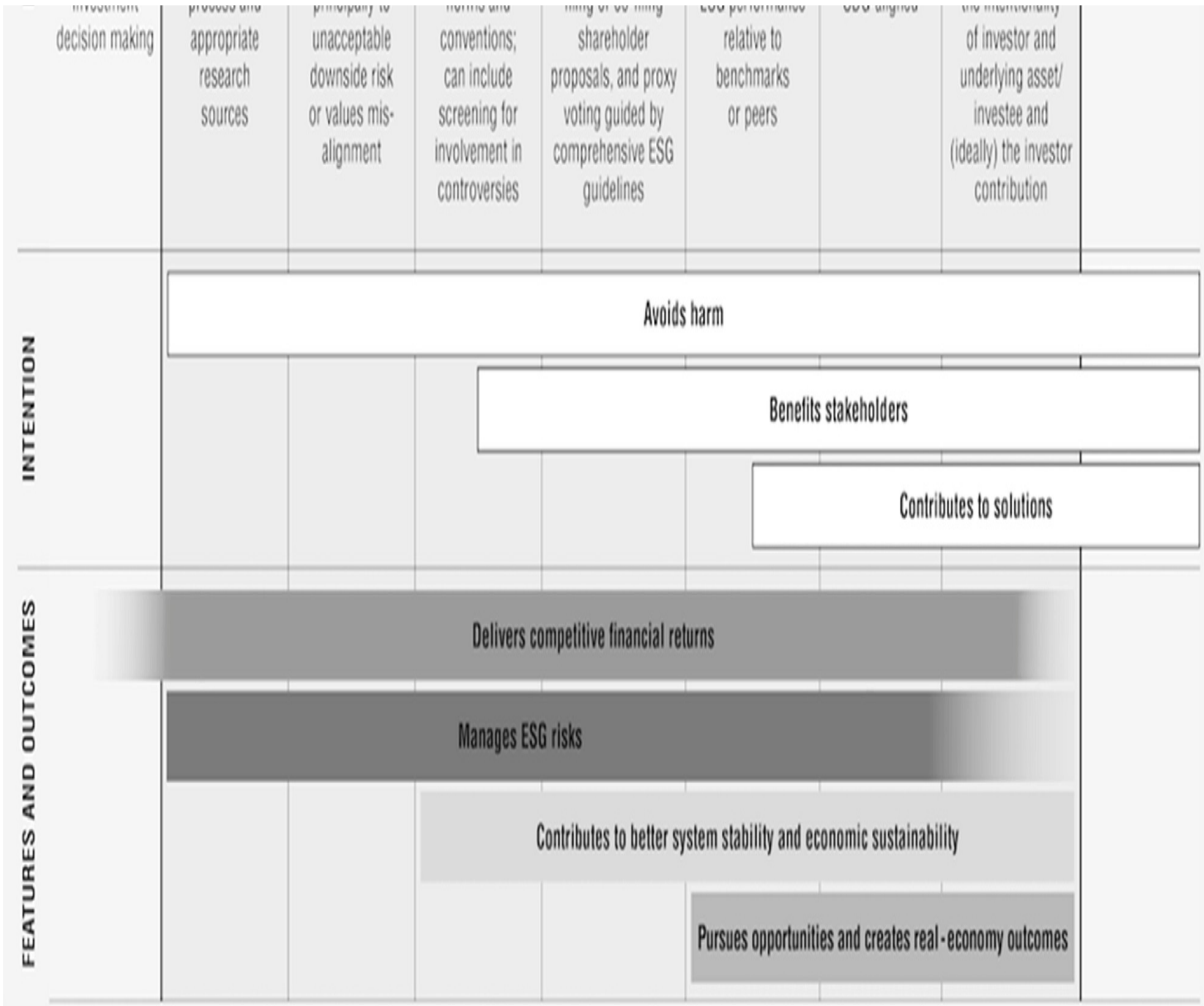

Figure 1. Responsible and Ethical Investment Spectrum by RIAA
Source: Adapted from frameworks developed by Bridges Fund Management. Soren Capital and the Impact Management Project.

Although putting impact investing on a continuum with traditional investing, philanthropy, ESG investing, and Socially Responsible Investing (SRI) helps with getting a first overview, it doesn't allow entangling some conceptual ambiguities because too many assumptions must be made for the framework to be taken as a reliable and accurate snapshot. As was previously stated, the fundamental premise of the spectrum approach is that objects on the spectrum have certain traits in common. They all fall under the same taxonomic group, in other words. Can we reasonably infer that impact investment, ESG investing, and SRI investing are all members of the same species, genus, family, or order?

We are uncertain. A key distinction between the two is noted in a blog post by Pitchbook: "*Impact investing is about the type of investments a manager is targeting, while ESG factors are part of an investment assessment process. Further, impact investing is seeking to make a measurable positive environmental/social effect with the investments a fund manager buys, while ESG is an approach to identifying non-financial risks that may have material impact on an asset's value. […] Unlike socially responsible investing, impact investing is seeking positive impactful attributes in which to invest rather than screening out perceived negative attributes*".

This variance is significant. The creation of value, or, to put it better, the creation of values that are both financially and non-financially material, is the subject of impact investing. ESG investing and socially responsible finance, on the other hand, are more concerned with how value is consolidated and preserved over time. While ESG and SRI offer an additional layer to the process of screening investment targets, impact investing, which is about transformation, presupposes a distinct investment perspective. Both allow non-financial factors to play a part, but impact investing demands that investors examine their basic business strategy, whilst ESG and SRI investing are content as long as investors meet a set of requirements. ESG examines the influence the outside has on the inside to determine the risks for the investor by using an inside-outside logic. Impact investing examines how internal factors affect external factors. This is about the beneficial effects of my acts on the outer world. Impact investing is, in this sense, a selfsufficient paradigm of investing with twofold materiality at its core.

If we take a closer look at philanthropy, then, we can see this difference is still there: according to European Venture Philanthropy Association (EVPA), if one looks at how impact investing is conceived from a venture philanthropy perspective, it is clear impact investing is "*a way of doing venture philanthropy*". This means that it should belong to a different taxonomic category than the one to which philanthropy belongs. This indicates that it ought to go under a different taxonomic group than philanthropy.

Additionally, we realize that the criteria impact-first vs. profit-first could aid in system navigation and provide a general but complete representation of all investment philosophies, styles, and approaches; however, we are putting things on an equal footing that have different phenomenological existences. Impact investing has, at least up to this point, primarily been carried out in the private markets, whereas SRI or ESG investing is often carried out in publicly traded vehicles. Although a recent Global Impact Investing Network (GIIN) report claims that impact investing in listed shares is progressing, the same study also states that "*maximizing impact in listed equities requires a re-focusing of the entire investment process in order to arrive at a materially different portfolio than a standard ESG fund*".

As a result, the overlap and dissonance between the impact and sustainability worlds is mirrored in the relevant finance schemes, creating a very magmatic context with still ambiguous boundaries. Certainly, the point of contact is one related to a reinterpretation of externality theories. The ability to quantify these in terms of the creation (or destruction) of social and environmental value, as well as the evolution of strategic management that includes their design and planning. That is, to shift from a model in which externalities, positive or negative, are unintentional to one in which intentional impacts (i.e., conscious externalities) are considered in an overall view of blended value.

4. Are the social and environmental impacts the same?

Whether we are discussing project impact measurements or organizational sustainability metrics, there is a recurring cross-cutting issue: the disparity in maturity between social and environmental impact.

Environmental Impact Assessment (henceforth, EIA) refers to the assessment of environmental impacts, has its own dedicated stream of research (Bakar et al., 2015). Although EIA was designed to be an allencompassing framework for analyzing environmental and social issues, it failed to adequately address social issues; thus, SIA was developed with a gradual expansion of the items under consideration (Estevens et al., 2012; Richmond et al., 2003). EIA has a significantly higher level of development, compared to SIA, capable of influencing investment, as evidenced by the European Union's New Green Deal.

There are three reasons why models for measuring environmental impacts have enabled a shift from a logic of spending to a logic of investment that considers its metrics and evidence consistent enough to precisely link public and private investment funds:

- **the indisputable nature of the impact results**. EIA measures objectively quantifiable outcomes that share standardized metrics recognized by all market players, such as CO2 equivalence systems, the carbon footprint method, and methods of calculating energy or water efficiency. Environmental outcomes are based on the gathering of evidence from the hard sciences and thus have objectivity. Furthermore, their detection in the field and relative reliability are increasing as a result of technological innovations such as IoT sensors that track live data and ensure its continuous and unambiguous measurement;
- **immediate feedback on impact since there is a reduced delay between output and outcome.** This is always related to the objective and measurable nature of environmental outcomes, which, in addition to being able to be tracked on an ongoing basis, enable for the observation of effects over a short time frame. Consider energy efficiency interventions; the reduction in consumption is visible and measurable immediately following a structural intervention in a building, and the expected impact flow can be reliably estimated;

- **high cashability and close relationship with finance**. The preceding two characteristics have resulted in environmental impact having a high conversion in cashability and thus playing a contrary role in the world of ESG finance. The achievement of environmental outcomes can be easily translated into financial metrics and influence the performance of related investment funds.

Because social impact manifests in opposite and contradictory ways to these three characteristics, it has not yet been possible to apply the same pattern to the social dimension. Attempting to retrace the same reasons for the maturity of environmental impact, one can analyze current social impact problems:

- **less certainty about impact outcomes (mix of hard and soft compo-nents)**. Social impact, by definition, takes into account the definition of what constitutes social (Arvidson and Lyon, 2014), and the scope of outcomes is dependent on different perspectives. Soft, or subjective, components are always present in measurement and relate to highly varied and uneven theories, methods, and modes of detection, making social impact measurement less reliable. It is certainly possible to have hard, i.e., objective, outcomes, but these do not provide a comprehensive picture of impacts on their own and are thus considered partial outcomes of the social dimension.

- **Impact feedback with a time bias (greater delay between output and outcome)**. Social impacts, in addition to having a subjectivity problem, have a temporality problem. The gap between the output and the occurrence of the outcome can be quite large. Consider the issue of child educational poverty and the programs that seek to address it; the outcomes are verifiable when the child becomes an adult. This type of delay between output and outcome is common in all educational interventions, but it is also prevalent in other social fields.
- **Cashability complexity (impact-finance correlation must be sought with matrix logic)**.

Cashability is another extremely complex issue because, assuming that the financial translation of the outcome can be quantified (thus overcoming the barriers described in the previous two points), the attribution of generated public expenditure savings or increased revenues may not necessarily be correlated with the investing entity. Consider, for example, investments in educational programs that have long-term effects on the welfare system. As a result, the cashability of social impact clashes with public accounting and its organization in allocating spending in the public and philanthropic sectors.

5. Conclusions and future research agenda

The issues and differences that emerge between social and environmental impacts can be attributed back to the overall challenge of capturing the blended value that aspiring to detect such distant dimensions implies the involvement of all disciplines and perspectives that have historically been kept separate in silos by the world of research and academia. Environmental impacts can be traced back to the hard sciences and thus have a standardization and mode of dialogue with economic quantification, whereas social impacts require comparison and synthesis work between the humanities and social sciences before a structured economic conversion can be expressed.

To gradually address this gap, extensive data benchmarking is required, which can be backed by an **evaluability process** though assessments that quantify the readiness of organizations of producing social and environmental impact data as a proxy for moving closer to impact-based models.

To summarize, future theoretical and applied research should focus on deepening the relationship between impact and sustainability frameworks and their metrics, while taking into account the object of evaluation: either the activities (projects or services) or the organizations themselves. The next wave of research should bring together the reflections and empirical evidences from sustainability and impact assessments to make policy recommendations that are consistent with evolving toward a blended value development system driven by economic, environmental, and social metrics.

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Part 2

FINANCIAL SECTOR, SUSTAINABILITY INTEGRATION AND IMPACT MANAGEMENT

Chapter 8
AMENDMENT OF CSRD DIRECTIVE, NRRP, FINANCIAL MARKET AND ESG PARAMETERS

Gianluca Santilli

Abstract: *The European Commission, on 21 April 2022, proposed an amendment to the Corporate Sustainability Report Directive (CSRD) which provides for a constant and consistent flow of information issued by companies on sustainability in favor of its stakeholders but also financial market and insurance analysts, of the rating agencies.*

This is to generate awareness of companies on their social and environmental impact and therefore on their level of sustainability.

The change to the CSRD leads to ensuring that corporate sustainability reporting is consistent with the obligations under EU Regulation 2019/2088 on sustainability reporting in the financial services sector.

The proposed change to the CSRD will bring the number of companies required to prepare reporting from 11,000 to 49,000 with time constraints from 2023 for large companies to 2026 for those with at least 250 employees but, an element of enormous importance, already from 2022 for all those which will require the funding provided for by the NRRP.

A study conducted by ConsumerLab on over 1,900 companies shows that 64% of large companies do not draw up the sustainability report.

This confirms the importance of communicating and raising awareness on these issues for companies that obviously do not realize that sustainability equals competitiveness, rating, appreciation of stakeholders starting with employees, finance, supply chains of large companies and therefore the future.

Keywords: Sustainability – ESGfactors – ESG – UE – SMEs – Directive – Financial – CSRD – Market.

1. Introduction

With the NRRP and its reforms Italy is going to be a fairer, greener, and more inclusive country, with a more competitive, dynamic, and innovative economy.

The NRRP defines actions and interventions to overcome the economic and social impact of the pandemic, acting on the country's structural nodes and successfully facing the environmental, technological, and social challenges of our time.

Social impact agenda for Italy has defined 10 recommendations useful to government, institutions, companies, financial funds, but also to universities, third sector actors and local communities, on how to exploit the opportunity offered by RRP and how to extend in Italy the potential of social entrepreneurship and impact finance to build a more inclusive and sustainable economy.

The finance/sustainability binomial becomes indissoluble, and it becomes a priority to make it assimilate to companies.

This need is among the reasons that led the EU Commission to propose, on 21 April 2022, an amendment to the Corporate Sustainability Report Directive (CSRD) which provides for a constant and consistent flow of information issued by companies on sustainability in favor of its stakeholders but also financial market and insurance analysts, of the rating agencies.

This is to generate awareness of companies on their social and environmental impact and therefore on their level of sustainability.

In my opinion, it is necessary to start from a premise: sustainability is not yet sufficiently acquired as a concept by companies (and people).

Even if companies consider paying attention to the sustainable development goals as a priority, there are few that indicate quantitative data, precisely because of the difficulties in translating good intentions into practice. Especially smart companies should pay attention to their sustainable development.[1]

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[1] Smart Industry and Sustainable Development, Smart Businesses and 2030 SDGs - Enrica Pavione - University of Insubria, Patrizia Gazzola - University of Insubria, Stefano Amelio - University of Milan Bicocca, Junior Magrì - University of Insubria.

Many of these have not understood either the advantages of being sustainable or the need to embrace the logic of sustainability.

Furthermore, it is not still perceived that the world of finance and large companies will tend to no longer have relationships with unsustainable companies

The proposal for a new directive is inspired by these premises and in fact greatly expands the target of companies that will be obliged to prepare the report, compared to the current directive.

The CSRD is a new directive replacing the current Non-Financial Reporting Directive (NFRD)

The CSRD is being introduced to standardize corporate sustainability reporting across the EU in a comparable way to which financial reporting is.

The new directive, which will be implemented on a national level across the whole EU, will cover a wider range of companies than the legislation it is replacing. Currently the NFRD covers just over 11,500 companies and the new legislation is expected to cover close to 50,000 companies operating across the block.

Why is the NFRD being replaced with the CSRD?

The scope of those reporting and what must be reported has been expanded. The NFRD wasn't far reaching enough to have the broad impact the EU wanted to reach its goal on climate change and taxonomy.[2]

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[2] Peter Wollmert - EY EMEIA Assurance Leader, Andrew Hobbs EY EMEIA Public Policy Leader.

Under the current NFRD, also known as Directive 2014/95/EU, companies with over 500 employees, listed companies, banks, and financial institutions are required to publish information on the company's approach to:

- Environmental protection.
- Human rights.
- Anti-corruption and bribery.
- Social responsibility and the treatment of their employees.
- Diversity on their board.

2. The proposed CSRD directive

The new directive takes a more standardized approach. On the environmental side, the CSRD covers the six environmental objectives foreseen by the EU Taxonomy:

1. Climate change mitigation.
2. Climate change adaptation.
3. The sustainable use and protection of water and marine resources.
4. The transition to a circular economy.
5. Pollution prevention and control.
6. The protection and restoration of biodiversity and ecosystems.

The CSRD will require disclosure of information relating to the EU taxonomy, equal opportunities, fundamental freedoms, roles of governing bodies, also with respect to sustainability, political affiliations and lobbying, transparency in commercial relationships, internal controls, and risk management. All information shall be addressed and reported with a double materiality approach (sustainability risk affecting the company and the company's impact on society and the environment) and should be prioritized based on the relative importance for stakeholders – including forward looking information, future targets, and progress being made by the company. All of this will be included in the Management Report, which must be submitted in a XHTML format in accordance with European Single Electronic Format regulation.

Many companies say: we aren't a company that impacts the environment, why should we care about CSRD?

The CSRD regulations are not only concerned with aspects of climate change and pollution. They are just one element of the new regulations. Even the NFRD focused on additional social aspects, including bribery and corruption, diversity, human rights, and the treatment of employees.

How the directive will be introduced into national legislation will have a major impact on the companies that must report on their work in these areas. The additions of reporting around social, human, and intellectual capital, and the process of selecting relevant topics for stakeholders, will be difficult areas for companies to get right.

How can a company be prepared for CSRD?

The best thing a company can do to prepare for this change is understand the methodologies of all aspects required in the reporting and, if necessary for a lack of internal competences, take a team of specialists, working across disciplines, with a deep knowledge of the interconnectedness and how it relates to a company's operations.

The assessment can be a preliminary analysis of the current positioning of the company, to identify the most significant areas to concentrate on to get ready for the disclosure requirements of the CSRD.

Understanding the requirements will not only keep you in good stead but will also build resilience within the company.

There is a lot of change occurring in the sustainability reporting landscape. The EU Sustainable Finance Road Map is an ambitious and comprehensive package of measures to improve the flow of capital towards sustainable activities across the European Union.

The proposed CSRD and its uniform standards, can provide a consistent and comparable baseline that enables comparability of corporate disclosures across countries.

The proposed CSRD will reflect the principles of TCFD: governance, strategy, risk management and metrics and targets. A key recommendation of TCFD is scenario analysis which allows a company to understand and quantify the risks and uncertainties it may face under different hypothetical futures i.e., different climate warming scenarios. Scenario analysis is an expected requirement of CSRD and needs early commitment and involvement from stakeholders in the business.

The reporting standards to be developed for CSRD will integrate the green financial indicators and build on the “substantial contribution” and “do-no-significant harm” criteria of the taxonomy.

The NFRD currently has a ‘double materiality perspective’, meaning that companies must report about how sustainability issues affect their business and about their own impact on people and the environment.

Companies within scope of CSRD will have to report on a whole range of sustainability issues relevant to the company’s business. Sustainability information will cover not just environmental factors but also social and governance factors.

Social factors will include:

- equal treatment and opportunities for all, including gender equality and equal pay for work of equal value, training and skills development, the employment and inclusion of people with disabilities, measures against violence and harassment in the workplace, and diversity;

- working conditions, including secure employment, working time, ade-quate wages, social dialogue, freedom of association, existence of work councils, collective bargaining, including the rate of workers covered by collective agreements, the information, consultation and participation rights of workers, work-life balance and health and safety;
- respect for the human rights, fundamental freedoms, democratic prin-ciples and standards established in the International Bill of Human Rights and other core UN human rights conventions, including the UN Convention on Persons with Disabilities, the UN Declaration on the Rights of Indigenous Peoples, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work and the ILO fundamental conventions, the European Convention of Human Rights, the revised European Social Charter, and the Charter of Fundamental Rights of the European Union.

Governance factors will include:

- the role of the undertaking's administrative, management and supervi-sory bodies, with regard to sustainability matters, and their composition; and their expertise and skills to fulfil this role or access to such expertise and skills;

- information about any incentive schemes offered to members of the administrative, management and supervisory bodies which are linked to sustainability matters;
- business ethics and corporate culture, including anti-corruption and an-ti-bribery, the protection of whistle-blowers and animal welfare;
- the undertaking's engagement to exert its political influence, including its lobbying activities;
- the management and quality of relationships with customers, suppliers and communities affected by the undertaking's activities, including payment practices, especially with regard to late payment to SMEs; and
- main features of the undertaking's internal control and risk manage-ment systems, in relation to the sustainability reporting process.

SMEs and small and non-complex credit institutions and captive insurance undertakings can choose to report more limited information.

Subsidiary undertakings are exempt if they are included in the consolidated accounts of a parent undertaking that includes this information and provided the subsidiary undertaking includes certain specified information in its own accounts.

3. The limited assurance

The information disclosed under CSRD will be subject to mandatory external “limited” assurance, with the expectation being that there would be a shift towards a “reasonable” assurance requirement at a later stage. Reasonable assurance provides the user with a relatively high degree of comfort that the subject matter is not materially misstated. On the other hand, limited assurance provides a lower level of comfort and narrows the scope for the subject matter.

Initially limited assurance will be expected under CSRD, as companies are only starting to put in place processes and controls to report the data and metrics. The introduction of mandatory assurance is intended to level the playing field across all those falling into scope and users will benefit from better access to comparable, relevant, and reliable sustainability information from more companies. The proposal also introduces the potential for Member States to allow the assurance services for sustainability information to be provided by firms other than the traditionally engaged auditors of financial information.

Assurance ensures users are more confident in the sustainability information provided, gives more credibility to your reporting processes and overall is preferable to investors. It cannot be denied that CSRD is a turning point for sustainability reporting in the EU as it holds companies accountable for the sustainability information they disclose and puts increased responsibility on management and audit professionals to assure it.

4. The management report

Sustainability information is required to be included in the management report under CSRD. The management report is the directors report. In addition to this, digitalization is an important element of change to be adopted – companies will be required to prepare their financial statements and their management report in a single electronic reporting XHTML format in accordance with Article 3 of Commission Delegated Regulation (EU) 2019/815 and to “tag” their sustainability information according to a digital categorization system to be developed in conjunction with the sustainability reporting standards.

This is to support the EU’s ambition to create an open-access European ESG database with the European Single Access Point (ESAP) model and will mean the storing of information is aligned with the trajectory of a digital age. The digital categorization system would be developed together with other sustainability reporting standards, therefore harmonizing reporting, and allowing information to be used for different purposes in future.

Who must align to the new reporting directive?

The scope will include all large companies, all companies listed on the European stock exchange, publicly listed small and medium sized companies, subsidiaries of global non-EU firms, and companies with securities on EU-regulated markets.

Why should companies report?

- Increasing consumers awareness on ESG topics.
- ESG aspects are considered by investors in decision-making processes.
- Compliance with laws and regulations.
- Corporate Sustainability Reporting Directive (CSRD).

5. Directive goal

Directive goal aims at providing more verifiable, accessible, and coherent non-financial data while ensure alignment between non-financial and financial standards.

Three new criteria to define large companies: 40 million € in net turnover, 20 million € on the balance sheet, 250 or more employees.

The framework is based on a set of mandatory EU Sustainability Reporting Standards.

Companies must assess how their strategy and business model aligns with and impacts ESG matters.

The CSRD looks at both past performance and future strategy related to broader sustainability initiatives and how risk is mitigated. This should result in reporting that showcases a company's overall sustainability performance.

Companies will have to report according to mandatory EU Sustainability Reporting Standards that will be published by the end of October 2022.

Timeline

Timeline for the reporting entities is:

- 2024 – CSRD is fully enforced.
- 2025 – NFRD compliant organizations start reporting on 2024 data.

- 2026 – Large companies not subject to NFRD start reporting on 2025 data.
- 2027 – Listed SMEs & small credit institutions and insurance start re-porting on 2026 data.

Application of the Directive

First, the directive will apply to all companies listed on the EU regulated markets, except for listed micro companies. Listed small and medium-sized enterprises (SMEs), have until 1 January 2026 to comply with the reporting requirements, even though there's an "opt-out" clause until 2028.

Second, it will apply to a "large undertaking" that is either an EU company or an EU subsidiary of a non-EU company. A "large undertaking" is a defined term in the Accounting Directive[2] and means an entity that exceeds at least two of the following criteria:

- a net turnover of 40 million €;
- a balance sheet total of 20 million €;
- 250 employees on average over the financial year.

As a third category, the CSRD will apply to insurance undertakings and credit institutions regardless of their legal form.

There are also exemptions to the application of the CSRD. Most notably, a subsidiary will be exempt if the parent company includes the subsidiary in its report that complies with the CSRD. As mentioned above, listed micro companies and non-listed SMEs fall outside of the scope, but can apply the provisions on a voluntary basis.

To respect the principle of proportionality, the European Commission will adopt mandatory sustainability reporting standards for large companies and separate, proportionate standards for SMEs. While SMEs listed on regulated markets will be required to use the proportionate standards from 1 January 2026, non-listed SMEs may still choose to use them on a voluntary basis.

Non-European companies with substantial activity in the EU market (net turnover of more than 150 million € in the EU at consolidated level) and which have at least one subsidiary (large or listed) or branch (net turnover of more than 40 million €) in the EU are required to draft a sustainability report at the consolidated level of the ultimate third-country undertaking.

The EU subsidiary or EU branch is responsible for publishing the sustainability report of the third-country undertaking.

The sustainability reports of the third-country undertaking should be prepared according to separate EU reporting standards (i.e., standards different to the ones applying to EU companies). The undertaking can also report according to the standards applying to EU companies, or according to standards which are deemed equivalent according to a Commission's decision.

To ensure the quality and reliability of the reporting, the sustainability reports of third-country undertakings should be published alongside an assurance opinion by a person or firm authorized to give an opinion on the assurance of sustainability reporting, either under national law of the third country undertaking or of a Member State.

What are the new reporting standards?

Reporting will be in line with mandatory EU sustainability reporting standards (**ESRS**) that are being developed by the Commission. The Commission is expected to take account of global standard-setting initiatives for sustainability reporting when setting the ESRS and they should be aligned with disclosure requirements and indicators in various existing regulations, including the Sustainable Finance Disclosure Regulation (**SFDR**) and the Taxonomy Regulation.

There will be a proportionate set of ESRS for SMEs, which non-listed SMEs might choose to use voluntarily.

The European Financial Reporting Advisory Group (**EFRAG**) is responsible for developing draft ESRS. They need to cover not just the risks to companies but also the impacts of companies on society and the environment so that the 'double materiality' principle is maintained. At the Commission's request, EFRAG had already published technical recommendations and a roadmap for the development of ESRS.

On 29 April 2022, EFRAG launched a public consultation on the exposure drafts of the draft ESRS. This cover environmental, social, governance and cross-cutting matters. On 11 July 2022, the Securities and Markets Stakeholder Group submitted its advice to ESMA on EFRAG's consultation.

CSRD – disclose information

The CSRD aims to ensure that companies publicly disclose adequate information about the sustainability risks and opportunities they face, as well as the impacts they have on people and the environment (i.e., principle of double materiality). According to the directive, sustainability reporting should be “comparable, reliable and easy for users to find and make use of with digital technologies”.

Reported information should be consistent with EU regulations, including the EU taxonomy, an EU-wide classification system that establishes a list of environmentally sustainable economic activities.

The directive aims to reduce unnecessary costs associated with sustainability reporting. Its goal is to enable companies to meet the growing demand for sustainability reporting in a cost-efficient manner.

The revised directive amends four existing pieces of legislation:

- the Accounting Directive;
- the Transparency Directive;
- the Audit Directive;
- the Audit Regulation.

Sustainability reporting standards

When companies report under the directive, they will need to use a set of sustainability reporting standards being developed by the European Financial Reporting Advisory Group (EFRAG). In March 2021, EFRAG published a detailed roadmap for developing the new sustainability standards, as well as proposals for mutually reinforcing cooperation between the global and EU standard-setting initiatives. In 2022, EFRAG set the new Sustainability reporting pillar with the creation of the EFRAG Sustainability Reporting Board (SRB) and the EFRAG Sustainability Reporting Technical Expert Group (SR TEG). A consultation on a first batch of draft standards was launched in April 2022.

The sustainability reporting standards aim to meet the requirements of an inclusive range of stakeholders. They adhere to the principle of “double materiality”, with both “impact materiality” and “financial materiality” perspectives being applied and without ignoring the interactions between them.

The sustainability reporting standards shall ensure the quality and relevance of reported information, by requiring that it is understandable, relevant, verifiable, comparable and is represented in a faithful manner. The standards shall also avoid disproportionate administrative burden on companies, including by taking account to the greatest extent possible the work of global standard-setting initiatives for sustainability reporting, developed by the International Sustainability Standards Board (ISSB).

This set will specify the information that companies should disclose regarding all sustainability topics, as well as any additional disclosure obligations for financial market participants. Furthermore, the Commission aims to adopt a second set of reporting standards by 30 June 2024, with sector-specific standards, standards for listed SMEs, standards for nonEU companies and other complementary information that companies should report on.

The Commission will review the standards every three years after the directive has been applied to consider new developments, such as international standards.

The CSRD is a step change in corporate reporting

The CSRD marks a major step change in corporate reporting with farreaching implications for businesses on an individual basis, as well as for the future of sustainability reporting, both in Europe and globally. Companies, regulators, standard-setters, and auditors will all need to devote significant time and resources to prepare for implementation of the directive – within a short timescale. There will be certain expectations from businesses such as:

- Disclosing more sustainability-related information than before about their business models, strategy, and supply chains.
- Providing information that investors can compare with peers with expected capital flow toward companies authentically demonstrating a strong sustainability performance.
- Transforming how businesses approach their own decision-making pro-cesses and how they share their stories with their stakeholders.

Given the significance of the directive – and the remaining time to get ready for it – companies should now start preparing for its implementation. It's important to familiarize with the directive and to consider what its requirements mean for their business on a practical level.

Companies will need to consider how they identify and gather sustainability-related information, manage environmental, social and governance (ESG) risks, draw up policies, and set targets and KPIs with an opportunity to reassess their relevance. Companies should also remain abreast of any outcomes, interpretation, and communications from EFRAG during the standard-setting process to get early visibility of how the standards are likely to look.

How is this achieved?

This proposal consists of one Directive that would amend four existing pieces of legislation: the NFRD, revising some existing provisions and adding certain new provisions about sustainability reporting;

- the Audit Directive and the Audit Regulation, to cover the audit of sustainability information; and
- the Transparency Directive to extend the scope of the sustainability re-porting requirements to companies with securities listed on regulated markets, and to clarify the supervisory regime for sustainability reporting by these companies.

How does it fit with the SFDR and Taxonomy Regulation?

The SFDR governs how financial market participants (including asset managers and financial advisers) should disclose sustainability information to end-investors and asset owners. To be able to do that, those financial market participants need adequate information from investee companies. The CSRD aims to ensure that investee companies report the information financial market participants need to fulfil their own SFDR reporting requirements.

The Taxonomy Regulation establishes the framework for the EU taxonomy by setting out four conditions that an economic activity must meet for it to qualify as ‘environmentally sustainable’. It also requires companies within the scope of the NFRD to publish information on how and to what extent their activities are environmentally sustainable according to the taxonomy. See EU Taxonomy Regulation: ESG disclosure obligations for large companies for more information.

On 10 December 2021, a Commission Delegated Regulation (the Article 8 Delegated Act) setting out Level 2 measures under the Taxonomy Regulation was published in the Official Journal and took effect on 1 January 2022. The Article 8 Delegated Regulation specifies the KPIs for financial undertakings. It also sets out the detailed rules for complying with the Article 8 disclosure obligations, with the content, methodology and presentation of the KPIs being set out in a number of Annexes.

The CSRD consultation stated that the indicators in the Taxonomy Regulation are complementary to the information that companies must disclose under the NFRD, and companies will have to report them as well as other sustainability information required by the NFRD.

As noted above, the Commission is expected to align its ESRS with disclosure requirements and indicators in various existing regulations, including the SFDR and the Taxonomy Regulation.[3]

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[3] A Model for the Taxonomy of Research Studies: A Practical Guide to Knowledge Production and Knowledge Management - Authors: Shahram Yazdani, Armin Shirvani. Peigham Heidarpoor.

Companies affected by the directive

It is expected that approximately 49,000 EU companies will be required to report sustainability information in future, compared with 11,600 companies at present. While the directive aims to "reduce the unnecessary costs of sustainability reporting for companies", it is estimated that preparers will incur significant one-off costs as well as recurring annual costs to comply with the directive.

The directive highlights that companies already face a growing bill to provide sustainability information due to stakeholder demand. As a result, companies could effectively save by using the standards, depending on their size, on the basis that the standards remove the need for additional information requests.

Listed SMEs will only be expected to provide sustainability reporting that is proportionate to their size and resources, and since this is a big step for SMEs, seeking professional expertise from external partners can support with the transition.

Companies that fall within the scope of the CSRD will need to make some significant changes to how they prepare and disclose sustainability information.

Management will need to provide additional disclosures.

All sustainability information disclosed should apply a forward-looking and retrospective view and should be qualitative and quantitative. It should also consider short, medium, and long-term horizons and consider the company’s whole value chain.

Report in accordance with new sustainability reporting standards

Companies will use the new sustainability reporting standards to disclose information as part of their management report, thereby giving users of the report an integrated view of their impact and performance on environmental, social, and human rights, and governance (ESG) factors.

As the standards are currently being developed, more details will be made available in the coming months.

To make their sustainability information easier for users to search and machines to read, companies will be required to prepare both their financial statements and their management report in a single XHTML format and mark up sustainability information, tagged in accordance with a digital taxonomy.

Audit committees will need to oversee new reporting processes and monitor effectiveness of systems and controls setup.

Audit committees will have enhanced responsibilities under the new directive. Along with monitoring the company's sustainability reporting process and submitting recommendations to ensure the integrity of the sustainability information provided by the company, they will need to:

- Monitor the effectiveness of the company's internal quality control and risk management systems and its internal audit functions.
- Monitor the assurance of annual and consolidated sustainability reporting.

- Inform the company's administrative or supervisory body of the outcome of the assurance of sustainability reporting.
- Review and monitor the independence of the assurance providers.

Under the CSRD, there is a requirement for the company's statutory auditor, another auditor (according to Member State's option) or an independent assurance services provider (IASP) (Member State's option), to provide limited assurance around a company's reported sustainability information. Member States should set out equivalent requirements for IASPs around quality, independence and oversight in line with the Audit Directive.

There is also the option of moving toward reasonable assurance – the standard of assurance provided for financial information – at a later stage.

EU Member States are required to extend their current frameworks for providing public oversight of statutory auditors and audit firms to cover assurance of sustainability reporting.

The individuals within the company who are responsible for the annual report will be required to confirm, to the best of their knowledge, that the management report is prepared in accordance with the sustainability reporting standards.

The CSRD will make sustainability reporting by companies more consistent, so that financial firms, investors, and the broader public can use comparable and reliable sustainability information. Major public and private investments are needed to make the EU financial system sustainable and ensure Europe is climate-neutral by 2050. Better data from companies about the sustainability risks they are exposed to, and their own impact on people and the environment, is essential for the successful implementation of the European Green Deal and the Sustainable Finance Action Plan.

6. Conclusion

Companies only have a limited period to prepare for the implementation of the directive. As a result, it is essential they start acting now to understand the impact of the directive on their sustainability strategy, as well as its impact on their corporate reporting, internal controls, and other key business processes. These far-reaching changes will strengthen the nature of corporate performance and financial reporting widely across all sectors.

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Chapter 9
FINANCE FOR IMPACT: THE NEW ERA OF SUSTAINABLE FINANCE

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Abstract: *This chapter addresses the topic of the challenges that sustainable finance is currently facing under the spotlight of the criticism and the scrutiny surrounding ESG investing, as it does not create a meaningful impact on environmental and societal challenges. In the transition towards a sustainable economy the financial sector plays a key role, and the UN Sustainable Development Goals (SDGs) represent a meaningful framework to assess its contribution to a just society. A new phase of sustainable finance is required: rooted in the concept of double materiality the new sustainable finance cannot but be a "finance for impact.*

Keywords: Sustainable finance – Financial materiality – Double materiality – Impact.

Summary: 1. Introduction. – 2. Winds of change on the sustainable finance landscape. – 3. From sustainable finance to finance for impact. – 4. Conclusions. – References.

1. Introduction

The 17 SDGs [1] for 2030, adopted by the 193 countries of the UN General Assembly on September 25, 2015, with the resolution *Transforming our World: the 2030 Agenda for Sustainable Development* (UN, 2015), have been described as "the closest thing the Earth has to a strategy" (Pricewaterhouse Coopers, 2017). They are about making the world a better place for this generation as well as future generations, with *better* defined by the 169 targets for these 17 SDGs.

[1] More information on the United Nation's Sustainable Development Goals can be found at https://www.un.org/sustainabledevelopment/sustainable-development-goals/.

It is also widely acknowledged that the goals set for 2030 cannot be achieved by the public sector alone. [2] Although the limited availability of data and standardized criteria make SDG needs assessments difficult, the world's estimated financial needs for achieving the SDGs are between $5 trillion and $7 trillion a year. Indeed, the greater burden falls on the private sector with estimates that it will have to close the funding gap of $2.5 trillion per year and to ensure that the private sector provides the expected 50% of the total $115 trillion cost of funding the SDGs.

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[2] For pre Covid-19 estimates, see for example https://www.sustainablegoals.org.uk/filling-the-finance-gap/.

Business and policymakers have responded to this growing concern by seeking reforms to existing models that encourage a greater degree of ethical business practice and stronger enforcement of the rules of the game (Mayer, 2020). In the last couple of years, many of the largest corporations have rejected the conventional Milton Friedman (1970) doctrine in favour of a view that corporate purpose should reflect the interests of stakeholders as well as shareholders, leading the Business Roundtable to release, on August 2019, a new statement on the purpose of the corporation signed by 181 CEOs, who move away from shareholder primacy and commit to lead their companies for the benefit of all stakeholders (Business Roundtable, 2019. See Freeman, 1983 for a discussion of stakeholder theories). This has provoked a mixture of admiration, cynicism, scepticism, and opposition (Council of Institutional Investors, 2019).

However, it is worth underlining the importance for companies of having a clear and well-defined purpose (British Academy, 2019; McKinsey, 2020). Among the different possible meanings of ‘purpose’ applied to the business environment (Hsieh et al., 2018), we coincide with Edmans (2020) for whom: “Purpose is why an enterprise exists - who it serves, its reason for being and the role it plays in the world”. It is the answer to the question “how is the world a better place by your company being here?”. Purpose is the way in which an enterprise serves society (Mayer, 2020). By identifying its purpose, the company reveals its contribution to the SDGs.

The 2008 economic and financial crisis shed light on the negative effects induced from taking the pursuit of profit as the sole and exclusive purpose of the economic activity, and it has stimulated the thoughts of policy makers and scholars on the need to combine the search for a fair profit to that of the higher common good.

Worldly challenges related to climate change and demographic and technological developments, have made clear the need to redefine the economic development models adopted to date, making it no longer possible to delay the transition towards an economy which is sustainable from an environmental, social and governance point of view. There is only one planet Earth, yet – as pointed out by the United Nations – between now and 2050, the world will consume natural resources equal to three planets. [3]

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[3] See for example https://www.un.org/sustainabledevelopment/sustainable-consumption-production/.

The recent Coronavirus pandemic which enveloped the entire world has also shown the need to implement coordinated interventions by the various States aimed on the one hand at strengthening the sustainability and resilience of our societies, and, on the other, at modifying the way economic systems operate to minimize the risk of future health emergencies and ensure the ability of our societies and economies to withstand and recover from these emergencies.

The pandemic meant a substantial slowdown in the achievement of the goals as originally indicated (Sachs et al., 2020; UN, 2020; UN, 2020a), with some estimates that postpone the achievement of the SDGs by the 2092. [4] The economic downturn followed by the health crisis has spared no sector or economic area and has brought out inequality problems with even greater harshness. At the same time this crisis allows to put once again the question of what kind of development the globalized society wants to pursue at the center of the debate (WEF, 2021).

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[4] See the *Social Progress Index Report:* https://www.socialprogress.org/static/8dace0a5624097333c2a57e29c2d7ad9/2020-global-spi-findings.pdf.

The society never emerges from a crisis unaffected: either it ends up better or worse. Along this way, the reference to the SDGs as a 'roadmap' for humanity remains a valid and widely shared option.

2. Winds of change on the sustainable finance landscape

In the transition towards a sustainable economy the financial sector plays a key role: first, by being directly affected by the paradigm's change of economic theory and second, by playing the role of 'engine' for a sustainable growth, making available the necessary resources to achieve the SDGs. In this sense, the financial sector, blamed as the main cause responsible for the global financial crisis of 2008, has a significant opportunity for reputational recovery in its support function of the 2030 Agenda.

In this context, the adoption of a new investment choice paradigm led some scholars to use the term ‘sustainable finance’ although there is no univocal and shared definition of it. [5]

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[5] For a review, see, for example, Cunha et al., 2021.

On a theoretical perspective, sustainable finance recognizes both a greater range of potential values – including financial return, risk aversion, altruism for current and future generations, and concern for ecological resilience – and a larger potential set of returns or losses, both financial and otherwise (Fullwiler 2015). According to the European Commission: “Sustainable finance generally refers to the process of taking due account of environmental, social and governance (ESG) considerations when making investment decisions in the financial sector, leading to increased longer-term investments into sustainable economic activities and projects.”. [6]

[6] https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainablefinance/overview-sustainable-finance_en.

The absence of a shared definition of ‘sustainable finance’ and a common classification of ‘sustainable’ investments has led to the occurrence of *greenwashing* practices, that is a financial product marketed as environmentally friendly even when it does not properly meet environmental standards, or there is no real control over its authentic contribution to sustainability. Lacking a univocal and standardized definition of sustainable investments, the players in the financial sector have adopted different approaches and strategies for the investments selection (Global Sustainable Investment Alliance, 2018; Schoenmaker and Schramade, 2018). [7]

[7] See, for example, A first group of approaches are those in which intermediaries do not finance those investments made by companies operating in controversial sectors (weapons, tobacco, alcohol, etc.) or by States involved in human rights violation (that is *exclusion or negative screening*). The first group also includes investment selection strategies linked to thematic areas or sectors of intervention for sustainable development (*sustainability thematic investment*) such as, for example, renewable energy. Microfinance actors, for example, impact on the SDGs related to poverty (SDG 1), decent work (SDG 8) and gender equality (SDG 5). Also in this first group of approaches are those strategies aimed at selecting the investments of companies or States that comply with certain international standards, such as those of the UN or its agencies (*normed based screening*). A second group of strategies are those that can be defined as SRI performance evaluation united by the objective of estimating

performance both in financial and sustainability terms. Among these approaches, there are those aimed at financing the best companies within a universe (*best in class* or *positive screening*), a category or a class according to ESG criteria (*ESG integration*) or those that exercise their voting rights to influence the investments and behavior of companies *(engagement*). Finally, some actors finance investments that guarantee a financial return and a positive and measurable environmental or social *impact* (*impact investing*).

Notwithstanding that, the need to finance long term investments that respect the commitment to the sustainable development led policy makers and scholars to think how a transition to a sustainable finance might be possible, developing a variety of tools and products that attempt to integrate social and environmental factors into decision-making and investment evaluation processes, not just based on the exclusive search for profit.

The major drivers for change are at least three: 1) the growing trust of citizens in the business sector compared to governments and NGOs to solve major social and political issues (Edelman Trust Barometer, 2022), an element that pushes asset owners for 'doing well by doing good'; 2) the need for asset managers to face the 'tragedy of horizons', that is the distance between, for example, the climate perspective – which has a horizon of fifteen or twenty years – and that of a stock broker – with a one-minute horizon - that of the banker – with the horizon of a quarter – and that of a central bank governor – with a horizon of three or five years (Carney, 2015); 3) the high ownership concentration by asset managers that exposes them to the systemic risk of being 'too big to let the planet fail'. [8] The financial system is going through a 'silent revolution' that is allowing finance to be directed towards sustainable development (UNEP Inquiry, 2015).

[8] Bebchuk and Hirst (2019) shows that the proportion of S&P 500 shares managed by the Big Three - BlackRock, Vanguard and State Street Global Advisors - has grown approximately fourfold over the past two decades, from 5.2% in 1998, to 20.5% in 2017.

The increased interest on the ESG and the rise of sustainable investments over time go hand in hand with the increased interest on sustainable finance in the academic research. As shown in Figure 1, the attention on ESG term, the number of new signatories of Principles of Responsible Investments (PRI) – the largest global network of institutional investors committed to considering ESG issues in their investment processes – and the number of academic publications on sustainable finance was quite low worldwide from 2004 to 2016 when the slope began to increase and really started to spike up in 2019.

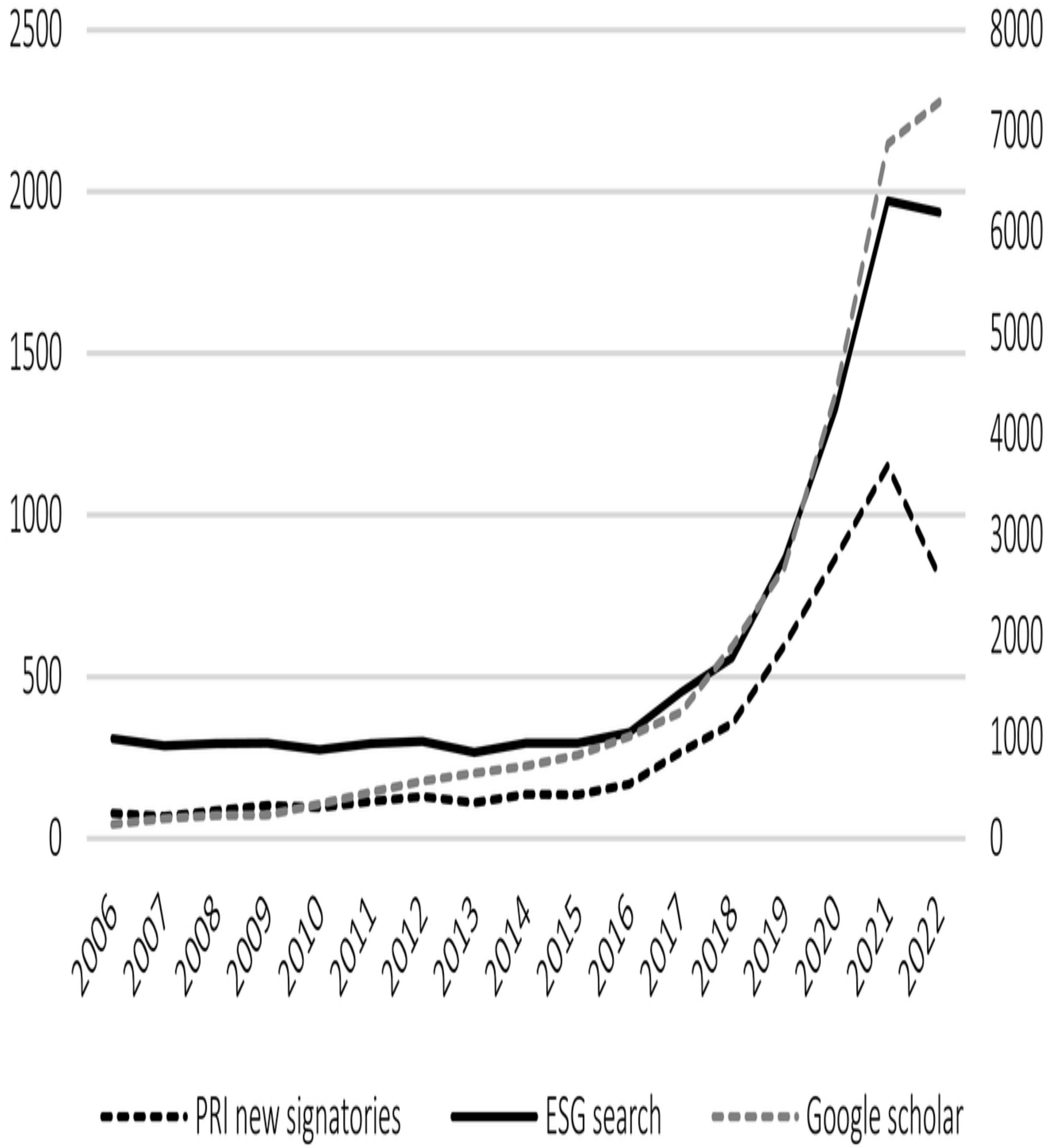

Figure 1. ESG Google Trend-PRI new signatories-Academic research on Sustainable finance

Source: Our elaboration on data from: Google Trend, PRI and Google Scholar.

Indeed, the Global Sustainable Investment Review (2020) reports that over US$ 35 trillion were managed according to responsible investment criteria across the world in 2020, with an increase of 55% compared to 2016. The data also show that reported sustainable investment assets make up a total of 35.9% of total assets under management, representing a growth of almost 30% from 2016.

An essential driver of this rapid growth in sustainable investments has been the concept of ESG financial materiality. Amel-Zadeh and Serafeim (2018), using survey data from a sample of senior investment professionals from mainstream investment organizations, highlighted that ESG materiality is likely to become an important part of investment practices as it is related to investment performance. In a similar vein, in their survey Unruh et al. (2016) found that an increasing number of investment firms are demonstrating that attention to nonfinancial material issues can produce positive impact on financial returns.

By ensuring material ESG factors are integrated into their investment and portfolio construction strategy, it is argued that ESG, helping managers achieves competitive returns or even outperformance, create a win-win value proposition that benefits both investors and society.

3. From sustainable finance to finance for impact

In the last few years, the value proposition of sustainable finance created by the concept of financial materiality has come under increased scrutiny. The main critic is that ESG is not creating a meaningful impact on planet and/or society, but simply gives the illusion of the power of market in solving systemic challenges.

Indeed, winds of change are blowing on the ESG and sustainable finance landscape. A study carried out by Schroders in 2021 spanning 750 institutional investors – collectively responsible for $26.8 trillion in assets – reveals that institutional investors are wanting more from their sustainable investments and asset managers and highlights that while Covid-19 has accelerated sustainable investing for institutions, sustainability remains a challenge and measuring and quantifying the impact of investments has become a priority (Schroders, 2021).

Financial materiality has led to an "ESG financialization": not only the weight of ESG investment dramatically increased in the last few years but also the ESG integration strategies in investment decisions made the sustainability component not a separate variable leading to an "ESG adjusted mean-variance" framework. Conversely, this new phase of sustainable finance, rooted in the concept of “double materiality”, makes sustainable finance a “finance for impact”, posing that generating competitive financial returns is not the solely goal but also long-term societal and environmental impact, with ESG impact on financial risk and return being in a dynamic relationship with societal and environmental systemic impact, as a function of the evolving of social, political, and macroeconomic factors.

Nevertheless, capital market actors do not yet widely evaluate double materiality. An analysis by High Meadows Institute (2021) on a sample of the world’s largest asset managers with the highest public equity, private equity, and fixed income exposure reveals that when double materiality is considered, the way varies across asset classes. It is included in the context of stewardship (public equity), it is done in a general, high-level manner with regards to stakeholder benefits (private equity) or in the context of engagement and themed funds (fixed income).

To strengthen the transition towards the new sustainable finance requires further measures, such as those aimed at bridging still existing information gaps. Information on the sustainability of economic and financial activities is essential to ensure the definition of the most appropriate incentives, the measurement of results, the correct evaluation of investments and the effective risk management. Within this new framework the challenge for investors is therefore to find impact measurement solutions able to measure not only impact on return to shareholders but also impact on stakeholders and systemic factors of portfolio companies, therefore charting progress on globally shared objectives like the Paris Agreement and the UN Sustainable Development Goals (SDGs). New impact measurement frameworks and standards, like the Capitals Coalition, the Value Balancing Alliance (VBA), and the Impact-Weighted Accounts Initiative (IWAI) have been developed in the last years with the aim to provide companies with clear methodology to report on their impacts with comparable and decision-useful metrics (see High Meadows Institute, 2021 for a review).

This is an ongoing transition process that could be strengthened by the implementation of coordinated measures of collaboration between the public and private sectors, both nationally and internationally, and by integration with sustainable development policies that directly impact the real economy.

With reference to the creation of a strategic framework for sustainable finance capable of overcoming these obstacles, the

European Commission set up, in December 2016, a group of experts (High level technical expert group on sustainable finance, "HLEG") in charge of developing the sector strategy for the European Union. The final report was published on 31 January 2018 which identifies two imperatives for the European financial system: 1) improving the contribution to sustainable and inclusive finance; 2) the consolidation of financial stability through the integration of ESG factors in investment decisions.

Based on the recommendations of the HLEG (2018), the European Commission published on 8 March 2018 a plan to finance sustainable growth that will contribute to achieving the objectives of the Paris Agreement on climate and those of sustainable development indicated in the document of the Commission (EC, 2018). The Action Plan presents ten measures to promote the transition of the EU financial system, mobilizing private funds towards sustainable investments, since public funding is insufficient compared to the vast and urgent needs arising from the pursuit of the SDGs.

The measurement of flows and stocks of sustainable financial assets then requires convergence on criteria and methodologies capable of identifying these assets in the financial statements and investment portfolios of financial intermediaries. In this sense, the recent EU Corporate Sustainability Reporting Directive (CSRD) built around the concept of double materiality will represent and important shift not only for impact reporting but also for its close connection with the EU Sustainable Finance Disclosure Regulation (SFDR) which mandates double materiality for asset managers.

4. Conclusions

It is evident that shareholders and management of financial intermediaries need to integrate sustainability considerations into their business strategies and financial resource allocation decisions. In this regard, measures are necessary to increase the ability of the various actors to use information on sustainability, while improving their analytical skills. Furthermore, since investment decisions are influenced by values, culture, company policies and, more generally, by the incentive systems adopted, it is necessary to internalize the sustainability objectives in the key corporate performance indicators which the personnel of the financial intermediaries is required to respond.

Precisely the need to make the achievement of the SDGs converge with the classic risk-return analysis requires asset managers to identify a link that allows to overcome well-known dichotomies. How can they support the SDGs while still delivering returns to shareholders? While investors may be enthusiastic about the SDGs, most of the money devoted to achieving them will come from the resource allocation decisions made by the companies in which they invest. Even if the incorporation of ESG factors in investment strategies is increasingly becoming the ‘new normal’, traditional ESG integration strategies do not explicitly take in to account a portfolio’s impact on SDGs.

A sustainable finance rooted on double materiality, and supported by rigorous impact measurement and management, has the potential to drive progress towards the Global Goals. Although if impact measurement and management is not yet widely adopted by financial institutions, they are incentivized to work to shift their asset flows by consultants and allocators. In addition, Governments have interest in supporting the shift to a new model of capital markets able to finance a just transition. They do not have, alone, the financial resources necessary to achieve the global societal and environmental goal, especially with the timeframe required to avoid the dangers of climate change, biodiversity losses and social inequality.

Until now, ESG driven sustainable finance has been focused on inputs and outputs of the business activity; a shift to outcomes and to impact is required, making necessary for companies to measure what has changed because of their business activities and how these outcomes affect society and the environment. How corporates will disclose their impact is critical for the development of a sustainable finance which can become a finance for impact.

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Chapter 10
ESG PERFORMANCE AND IMPACT MEASUREMENT IN THE BANKING INDUSTRY

Irma Malafronte, John Pereira

Abstract: All organisations have a significant influence on the society, from the way they treat employees to the way they serve their customers, but financial institutions have influence that goes much further. As providers of financial capital, they can direct funds into organisations that benefit society as well as influence others to change and create more sustainable business models. Measuring and reporting impact has a crucial role on reputation and credibility and are reflected in the financial returns. Social and environmental impacts are also materializing on banks' balance sheets, and it is anticipated that there will be increasing demand from regulators on environmental, social, and governance (ESG) issues, moving from voluntary to mandatory requirements. This raises important questions on how to adequately measure, manage, and report the *impact generated on clients, employees, and the society. This chapter provides an overview of ESG performance and impact measurement in the banking industry. It reviews evidence from academic research on ESG and banking, it offers an overview of ESG data in the banking industry compared to non-banking institutions, and summarizes initiatives related to impact measurement for financial institutions.*

KEYWORDS: ESG performance - ESG research - ESG data - Impact measurement - Banking.

1. Introduction

Banks play a fundamental role in the financial system and the society. They allocate funds to borrowers, provide specialized financial services, and contribute to make the economy more efficient. Banks' role in the society extends much beyond this; through their lending and investment activities, they have relationships with customers and organizations across sectors and as such they can contribute to a positive change for the people and the planet. As facilitators of financial capital across sectors, they can encourage organizations to develop more sustainable business models and can direct funds towards those that generate a positive impact on society. In return, banks will benefit in terms of enhanced reputation and credibility when taking environmental and social issues into account in financing decisions (BFI, 2021; 2022). Recent research shows that banks need to focus urgent attention on environmental, social, and governance (ESG) issues. Across the financial sector, banks have moved beyond merely including ESG goals in their mission statements; sustainability leaders do not view the ESG subject as a challenge, but as a major opportunity for banks to lead and capitalize on the once-in-a-generation transition that is taking place (Barrett et al., 2022). Moreover, with the introduction of ESG and sustainability topics in the financial sector, there is a new emerging risk, i.e., sustainability risk or ESG risk. This focuses on the potential effect an organization's stakeholders (such as customers, outsourcing suppliers, employees, or the environment) may exert and in reverse the impact that the organization may have on its stakeholders and the environment due to its activities. When occurring, ESG risks will have or may have negative impacts on the assets, the financial performance, the earnings situation, and the reputation of a bank (KPMG, 2021).

There is wide consensus on the role of finance and financial institutions in facilitating climate transitions plans and the incorporation of ESG practices into business operations. Social and environmental impacts are also materializing on banks' balance sheets, and it is anticipated that there will be increasing demand from regulators on ESG issues, moving from voluntary to mandatory requirements. This includes, among others, the Sustainable Finance Disclosure Regulation, [1] the European Central Bank climate risk stress test, [2] the recommendations of the Taskforce on Climate-related Financial Disclosures, [3] the EU Taxonomy Regulation, [4] the Corporate Sustainability Reporting Directive, [5] among others. In order to satisfy increasing expectations from customers, employees, regulators, and the wider society, banks need to incorporate sustainability and impact within their business operations. The financial system with its rules and supervisory controls are crucial at ensuring that financial intermediaries manage the related risks in compliance with the principles of sound and prudent management. Regulation is an important lever; the Basel Committee and the European Banking Authority are considering a revision of the current Basel regulatory framework, in consultation with the sector. In particular, there are ongoing discussions on potential revision of the prudential capital requirements (first pillar) specifically for activities exposed to ESG factors, the prudential control process (second pillar) to promote best practices in the management of climate risks, and the disclosure (third pillar) of the related information (Bank of Italy, 2022).

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1 For information on the Sustainable Finance Disclosure Regulation, see https://www.eurosif.org/policies/sfdr/.

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2 For information on ECB Banking Supervision 2022 climate risk stress test, see https://www.bankingsupervision.europa.eu/press/pr/date/2022/html/ssm.pr220127~bd20df4d3a.en.html.

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3 For information on the Taskforce on Climate-related Financial Disclosures, see https://www.fsb-tcfd.org/.

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4 For information on the EU Taxonomy Regulation, see https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en.

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5 For information on the Corporate Sustainability Reporting Directive, see https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reportingand-auditing/company-reporting/corporate-sustainability-reporting_en.

This raises important questions on how to adequately measure, manage, and report the impact generated on clients, employees, and the society as a way to future-proof banks in the face of environmental and social challenges (BFI, 2021; 2022). Within this debate, this chapter reviews evidence from academic research on ESG and banking, it offers an overview of ESG data in the banking industry compared to non-banking institutions, and summarizes initiatives related to impact measurement for financial institutions.

2. ESG and banking: evidence from academic research

A growing body of research investigates the implementation of ESG criteria and its link to performance, value creation, and risk in the banking industry (Ahmed et al., 2018; Azmi et al., 2021; Buallay, 2018; Chiaramonte et al., 2022; Cui et al., 2018; Di Tommaso and Thornton, 2020; Miralles-Quir'os et al., 2019; Shakil et al., 2019; Umar et al., 2021; among others). Existing research shows the various channels through which ESG activities could impact bank performance. Investment in ESG could influence a bank's cost of capital, its cash flows, and its efficiency. ESG activities have the potential to reduce conflicts between stakeholders and the information asymmetry deriving from lower monitoring cost (Cui et al., 2018; Healy and Palepu, 2001). The reduced information asymmetry ensures greater demand for bank shares and bonds, thus improving its cost of capital. The cash flow channel linking the impact of ESG on bank performance is directly related to its ability to invest in value enhancing projects tied to a bank's financial constraints. Banks with better access to funds via borrowing or through customer deposits could invest in projects with a positive net present value, increasing their cash flow, while those with greater financial constraints might have to forego profitable opportunities. Reduced information asymmetry also reduces the financial constraints, enabling banks to make more loans thereby increasing their cash flow. Further, banks that engage in ESG activities should incur lower cost from future regulations. Indeed, sustainable firms engaging in greater product and strategic innovation can reduce their cost significantly thereby improving their efficiency.

Buallay (2018) highlights a significant positive impact of ESG on banks' performance, measured in terms of bank's operational (Return on Assets), financial (Return on Equity) and market performance (Tobin's Q), for 235 banks over the period 2007–2016. Specifically, the findings show that environmental disclosure positively affects banks' operational and market performance, social responsibility disclosure negatively affects the three performance measures; and governance disclosure negatively affects ROA and ROE while it positively affects the market performance. Similar results are found by Azmi et al. (2021); using a sample of emerging market banks over the period 2011 to 2017, they find that increase in ESG activities improves banks' performance. However, their study also finds that while low levels of ESG activity positively affect bank value, high levels of ESG activity exhibit diminishing returns to scale. Their study concludes that bank managers should be mindful of diminishing marginal returns to large amounts of ESG activity and that beyond a certain threshold, banks could more efficiently allocate resources away from ESG activity. In the context of emerging markets from 2015 to 2018, Shakil et al. (2019) explore the effects of ESG performance of banks on their financial performance and find a positive association of emerging market banks' environmental and social performance with their financial performance, while governance performance does not influence financial performance. Birindelli et al. (2018) find an inverted U-shape relationship between women on the board of directors and a bank's ESG performance on a sample of 108 listed banks in Europe and the United States for the period 2011–2016, concluding that only gender-balanced boards positively impact a bank's performance for sustainability.

Apart from the growing pressure from stakeholder groups to report and consider ESG factors within their business operations, banks would also need to see benefits of diversifying their credit and market books to include carbon neutral investments. Using a sample of banks across 19 EU member states, Umar et al. (2021) find that banks that focus on carbon neutral lending have lower credit risk. This could be explained by the lower earnings and cash flow volatility translating into higher repayment capacity for businesses that focus on carbon neutrality. This benefit is also found to be more pronounced for small banks compared to medium and large sized banks, due to the constrained nature of small bank's credit books that are more sensitive to borrower's repayment capacity. These results provide further support to the incentive available for banks to increase green lending and thereby saving on loan loss provisions and economic capital associated with their lending activities. This study also points towards the need for banking regulation to promote green financing by incentivising banks through prudential interventions and requiring a lower loan loss provision, collateral requirements, and adjusting the capital charge. Supporting this evidence, Chen et al. (2022) demonstrate that banks benefit by extending green loans, and experience better spreads and reduction in the likelihood of default. Their results confirm that when a bank's credit portfolio is skewed towards green lending, it helps in lowering the chances of bank default. As a bank's failure erodes the depositors' wealth and results in an overall drag on the financial system, the investment in sustainable credit portfolios benefit not only the bank but also the macroeconomy.

Using a sample of European banks operating in 21 countries over 2005– 2017, Chiaramonte et al. (2021) find that the total ESG score, as well as its sub-pillars (Environmental – E, Social – S, Governance – G), reduce bank fragility during periods of financial distress; this stabilizing effect is particularly strong for banks with higher ESG ratings. Moreover, during the financial crisis, the longer the duration of ESG disclosures, the greater the benefits on stability. Di Tommaso and Thornton (2020) examine whether ESG scores of European banks impact on their risk-taking behavior and on bank value. In line with the "stakeholder" view of ESG activities, the findings show that high ESG scores are associated with a modest reduction in risk-taking for banks that are high or low risk-takers, and that the impact is conditional on executive board characteristics. However, high ESG scores are also associated with a reduction in bank value consistent with the "overinvestment" view of ESG whereby scare resources are diverted from investment. Therefore, the authors conclude that there is a trade-off between reducing bank risk-taking and a more stable financial system on the one hand and bank value on the other.

Recently, Galletta et al. (2022) have conducted a bibliometric analysis of ESG performance in the banking industry, with the aim to find, summarise, and analyse existing studies and uncover patterns in the field. A review of 271 articles, including co-authorship analysis, citation analysis, keyword cooccurrence analysis, bibliographic coupling analysis, and co-citation mapping analysis, documents a rising interest in ESG factors in academic research in the banking industry, mainly focused on CSR and the social dimension of ESG. The main findings show, among others, that ESG studies in the banking sector have shown a growing interest towards ethical issues since 2011, with limited focus on environmental issues, and research has been published on management and business journals. Therefore, a gap has emerged on the relationship between the effectiveness of environmental policies and performance.

3. ESG data in the banking industry

Several databases are used by researchers and practitioners to measure a company's commitment towards environmental, governance, and social issues. Among others, Bloomberg's

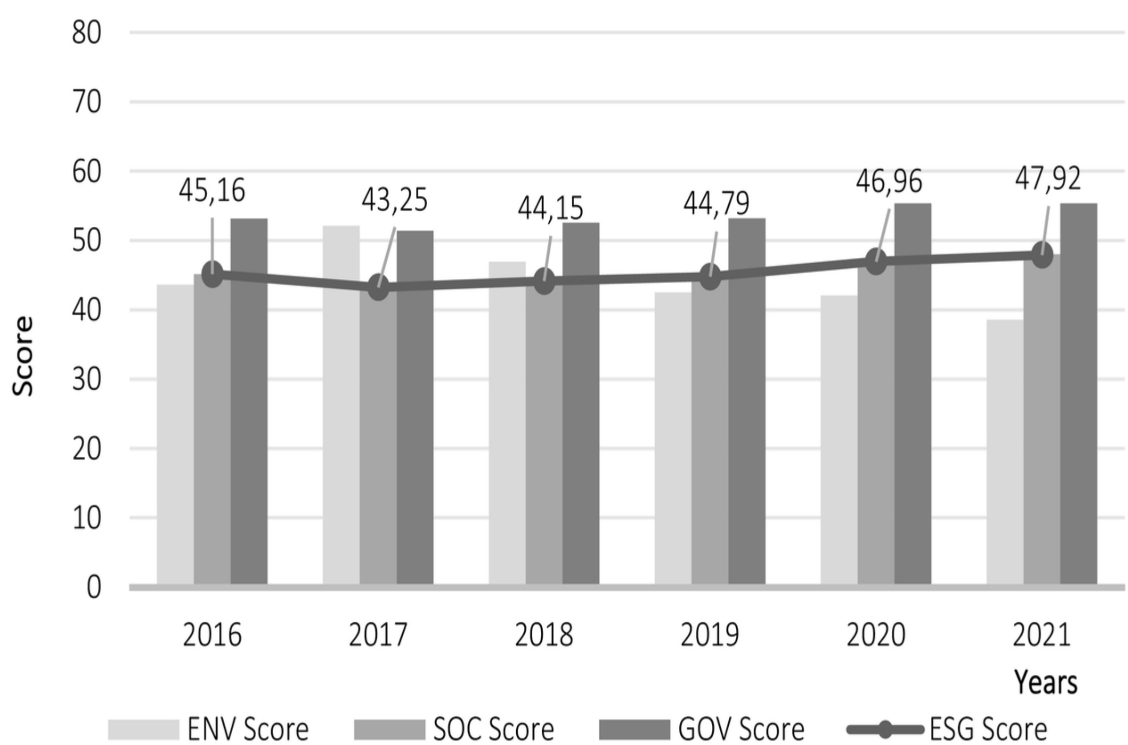
Environmental, Social & Governance (ESG) dataset [6] offers ESG metrics and ESG disclosure scores for more than 14,000 companies in more than 100 countries; it includes asreported data and derived ratios as well as sector and country-specific data points. Bloomberg provides ESG data organized into more than 2,000 fields that span several key sustainability topics, including but not limited to: air quality; climate change water and energy management; materials and waste; health and safety; audit risk and oversight; compensation; diversity; board independence, structure and tenure; shareholders' rights. Similarly, the Refinitiv ESG score [7] measures a company's ESG performance based on verifiable reported data in the public domain; it captures and calculates over 630 company-level ESG measures, of which a subset of 186 of the most comparable and material per industry power the overall company assessment and scoring process. The category scores are rolled up into three pillar scores – environmental, social and corporate governance; the overall ESG pillar score is a relative sum of the category weights which vary per industry for the 'Environmental' and 'Social' categories; for 'Governance', the weights remain the same across all industries. Through these databases, it is possible to collect data and conduct analysis for large samples, thus offering the opportunity for a comprehensive overview of the phenomenon.

6 For more information, see https://www.bloomberg.com/professional/dataset/global-environmental-social-governance-data/.

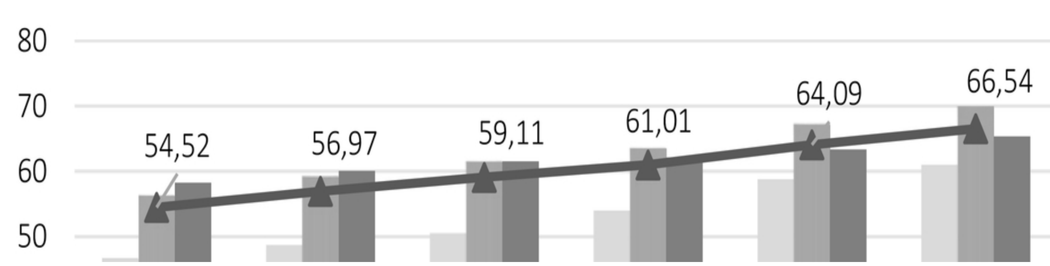
7 For more information, see https://www.refinitiv.com/en/sustainable-finance/esg-scores.

In Figure 1, we report ESG data from Refinitiv and compare the ESG scores of banks (Panel A) in US, UK and EU to non-banking firms (Panel B) in the S&P500 index over the period 2016 to 2021, together with a comparison of the trend in the environmental (ENV), social (SOC), and governance (GOV) scores which form the three main pillars of the ESG score. Over the last six years, we note a clear and consistent trend, where the average ESG scores has been steadily increasing for non-banks while the trend is mostly consistent for banks compared to non-banking institutions. Further, banks have lower average ESG scores compared to nonbanks as a whole and across the individual ENV, SOC and GOV components. Further, the average score across the GOV pillar is higher compared to the SOC or ENV pillar indicating a better disclosure quality on the corporate governance aspects of bank management than the social and environmental performance. While there is rationale in assuming that banks have lower environmental footprints through their direct operations and activities, one cannot discount the rippling effect of banks' lending decisions on the ESG activities of the firms through the projects they extend credit to, making banks an important party in the ESG space. The ESG measure obtained from Refinitiv Eikon is based on the consideration around comparability, impact, data availability and industry relevance that varies across industry groups.

Panel A. Banks



Panel B. Non-banks



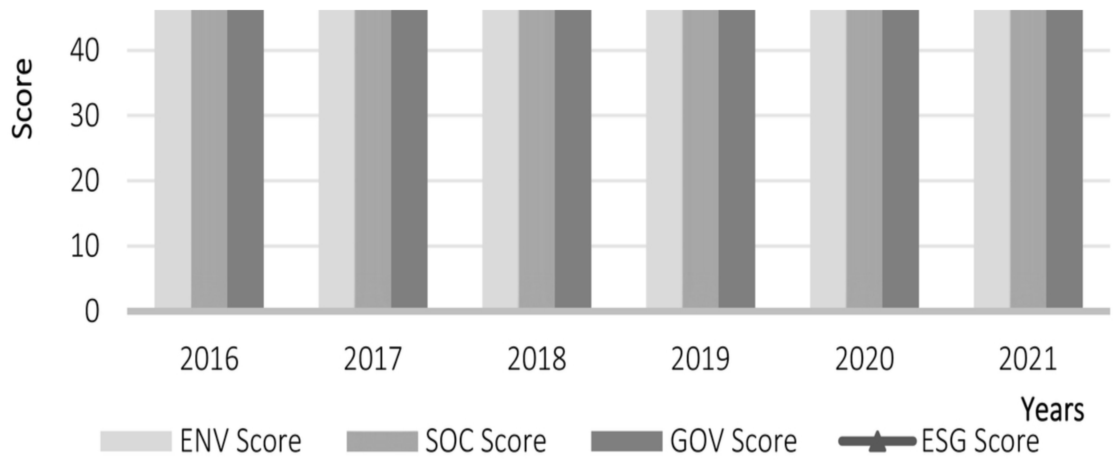
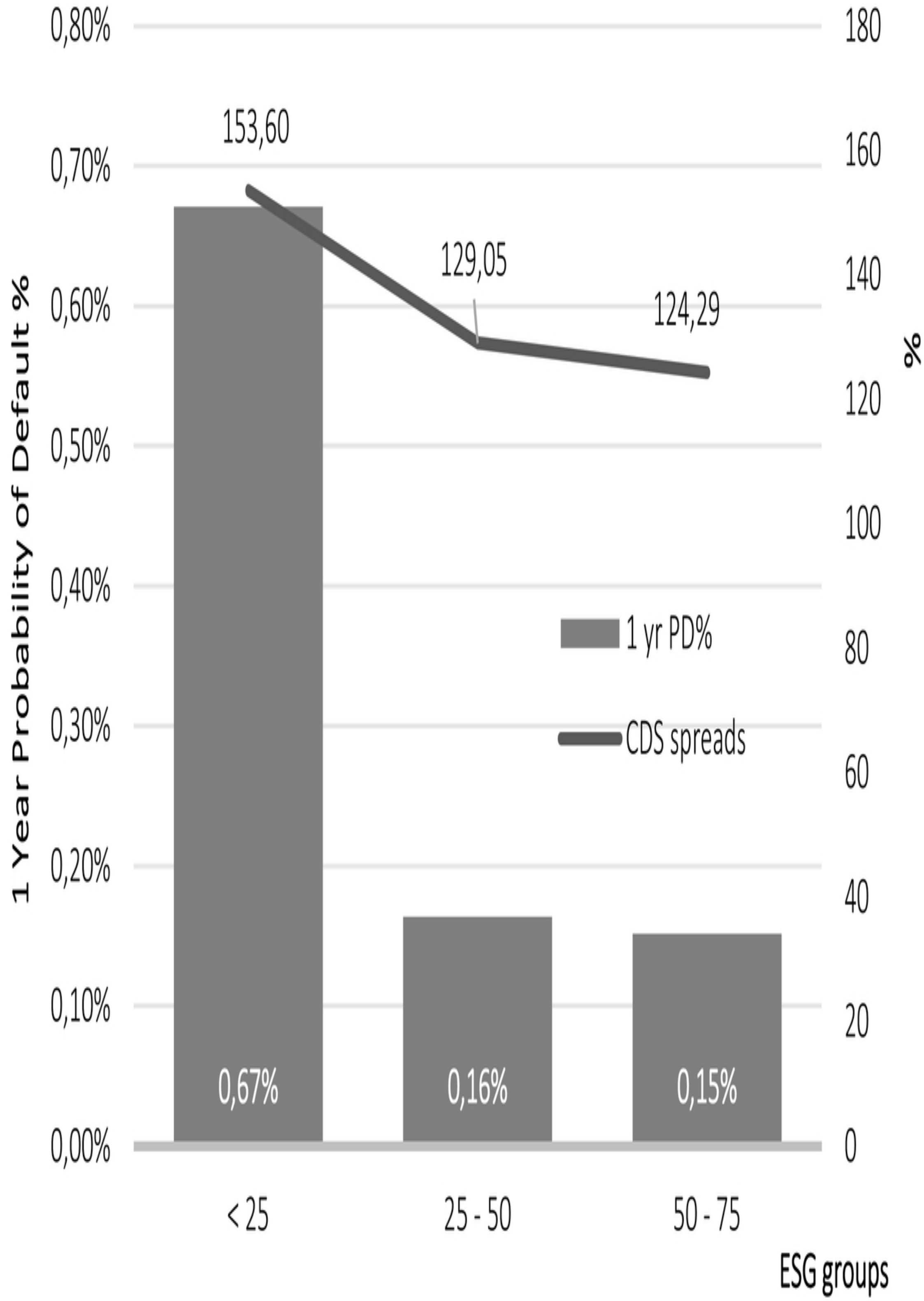


Figure 1. ESG data of banks vs non-banks over the period 2016–2021 Panel A. Banks

Source: Refinitiv.

Recent research shows a negative relationship between ESG and probability of default. Companies with a stronger commitment to sustainability are found to be the most solid ones, with a lower probability of default, and lower credit risk. The analysis was carried out on a large database of over 18,000 Italian companies and a significant sample of foreign companies, across different size and sector. [8] We observe similar results for banks across our global sample, where a higher Bloomberg ESG score is associated to a lower one-year probability of default and credit risk proxied by 5 years CDS spread. Banks in the first quartile of ESG score (i.e., ESG score < 25) have a probability of default that is around 4 times higher than that of the most virtuous (Figure 2). Table 1 reports the values of the ESG score and some components from Bloomberg ESG dataset.



1 Year Probability of Default %
0,80%
0,70%
0,60%
0,50%
0,40%
0,30%
0,20%
0,10%
0,00%
180
160
140
120
100
80
60
40
20
0
%
153,60
129,05
124,29
1 yr PD%
CDS spreads
0,67%
0,16%
0,15%
< 25
25 - 50
50 - 75
ESG groups

Figure 2. ESG score vs risk

Source: Bloomberg.

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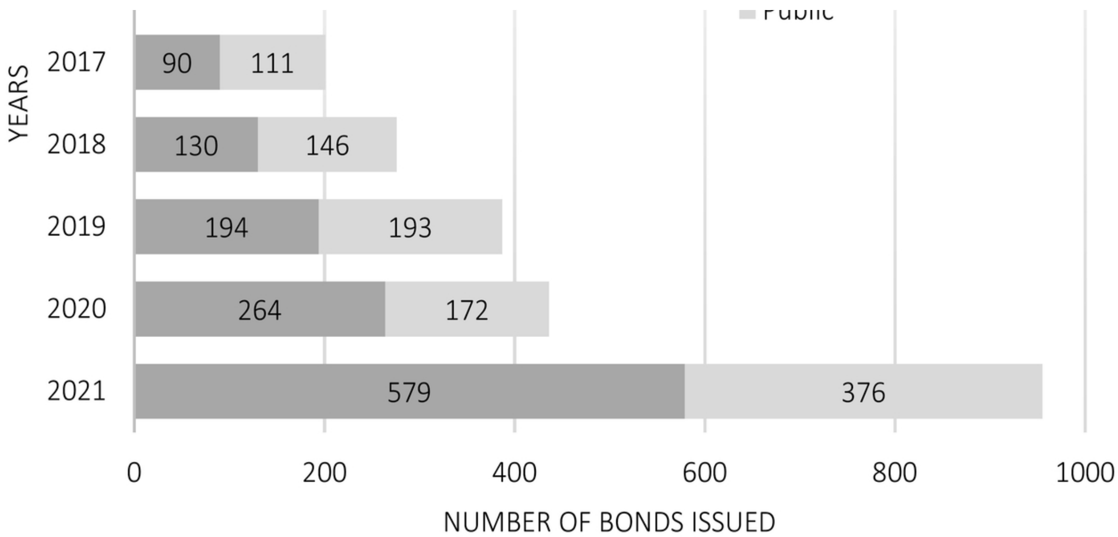
8 Research from ESG Connect, Cerved Rating Agency https://www.cerved.com/cerved-esg-connect/

As mentioned earlier, banks play a crucial role in the transition to a sustainable economy through their products and services. Among these, it is important to mention the role of green bonds, a recent development in corporate finance that has become increasingly popular in recent years. Figure 3 shows the number of green bonds issued by public and private firms (Panel A) and by financial and non-financial firms (Panel B) globally over the period 2014 to 2021. This includes all corporate bonds with fixed or floating rate coupon with maturity ranging from 1st Jan 2013 to 31st Dec 2099. The data is extracted from Bloomberg's fixed income database for bonds that are labelled as "green bonds" (more precisely, bonds for which the field "Green bond indicator" is "Yes").

Panel A. Green bonds issued – Public vs Private



Panel B. Green bonds issued – Financial vs Non-Financial

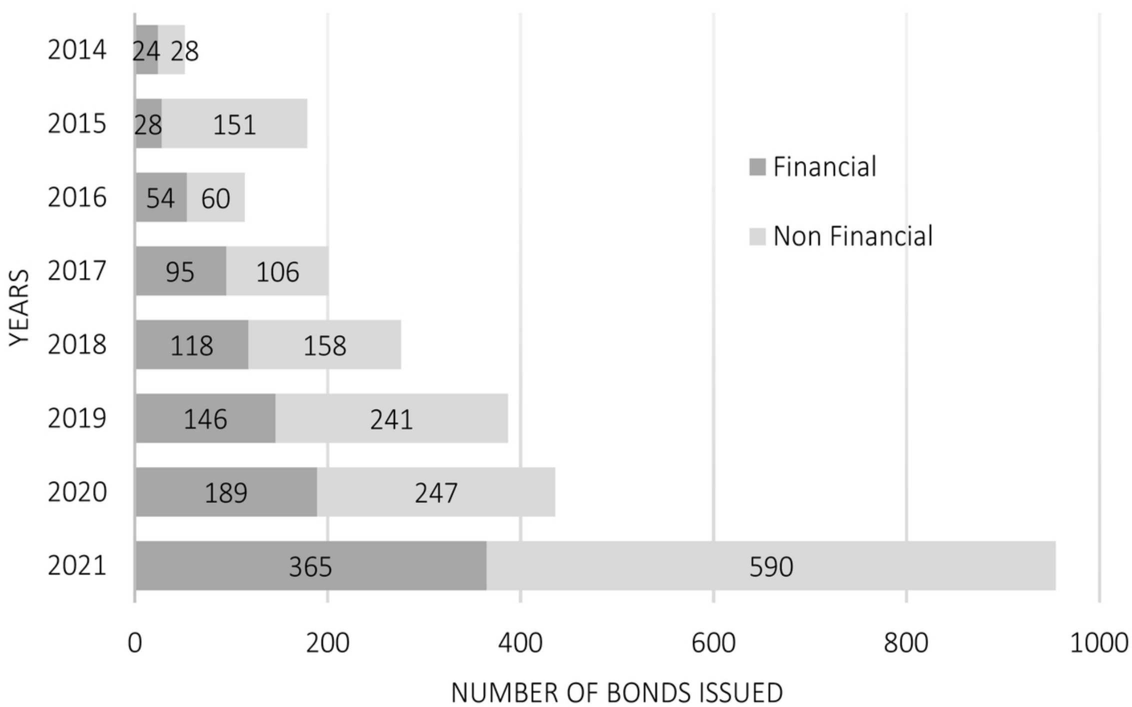


Figure 3. Issuance of Corporate Green bonds by Public and Private firms (Panel A) and by Financial and Non-financial firms (Panel B) globally Panel A. Green bonds issued – Public vs Private

Source: Bloomberg.

Table 1. Bloomberg ESG scores and components

Variable Name	Average Values	Units
ESG DISCLOSURE SCORE	46.69	Out of 100
ENVIRONMENTAL DISCLOSURE SCORE	26.60	Out of 100
Total Energy Consumption	250.25	Thousands of MWh
Renewable Energy Use	136.56	Thousands of MWh
Total Waste	38.03	Thousands of metric tonnes
Waste Recycled	2.10	Thousands of metric tonnes

Variable Name	Average Values	Units
GHG Scope 1 & 2 Location-Based	80.74	Thousands of metric tonnes
Electricity Used	175.81	Thousands of MWh
Total Water Use	4,483.49	Thousands of cubic meters
SOCIAL DISCLOSURE SCORE	31.04	Out of 100
Board Members that are Women	24.62	% age
Employee Turnover	12.16	% age
Women in Workforce	49.84	% age
Community Spending	6,945.59	In millions

Variable Name	Average Values	Units
Gender Pay Gap to Total employee	83.48	% age
Non-Executive Directors on Board	9.64	Number
Independent Directors	60.12	% age
GOVERNANCE DISCLOSURE SCORE	82.30	Out of 100
Women on Board of Directors	23.79	% age
Board Meeting Attendance	94.12	% age
Board Average Age	60.49	Years
Size of the Board	11.36	Number

Variable Name	Average Values	Units
CEO Duality	19.68%	% age of CEO as Chairman

Source: Bloomberg.

Green bonds are those bonds whose proceeds are committed to finance environmental and climate-friendly projects, such as renewable energy, green buildings, or resource conservation. The table reports the evolution of green bonds over the years, evidencing the rapid growth in demand for corporate green bonds. The trend is likely to continue given the growing popularity of sustainable finance and investors demand for green instruments.

To qualify as a certified green bond, organizations must undergo third party verification to establish that the proceeds are funding projects that generate environmental benefits, giving rise to administrative and compliance costs. Given the constraining nature of the green bonds due to their potential to restrict companies' investment policies, a seemingly superior strategy would be to issue conventional bond and use its proceeds to fund green projects. Financial and non-financial companies can issue green bonds for a variety of reasons; as per the signalling argument, issuing a green bond serves as a credible signal of a company's commitment towards environment which is valuable for investors in the face of insufficient information on company's environmental commitment. The cost of capital arguments states that, if green bond investors are willing to trade off financial returns for social benefits, companies may choose to issue green bonds and obtain cheaper financing through lower cost of capital. However, issuing green bonds could also be a form of "greenwashing", where companies may issue green bonds to portray themselves as environmentally responsible without taking any tangible actions. Regardless of the company's rationale for issuing green bonds, it is worth noting that financial institutions are involved in the issuance, underwriting and purchasing of debt instruments which makes them an important party in the green bond boom.

4. Impact measurement in the banking sector

Several initiatives have been put in place in order to stimulate awareness on the key role and responsibility of banks in the society and make substantial progress towards measuring impact in the banking sector.

Among these, in 2019 a partnership between founding banks and the United Nations (UN) has designed a framework based on six principles, aimed to bring purpose, vision, and ambition to sustainable finance (Box 1). [9] The letter signed by the Chairs or CEOs of the involved institutions recognizes that "*only in an inclusive society founded on human dignity, equality and the sustainable use of natural resources, can our clients and customers and, in turn, our businesses thrive*". Indeed, *"banking is based on the trust our customers and wider society put in us to serve their best interests and to act responsibly"* and *"it is our purpose to help develop sustainable economies and to empower people to build better futures*."

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9 Further information on the UN Principles for Responsible Banking is available at http://www.unepfi.org/banking/bankingprinciples.

The UN Principles for Responsible Banking are a unique framework for ensuring that signatory banks' strategy and practice align with the vision society has set out for its future in the Sustainable Development Goals and the Paris Climate Agreement. The framework also identifies a three-step process to guide signatories through implementing their commitment. The first step is Impact Analysis, focused on identifying and analyzing the most significant impacts of a bank's products and services on the societies, the economy and the environment that the bank operates in. To successfully implement the principles, banks should determine the scope of the impact analysis, within the context with respect to the counties/regions where the bank operates and prioritize the 2 most significant impact areas by engaging with internal and external stakeholders.

The second step refers to Target Setting, that requires setting and achieving measurable targets in a banks' areas of most significant impact. Signatory banks must set at least two targets to address the significant impact areas, set milestones and implement actions to meet their targets. Targets need to be Specific, Measurable (quantitative or qualitative), Achievable, Relevant and Time-bound (SMART). After conducting the impact analysis in step one and setting the targets in step two, the third step entails Reporting; this includes publicly reporting on the progress the bank has made in implementing the principles and being transparent about impacts and contributions.

The increasing relevance of ESG topics in the financial sector requires banks to develop impact measurement and management models that can be stress tested by regulators. The Banking for Impact (BFI) working group is committed to create a common impact measurement and valuation approach; a robust, scalable, and cost-effective method for the quantification, valuation, attribution, and aggregation of impacts for the sector. BFI has proposed a tailored four-pronged approach to create meaningful impact measurement and valuation (IMV) for banks.

BOX 1. PRINCIPLES FOR RESPONSIBLE BANKING

The signatory banks commit to the ambitions set out in the following Principles:

Principle 1: Alignment. We will align our business strategy to be consistent with and contribute to individuals' needs and society's goals, as expressed in the Sustainable Development Goals, the Paris Climate Agreement and relevant national and regional frameworks.

Principle 2: Impact & Target Setting. We will continuously increase our positive impacts while reducing the negative impacts on, and managing the risks to, people and environment resulting from our activities, products and services. To this end, we will set and publish targets where we can have the most significant impacts.

Principle 3: Clients & Customers. We will work responsibly with our clients and our customers to encourage sustainable practices and enable economic activities that create shared prosperity for current and future generations.

Principle 4: Stakeholders. We will proactively and responsibly consult, engage and partner with relevant stakeholders to achieve society's goals.

Principle 5: Governance & Culture. We will implement our commitment to these Principles through effective governance and a culture of responsible banking.

Principle 6: Transparency & Accountability. We will periodically review our individual and collective implementation of these Principles and be transparent about and accountable for our positive and negative impacts and our contribution to society's goals.

Source: The 6 Principles for Responsible Banking, UN environment programme finance initiative (https://www.unepfi.org/banking/bankingprinciples/more-about-the-principles/).

BOX 2. IMPACT MEASUREMENT IN THE BANKING SECTOR: DEFINITIONS

Impact – the difference an individual or entity makes in the world by having an effect on the things valued in society.

Positive Impact – a positive change of a capital stock, or a positive change in the wellbeing of a stakeholder or prevention of the breach of a right (as compared to the reference scenario).

Negative Impact – a negative change of a capital stock, a negative change in the wellbeing of a stakeholder or the breach of a right (as compared to the reference scenario).

Intended Impact – the impact that an organisation purposefully makes through their activities.

Unintended Impact – the impact that an organisation does not purposefully make through their activities, but that arises as a side effect of the activities. Unintended impact can be assessed by making use of impact pathways.

Direct Impact – an impact caused directly by the organisation's own operations.

Indirect Impact – arises outside the organisation, where the organisation's activities exert an influence on a pathway or system which influences the occurrence or size of the impact. Absolute Impact - the impact generated by an organisation's activities as compared to a no alternative reference scenario in which no activities occur.

Marginal Impact – the additional impact generated by the organisation's activities as compared to a scenario where alternative activities continue in the organisation's absence.

Source: BFI (2022), 11–12.

IMV is a methodology for quantifying non-financial impacts into monetary units, tailored to the financial sector. To capture the full scope of a bank's impact, IMV is focused on four key aspects: Quantification; Valuation; Attribution; Aggregation (Table 2).

Table 2. Banking for Impact – Our Proposal

1. Quantification	2. Valuation
For financial firms to manage impacts, it will be key to quantify them. Quantification is the process of measuring the outcomes of activities in quantitative units. Many impacts can be easily and naturally measured, such as the number of jobs created, or amount of CO_2 emitted. Others may require more work to	After quantification, impacts are translated into monetary values so they can be evaluated in relative terms. This valuation places different types of impact into the same context (monetary) so that they may be compared. When comparing alternatives (be they an investment, policy, or client related) some decisions are positive for certain impacts (e.g., jobs or

1. Quantification	2. Valuation
quantify, like the wellbeing created from employment. By tackling quantification, it will be possible to measure, track, manage and report on all types of impact in a clear and consistent manner.	biodiversity), but negative for others (e.g., climate and healthcare). Valuation can reveal whether the gains outweigh the losses.

3. Attribution	4. Aggregation
While financial institutions do create some impact directly (e.g., paying staff and ensuring buildings are energy efficient), by in large, the majority of their impact is indirect, through the facilitation of client activities (e.g.,	The final step in the IMV approach is aggregation, wherein impact information is combined to be made suitable for comparability and decision-making (i.e., about the entirety of a company rather than its individual practices). Aggregation can be tricky

1. Quantification	2. Valuation
lending, financing or providing investment advice). Financial institutions are still partially responsible for this indirect impact. Determining how responsible the firm is and transferring a portion of impact from client to firm, is called attribution.	even for nonfinancial companies because when certain factors are combined (i.e., child labour and CO2 emissions), the actual impact my not be accurately reflected. Therefore, care must be taken to avoid loss of information during the process and standards need to be set for what types of impact can be aggregated and how.

Source: BFI (2021), 19–20.

5. Conclusions

The banking sector plays a crucial role in supporting the economic growth by providing an efficient intermediary function between suppliers and users of capital. As banks use significantly more resources than non-financial firms, they are under greater pressure to provide societal benefits. Banks in their primary role as financial intermediaries can help mobilize resources to promote a carbon neutral corporate structure. Banks also play a strategic role in funding projects that can affect environmental change. As banks are the major contributor to corporate financing and lending, their investments in green assets are crucial to achieve the zero-carbon economy and are vital to support sustainable growth.

ESG topics have been at the attention of financial institutions for a while. What has changed compared to the past is the urgency that ESG issues have taken on the global political agenda and, consequently, the greater awareness by all stakeholders of their centrality in ensuring the sustainability of business models. Financial institutions have already taken significant steps in response to market pressure, with most banks implementing ESG strategies (Bank of Italy, 2022).

As discussed in this chapter, there is growing research on the implementation of ESG criteria and its link to performance, value creation, and risk in the banking industry; research documents that ESG activities have a positive impact on banks' performance, value creation, and reputation, while reducing credit risk and bank fragility. Data on ESG shows a steady commitment to sustainability by banks across different geographic areas and an increased interest towards the issue of green bonds. A negative association can be found between ESG performance and bank's probability of default i.e., the credit risk. Several initiatives are moving towards the direction of defining a common framework to measure and report on impact; this includes, among others, the UN Principles for Responsible Banking and the Banking for Impact working group, that have been presented in this chapter. The financial intermediaries that will be able to integrate ESG factors into their investment processes and credit decisions will benefit in terms of competitive advantage and exploiting the opportunities offered by the transition, while those who are not ready to do the same are expected to be penalized in terms of their market positioning, may find it difficult to manage the evolution of the quality of their portfolio, eventually finding themselves more exposed to ESG risks (Bank of Italy, 2022).

In spite of the growth and development of ESG related disclosure and initiatives, it is still a long way towards achieving comparability and accountability across the ESG space. To get to the meat of the matter, lenders and financial markets need quality, coherent and comparable data, and a standardized framework for measuring and reporting on impact. Although the number of firms providing a sustainability or ESG report has soared, these reports lack the rigor and consistency of traditional financial statements. There have been growing calls for a more standardized and better corporate ESG reporting framework. Governments and regulations are responding by mandating corporate reporting on ESG, albeit for firms with certain characteristics. As companies start collating and reporting on ESG data, it will help banks and investors make more informed decisions. Climate change has become one of the key areas of concern across all sectors of the economy. Firms are being evaluated on their role in helping countries achieve their bold commitments towards The Paris Agreement, and banks play a crucial party in tackling the climate emergency through lending.

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Chapter 11
MEASURING, MANAGING, AND COMMUNICATING IMPACT: THE CASE OF ABN AMRO

Irma Malafronte, Alexander Carp, Andre Jakobs

Abstract: This chapter describes the experience of ABN AMRO in the field of sustainability and impact reporting. ABN AMRO is one of the leading banks in the Netherlands; with nearly 20,000 employees, it provides banking services to retail, private and business clients. The bank is recognized for its commitment to sustainability; among others, it supports the goal of limiting global warming to 1.5 degrees Celsius, aims to increase the volume of its sustainability assets to more than a third of the total in 2024, and considers sustainability as a crucial aspect to attract talents. Through a review of ABN AMRO's impact journey, this chapter provides an overview of how ABN AMRO creates value for its stakeholders, not only as a provider of banking and other financial services but also as a responsible employer and an active contributor to the society as a whole.

The chapter offers examples of best practices in measuring, managing, and communicating impact to stakeholders.

KEYWORDS: Banking - Sustainability - Impact measurement - Impact management - Impact reporting.

1. Introduction

"A company's long-term licence to operate depends on its creating value for all stakeholders – clients, employees, investors and society at large. This is also true for ABN AMRO. As a bank, we certainly have an impact on our stakeholders. If we understand our impact by measuring and reporting, we will also begin to understand where we can achieve the most positive impact and at the same time reduce our negative impact. Ultimately, we will be able to allocate resources more effectively, and achieve our goal of building a better, more sustainable economy." Robert Swaak, CEO ABN AMRO

As providers of financial capital across sectors, banks play a crucial role in the allocation of financial resources in all modern economies and have a significant impact on society. They can direct funds into organisations that benefit society as well as influence others to change and create more sustainable business models (BFI, 2022). Financial institutions are in a unique position to establish themselves as the drivers of the transition to an impact economy that serves people and the planet; where companies have the opportunity to change their role in society, consumers further encourage companies to pursue impact through their purchasing decisions, while shareholders and stakeholders reward executives for generating profits in a manner that contributes to the public good (BFI, 2021).

Financial institutions need to be able to measure, manage, and report their impact. This is particularly challenging for banks as the majority of impact is indirect and occurs through lending, financing, and investing activities. This means banks need to be able to collate the impacts for all their clients. Similar to other sectors, there is a need for the identification of a framework and a tailored approach for measuring and managing impact in the banking industry. Some initiatives are going in this direction, including the Impact Weighted Financial Accounts Initiative from Harvard Business School and the Integrated Profit and Loss Framework from Impact Institute, among others. The Banking for Impact (BFI) working group is particularly committed to create a common impact measurement and valuation approach; a robust, scalable, and cost-effective method for the quantification, valuation, attribution, and aggregation of impacts for the sector.

Within this context, it becomes crucial to highlight and share best practices in the field of impact measurement, management, and reporting in the banking industry that can represent a guidance and inspiration for other organizations in the same sector. This chapter describes the experience of ABN AMRO in the area of sustainability and impact reporting. ABN AMRO is one of the leading banks in the Netherlands; with nearly 20,000 employees, it provides banking services to retail, private and business clients (Figure 1). Through a review of ABN AMRO's impact journey, this chapter provides an overview of how ABN AMRO creates value for its stakeholders, not only as a provider of banking and other financial services but also as a responsible employer and an active contributor to the society as a whole. The chapter offers examples of best practices in measuring, managing, and communicating impact to stakeholders.

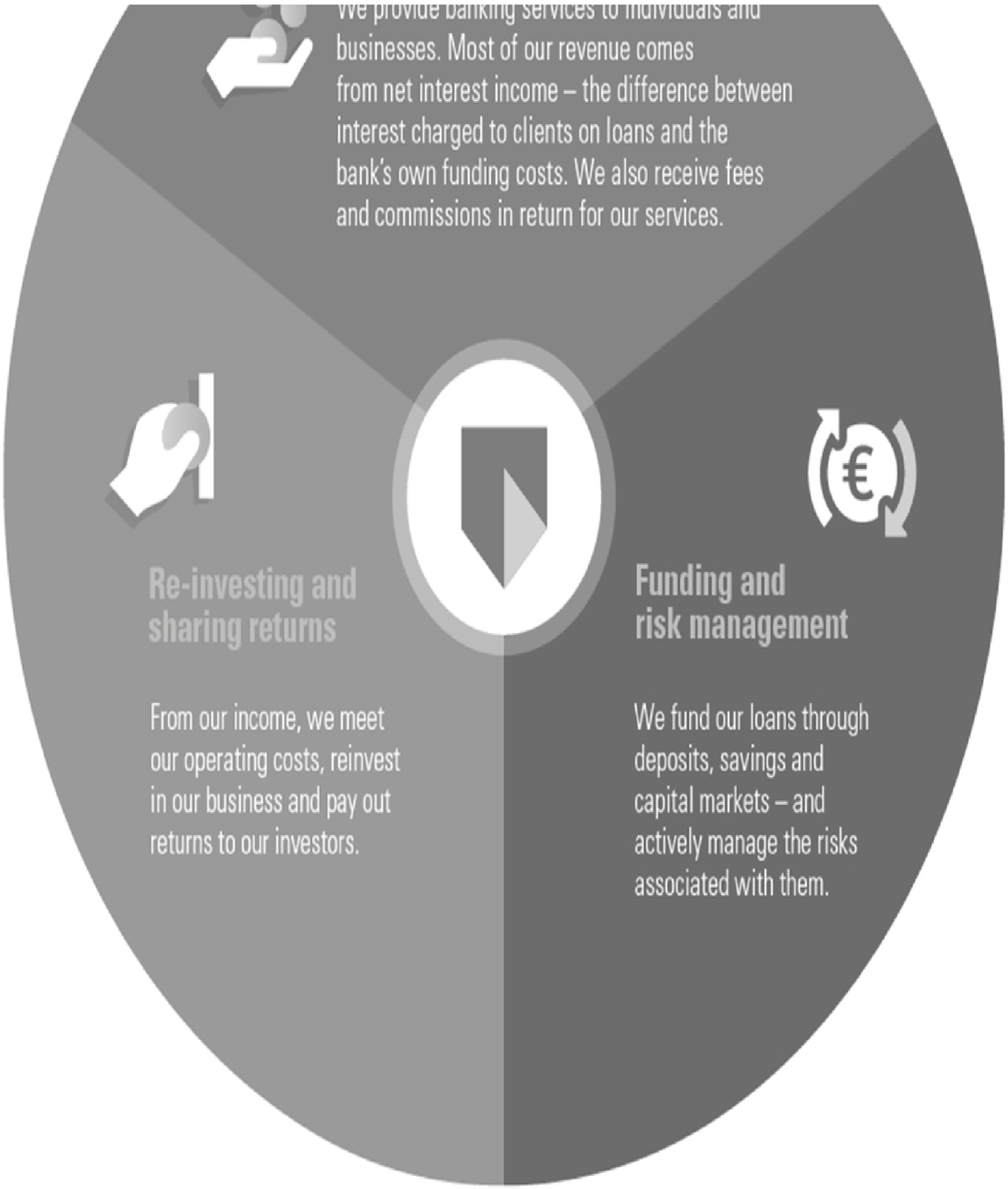


Figure 1. ABN AMRO's business activities

Source: ABN AMRO Integrated Annual Report, 2021, 14.

2. ABN AMRO's purpose and strategy

ABN AMRO is known for its commitment to sustainability. It firmly supports the goal of limiting global warming to 1.5 degrees Celsius. Its biggest impact is through lending and investment services, with the aim to increase the volume of sustainability assets to more than a third of the total in 2024. Sustainability is also an asset for attracting talent as young people want to work for companies that take sustainability seriously and take action.

> *"Our purpose 'Banking for better, for generations to come' serves as a compass in the realisation of our strategy. In order to keep our promises, we set clear, concrete goals throughout ABN AMRO". Robert Swaak, CEO ABN AMRO*

ABN AMRO's purpose, *'Banking for better, for generations to come'*, highlights the bank's commitment to play a serious role in the society, work together with its clients to tackle current challenges, and help shape the future. The purpose represents the basis for shaping and delivering the strategy. ABN AMRO's strategy, *'A personal bank in the digital age'* is aimed at offering a fully digital banking experience while at the same time strengthening the personal contact with clients. It has three strategic pillars: customer experience, sustainability, and future-proof bank (Figure 2).

Our purpose
Banking for better, for generations to come

Our strategy
A personal bank in the digital age

Pillars:

Customer experience | Sustainability | Future-proof bank

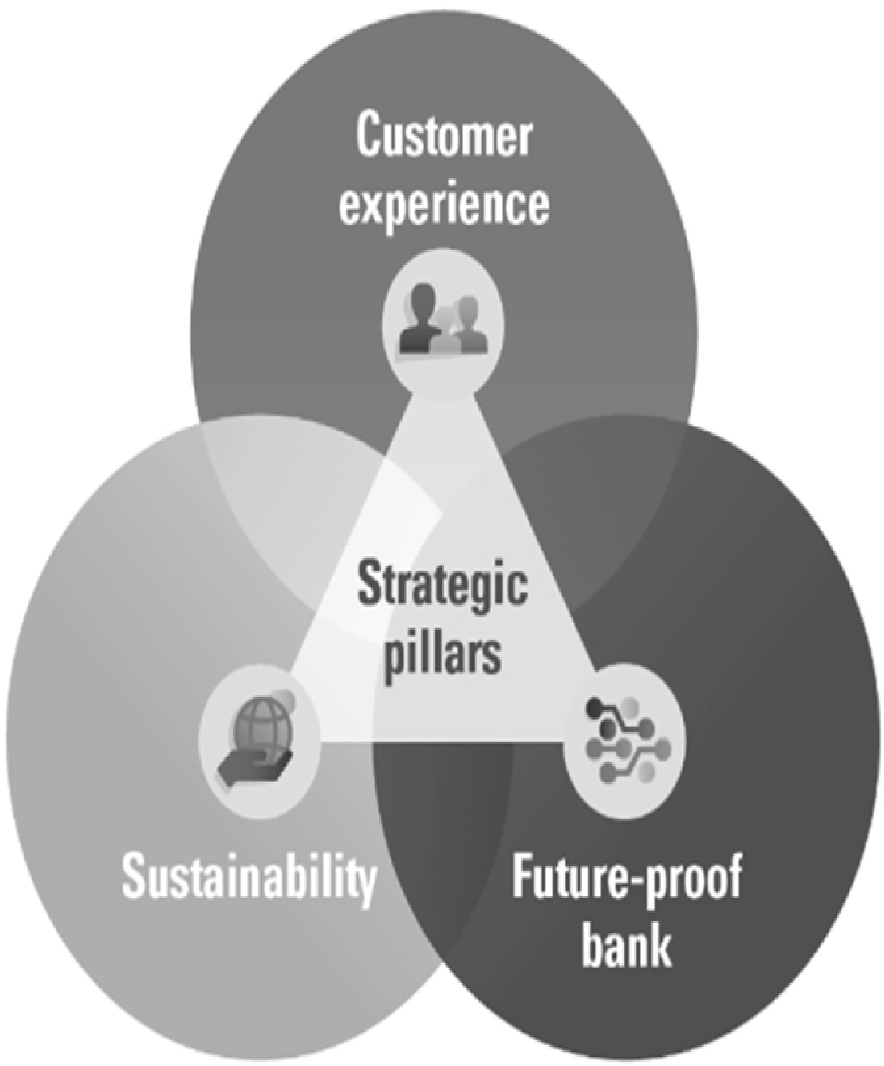
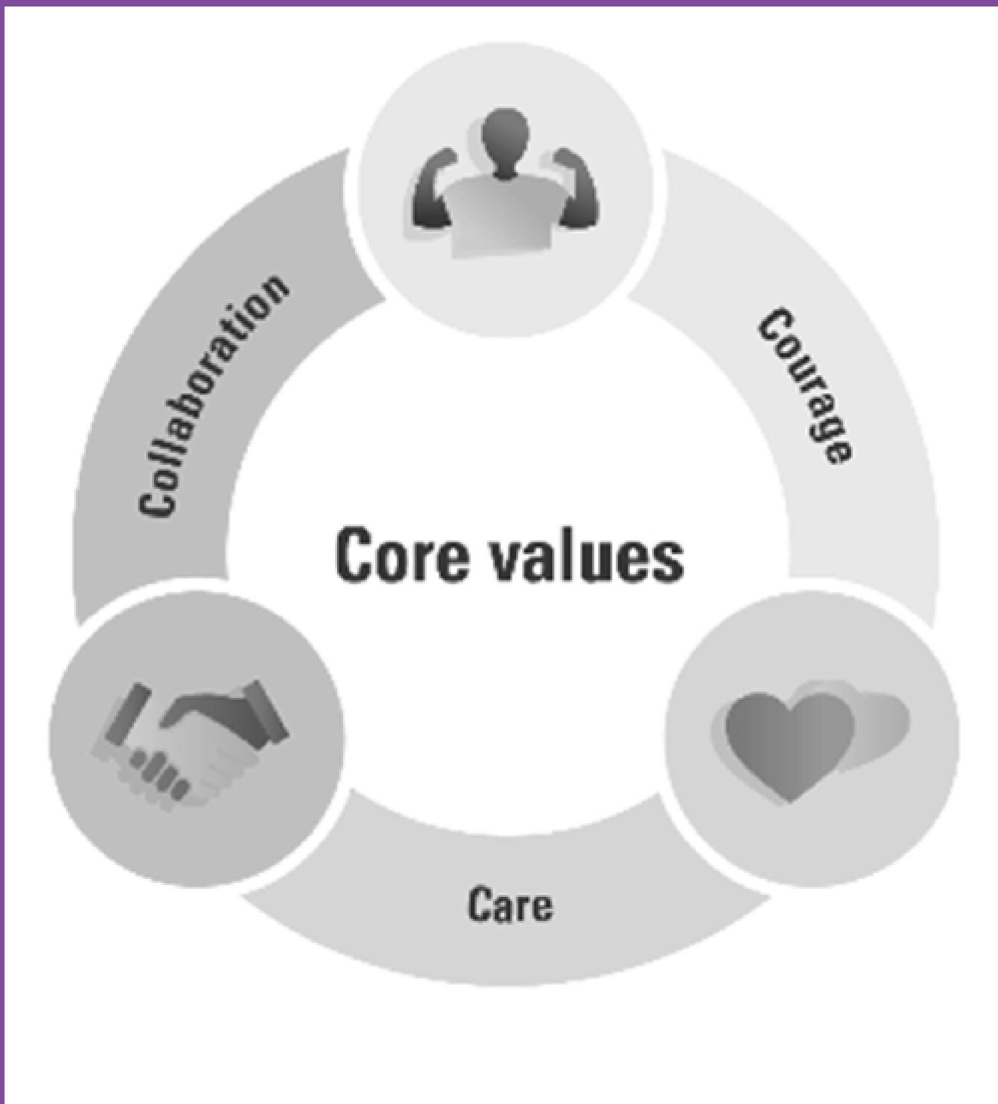


Figure 2. ABN AMRO's purpose, strategy, and strategic pillars

Source: ABN AMRO Integrated Annual Report, 2021, 7, 14.

ABN AMRO's core values are care, courage, and collaboration, expressing its sense of responsibility towards all stakeholders and ambition to support its clients as one bank. Focusing on inclusion, sustainability, social entrepreneurship, innovation, and daily banking, among others, the bank's commitment to society relies on the opportunities offered by the digital age that helps to bring banking closer to the clients and their needs (Box 1).

BOX 1. WHO WE ARE: ABN AMRO CORE VALUES



***Care** means…*

We care for our clients and want to do what's best for them. That's why we put them front and centre in everything we do. By understanding their needs we can advance their long-term interests. We see that as our responsibility. But care also applies to our sustainability ambitions. We care about our planet and about people – whether our clients, colleagues or groups in society that are less privileged and have had fewer opportunities in life. Everyone counts – including future generations.

Courage *means…*

It takes courage to commit to bringing about positive change, to deliver on our promises and ambitions. We have the courage to take a stand in the social debate, to act on our principles and to speak up against wrongdoing. We are working to create positive change and we're not afraid to say 'no' if it's is in the client's best interests. We engage with our clients about making their business practices more sustainable and if necessary, we require them to change.

Collaboration *means…*

It is only through collaboration that we are able to achieve our ambitions, and if we want to meet the challenges we face, we must pull together. No one has all the answers. That's why we set great store by collaborating across the organisation and why we partner with a host of other parties outside ABN AMRO to address social and environmental issues and to look after our clients' interests. We team up with the government and other banks to keep the financial system secure, and we forge relationships with fintechs and other companies to improve our services going forward.

Source: ABN AMRO Integrated Annual Report, 2021, 11.

In support of the strategy, the bank has set clear financial and nonfinancial targets for 2024, and as a result of a regular assessment of the operating environment has identified strategically differentiating *valuecreating topics* that are linked to the strategic pillars. The nine strategic differentiators are identified based on their importance for stakeholders and their relevance for ABN AMRO and represent a way to differentiate from competitors (Figure 3).

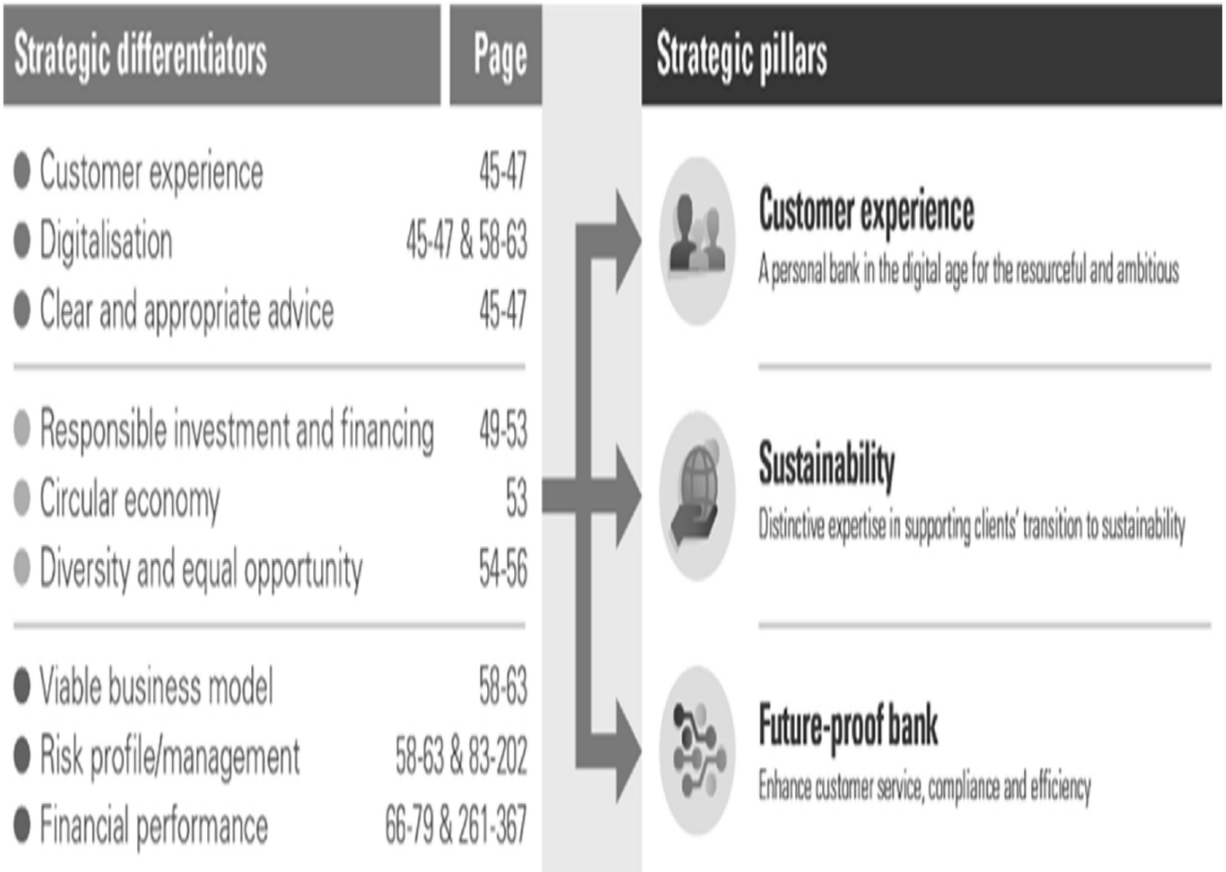


Figure 3. ABN AMRO's value-creating topics

Source: ABN AMRO Integrated Annual Report, 2021, 34.

3 Impact measurement and management approach by ABN AMRO

> *"It's no longer enough for banks like ours to report their financial performance. Society expects more of us – it expects us to show how we contribute to society." Robert Swaak, CEO ABN AMRO*

Through its business activities, ABN AMRO has an impact that stems largely from lending and investment services, but it also comes from employment practices, from the relationship with suppliers and other business partners. This impact may be positive or negative, therefore creating or loosing value for stakeholders. For example, mortgages offer clients the benefits of home ownership, but also encourage new houses to be built, which increases consumption of precious natural resources and damages the environment. Similarly, lending to companies generates a trade-off between supporting economic growth and job creation on one side, contributing to climate change and biodiversity loss on the other side. More specifically:

- *Impact on Mortgages*. The impact assessment shows that owning a home brings a range of benefits and costs for homeowners. When an ABN AMRO client receives a mortgage, it enables them to buy a house; this value is captured in the client value of housing impact. In return for this they pay interest, which is a negative impact for clients. These two major impacts balance each other out. To minimize the negative impact, ABN AMRO is helping clients improve energy efficiency in their homes across the Netherlands, which results in lower energy bills and reduced carbon emissions; the bank has also reduced interest rates on its Sustainable Living mortgage, for homes with the top A or B energy labels, to name a few initiatives on this issue.

- *Impact on biodiversity loss*. Lending and investment services allow companies to grow, but also consume more natural resources, and put increased pressure on biodiversity. ABN AMRO uses four main drivers behind the impact on biodiversity loss: water pollution, air pollution, changes in land use, and climate change. The bank excludes some activities from lending or investment; for example, it does not lend to companies involved in deforestation, it engages with corporate clients to help them reduce their impact on biodiversity, and encourages its Private Banking clients to invest sustainably through dedicated ESG and impact funds. ABN AMRO's strategy focuses on Northwest Europe and decided for a wind down of lending and investment activities in Asia and North/South America. As a result, its overall impact on biodiversity has decreased. [1]
- *Impact on IT circularity*. A bank's business activity requires extensive IT equipment from suppliers that replaces old equipment. Discarding IT equipment has a direct effect mainly on water and air pollution; manufacturing new IT equipment contributes to climate change because it adds to carbon emissions; in addition to this, IT equipment contains precious metals and scarce materials. To minimize the

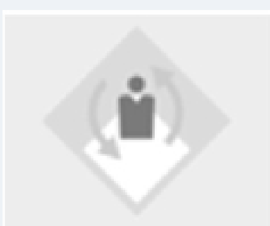
negative impact, ABN AMRO is working towards full IT circularity, by improving the procurement from suppliers, examining ways of collecting better data, and making steps towards lower IT carbon footprint.

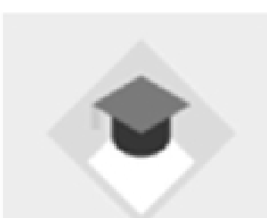
1 ABN AMRO's impact on biodiversity. Available at ABN_AMRO-s__impact_on_Biodiversity.pdf (ctfassets.net).

At ABN AMRO, impact is assessed through two lenses: stakeholders – i.e., who are we creating value for?, and capitals – i.e., what kind of value are we creating? Each impact is measured and assigned a 'euro-equivalent value' that is used to compile an Integrated Profit & Loss Statement (IP&L), showing the effect of the business activities on both stakeholder groups and capitals.

The capitals in scope for the assessment are financial capital, manufactured capital, human capital, intellectual capital, social capital, and natural capital. Table 1 below provides a brief description for each of the capitals in the application of impact assessment. The stakeholder groups in scope for the assessment are clients, employees, investors, and society. Table 2 offers the properties of the stakeholder groups. The six capitals and four stakeholder group make 24 combinations that, where relevant, have a story to be told; together these stories form the story of the company.

Table 1. The six capitals for impact assessment

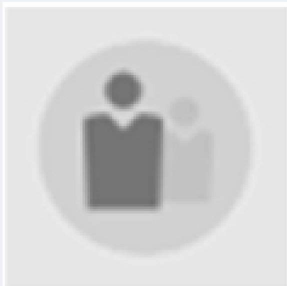
 Manufactured capital	All tangible assets. This includes the assets used for production (property, plant, and equipment, sometimes collectively referred to as manufacturing capital). In the context of Impact Assessments, this also includes the tangible assets of intermediate and finished products.
 **Human capital**	The productive capacity embedded in individual people. This includes their health, their competences and the time they put into producing goods and services. In addition, in the context of impact statements, elements of well-being are listed under human capital if they occur at the level of individual people.
	All assets that are a form of money or

 **Financial capital**	other financial assets, including contracts. Financial capital is owned by a specific stakeholder in almost all instances. Almost all financial capital exchanges between stakeholders preserve the total amount of financial capital (positive impact for one, and negative for the other that is compensated in another capital).
 **Social capital**	Value embedded in groups of people – from family to the global community – and includes social ties, norms, networks, and brands. Wellbeing effects are often listed under social capital if they only impact a group of people and could not be said to impact only one, singular individual.
	Intangible assets either with or without legal rights. Intangible assets cover intellectual property and organisational capital. In the context of Impact Assessments, this also

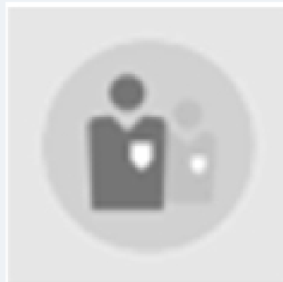
Intellectual capital	includes the value of services provided.
 **Natural capital**	All stocks of natural assets, accounting for their quality and overall scarcity. It contains living (biotic) and non-living (abiotic) natural resources including scarce resources, climate, and ecosystems that provide benefits to current and future generations (‘ecosystem services’).

Source: Impact Assessment 2021 – Note on Methodology, 2.

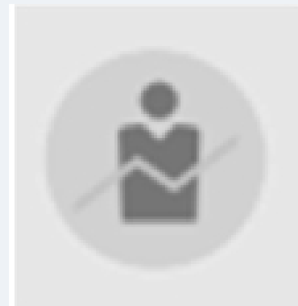
Table 2. Properties of stakeholder groups



Clients



Employees



Investors

Soci

• Retail and SME clients • Commercial, Cor-porate and Institutional Banking clients • Private banking clients • Public sector clients • Brokers, intermedi-aries and other distributors	• Full-time and part-time employees • Sub-contractors	• Shareholders • Bondholders	• S e c • C p • L c • G a • N
Stakeholders who receive	Stakeholders who are full-	Shareholders and	All stak

products or services from ABN AMRO. Note that deposit holders who have a function to provide capital to ABN AMRO, are also clients as their deposit account reflects a service provided by ABN AMRO.	time and part-time employees, as well as subcontractors of ABN AMRO. They receive a salary or wage and other benefits from the company and constitute much of the human capital.	bondholders of ABN AMRO that provide financial capital to the organisation. They are most directly affected by the financial results of the organisation.	incl indi of g and incl con bus loca gov regu (nor orga orga ups dow AMI clie othe affe AMI cha the com of ‘r

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Source: Impact Assessment 2021 – Note on Methodology, 3.

ABN AMRO has a clear structured and thorough process of measuring and managing impact, that is well described in the bank's Impact Report. [2] It includes four steps:

2 ABN AMRO's Impact Report is available at https://www.abnamro.com/en/about-abn-amro/overview.

1. *'Consider the value chain'*. Understanding impact requires understanding the value chain. With respect to the contribution to climate change, as an example, this means monitoring and taking responsibility for carbon emissions

beyond the bank’s offices and business travel towards impact arising at clients, their clients, and the companies they invest in (Figure 4).

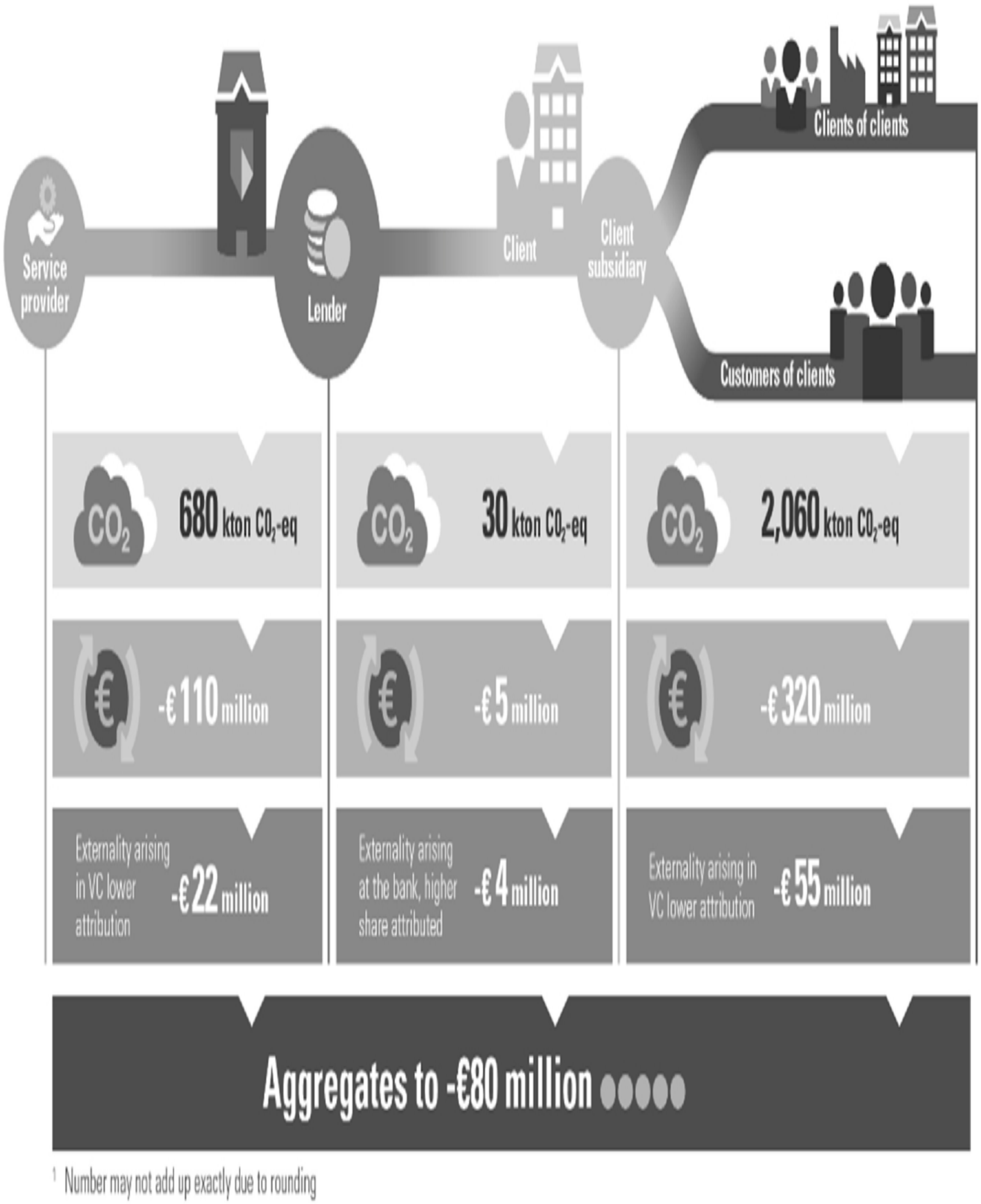

Figure 4. How we measure impact

Source: ABN AMRO Impact Report, 2021, 20.

2. *‘Measure our impact footprint’*. Further, it needs to measure the size of the impact, using a combination of direct data gathered by the bank and secondary data (e.g. macro-economic data and scientifically generally accepted parameters). For the climate change example, the impact footprint is Carbon Dioxide equivalent (CO_2 eq) emissions, that represents the amount of gas emitted into the air occurred at clients or suppliers and within their value chain.
3. *‘Monetise impact’*. After identifying and measuring, it follows the monetization of impact. This means applying a monetization factor which reflects the desirability of the impact and allows to weigh, compare, and aggregate very different impacts. As a general rule, large negative monetization factors demonstrate that an impact is very undesirable. For the climate change example, the monetisation value is -0.15 €/kg and is the abatement cost for the 2-degree global warming target in the long term, in line with the Paris Agreement.
4. *‘Attribute to the bank’*. The final step consists of attributing impact to the relevant source, both to the bank and to the value chain, avoiding any double counting. For the climate change example, ABN AMO is attributed a higher share of the emissions arising from the bank directly, while the share of emissions in the value chain is calculated by considering the

bank's added value and influence. Another relevant example is the mortgage portfolio; although the mortgage portfolio is more than half of ABN AMRO's total portfolio, the climate change impact related to the daily heating/energy use per house attributed to ABN AMRO is small, while the attribution of the impact to other parties in the value chain, including house owners and energy companies, is much bigger. Overall, the climate change impact related to the mortgage portfolio and attributed to ABN AMRO is small in the total impact reported in the IP&L.

ABN AMRO's impact methodology follows principles and concepts set out in the Impact Institute's Framework for Impact Statements (FIS). All Impact Statements are based on the FIS**.** Definitions, criteria and other requirements are taken from the Impact Institute's Integrated Profit & Loss Assessment Methodology (IAM). Impact assessment is described in the Impact Report as well as a separate, more detailed Note on Methodology, available online[3].

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3 ABN AMRO's Impact Assessment – Note on Methodology is available at https://www.abnamro.com/en/about-abn-amro/overview.

All impact statements are in the form of an IP&L Assessment, showing the value created or lost during the year for each of the bank's main stakeholder groups. All assessments are based on material impacts (for a total of 57 impacts, representing the overall impact of the bank's business activities). The assessment covers both direct impacts and impacts to which ABN AMRO contributes only indirectly (the latter may be client activities, for example, made possible by loans or investments from the bank). To identify and select the material impacts, the bank uses a number of sources, including: i) results from the bank's recent materiality exercise (detailed in ABN AMRO's Integrated Annual Report); ii) results from similar exercises carried out by peers; iii) existing impact studies from ABN AMRO and other organisations; iv) input from subject-matter experts within the bank.

Measuring and communicating impact is also aligned with the bank's purpose, strategic pillars, and core values, and it is essential to create long-term value for stakeholders. Indeed, impact measurement means awareness of the economic, social, environmental, and human implications of a strategy, in addition to the financial implications; impact valuation allows ABN AMRO to create and execute a comprehensive strategy and balance the trade offs between stakeholders and impacts. Further, understanding impact is crucial as a risk mitigation tool and it allows to anticipate and prepare for future financially material topics; sustainability topics like biodiversity and human rights are expected to increasingly affect banks' financial performance thus arising the need to proactively manage foreseeable risks and challenges. Finally, banks are expected to demonstrate their awareness and preparedness to tackle the externalities that arise from their activities, therefore measuring impact is crucial to communicate credibly about value creation and build trust from stakeholders across society.

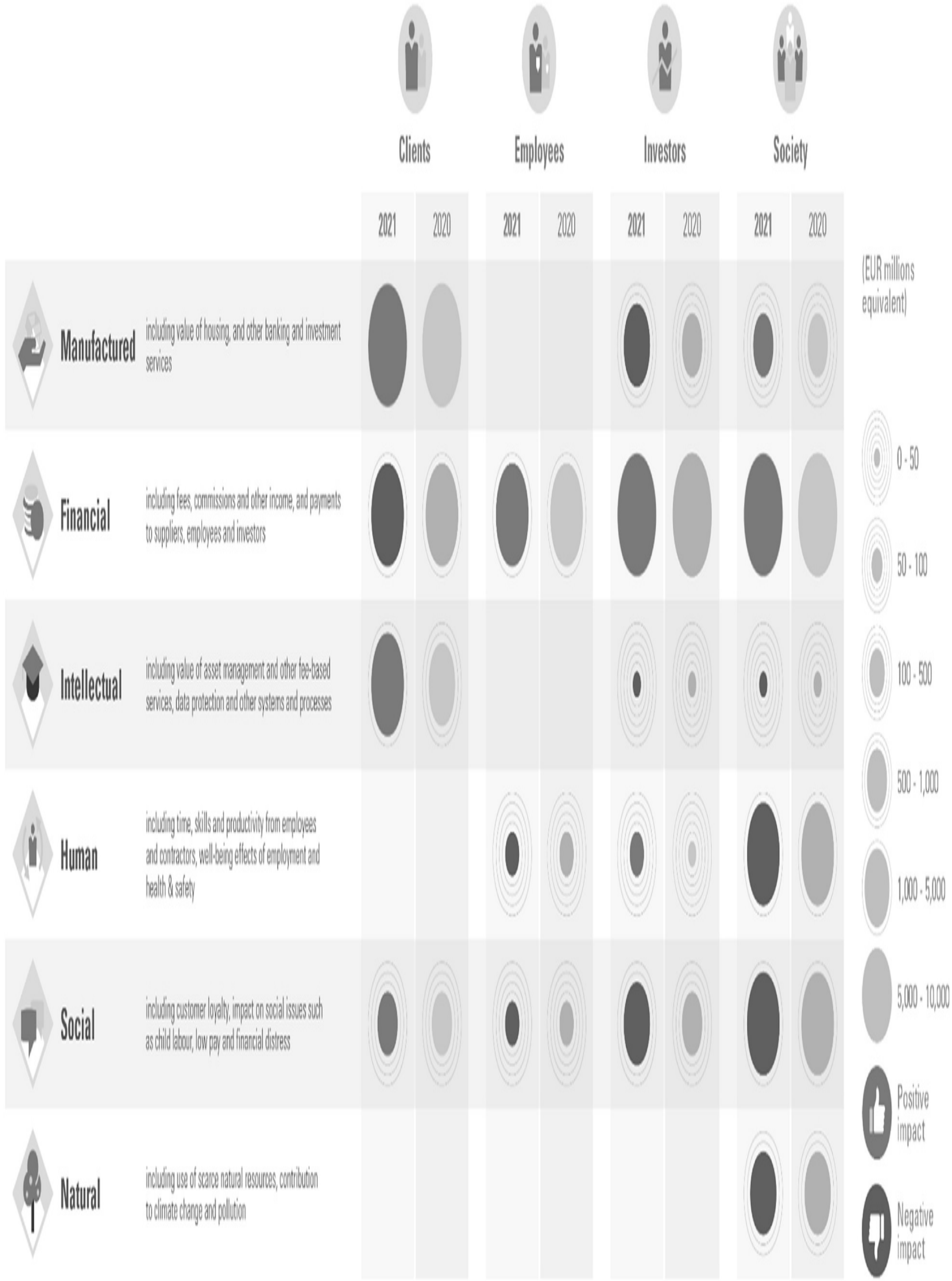
4. Communicating impact: a story of success

Every year, ABN AMRO publishes a rich reporting suite including the bank's Integrated Annual Report, Impact Report, Pillar 3 Report, and Social Impact and Human Rights Update.

The Integrated Annual Report explains how the bank creates value for its stakeholders over time, not only as a provider of banking and other financial services, but also as a responsible employer and an active contributor to society. It also explains ABN AMRO's business, strategy, financials and non-financial performance, together with providing information in the areas of risk, capital management, and governance structure, all in compliance with regulatory requirements. In compiling this report, ABN AMRO uses the Integrated Reporting <IR> Framework as a reference; the <IR> Framework also serves as a reference for the bank's Impact Report.

> *"At ABN AMRO, we consider financial and non-financial value to be equally important. I have found that the process of creating an Integrated Annual Review works like a management tool: it raises questions, introduces discipline, and gives us insight into the (non) financial value we have created in the previous year and what steps we need to take in order to keep creating sustainable value for all our stakeholders. Our integrated reporting helps make this value transparent." Tjeerd Krumpelman, Head of Advisory, Reporting & Engagement at ABN AMRO.*

The value creation model summarises the bank's value creation process; the model uses the Integrated Reporting <IR> Framework's six capitals. During the value creation process, these capitals may either increase or decrease as a consequence of the bank's activities. The model includes four sections: Inputs, Business activities, Outputs, and Outcomes. Much of the value created is financial in nature, but it may also be social or environmental. The six <IR> capitals – manufactured, financial, intellectual, human, social and natural – reflect these different types of value [4] (Figure 5).



Where no range is provided, this is due either to a lack of available data or because impacts were not considered sufficiently material. For more information on how we define our stakeholders, see page 34.

Figure 5. 2021 Impact dashboard

Source: ABN AMRO's Impact Report, 2021, 7.

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4 For a detailed view of the value creation model, please consult ABN AMRO's Integrated Annual Report, 2021, 40-41.

In 2022, ABN AMRO has published its fourth Impact Report, that describes how the bank has measured and reported its bank-wide impact. Every year, the impact analysis has grown in maturity in terms of the scope of the analysis and the impact measured. ABN AMRO plans to continue using impact measurement to stay ahead of impact risks and focus on further embedding impact thinking and impact measurement into its strategy and everyday business activities.

In 2021, ABN AMRO has also joined forces with Danske Bank, DBS, UBS, Harvard Business School Impact Weighted Accounts and Impact Institute to form Banking for Impact (BFI), a financial sector initiative that aims to promote impact measurement and valuation in the sector, share ideas and inspire more banks and financial institutions.

ABN AMRO impact statement includes five separate disclosures: Integrated Profit & Loss Statement (see Box 2); Stakeholder

Value Creation Statement; Investor Value Creation Statement; External Costs Statement; ABN AMRO's Contribution to the UN Sustainable Development Goals (see Table 3).

Table 3. Supporting the UN Sustainable Development Goals (SDGs)

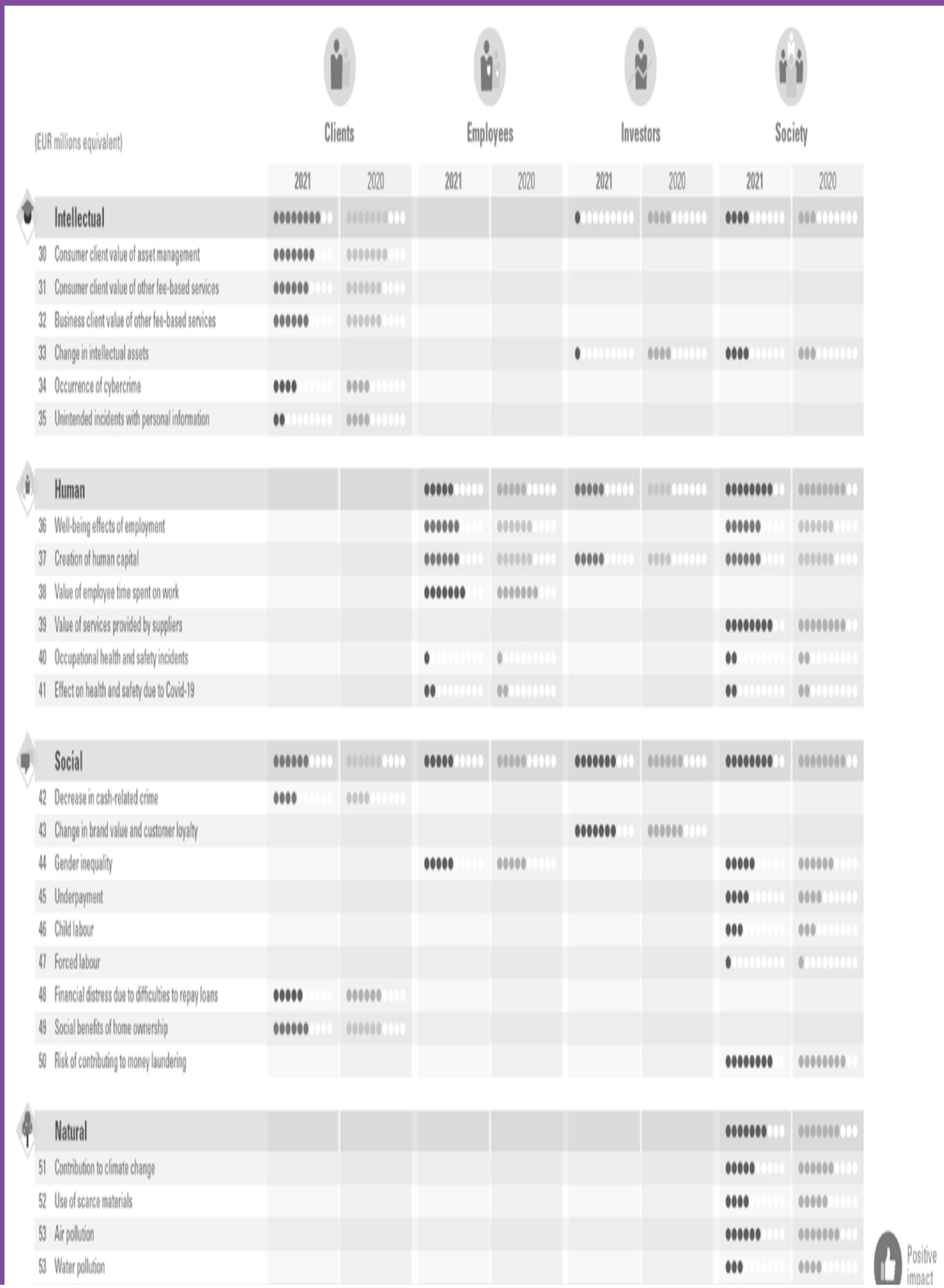
UN SDGs	ABM AMRO's contribution
SDG 8: Decent work and economic growth	• Minimum labour standards built into our Sustainability Risk Management Framework. • Loans to businesses, including SMEs, to support economic growth and job creation. • Financial support for social entrepreneurs and disadvantaged groups looking to join the labour market.

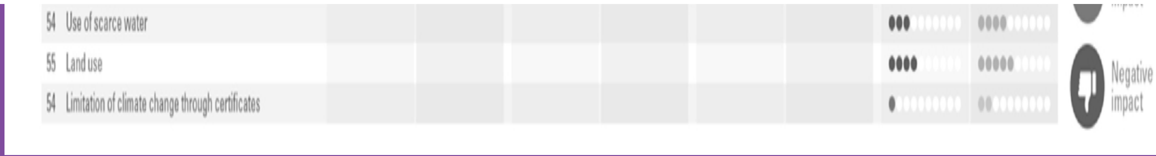
UN SDGs	ABM AMRO's contribution
SDG 12: Responsible consumption and production	• Circular economy financing to reduce waste and consumption of scarce raw materials. • Significant financing to support businesses switching to more sustainable operating models.
SDG 13: Climate action	• Bringing the bank's lending and investment operations into line with the Paris Climate Agreement. • Continued investment in renewables through our Sustainable Impact Fund. • Improving energy efficiency in our portfolio of residential and commercial real estate. • Encouraging clients to invest more in sustainable assets.

Source: ABN AMRO's Integrated Annual Report, 45

In the process of creating value for stakeholders, ABN AMRO is also contributing to the SDGs. Specifically, three SDGs are the most relevant for the bank, by helping protect basic human and labour rights, and by supporting economic growth and the transition to a more sustainable global economy (Table 3).

BOX. 2 INTEGRATED PROFIT & LOSS STATEMENT (EXTRACT)





Source: ABN AMRO’s Impact Report, 2021, 25.

The Integrated Profit & Loss Statement shows ABN AMRO’s impact from the perspective of different stakeholder groups. The image below shows the impact in terms of Intellectual, Human, and Social capital and is an extract of the IP&L Statement published on the bank’s Impact Report 2021.

As part of its commitment to society, ABN AMRO has also paid particular attention to social impact, that has gained in prominence during the coronavirus pandemic started in 2020. For ABN AMRO, it is important that everyone has access to the financial system, including those who have financial worries, disabilities, or experience face discrimination. The bank’s approach to social impact is focused on three main priorities: equal opportunities, financial resilience, and financial inclusion. To report few examples of its commitment to social issues, ABN AMRO provides financial coaches to senior citizens and clients with disabilities, particularly important with the growth in digitization. The ‘Banking through the gender lens’ programme aims to help break down current, often unconscious barriers to financing faced by various client groups, such as women entrepreneurs and young entrepreneurs. ABN AMRO Foundation promotes volunteering among employees, and fund charities and good causes, including the Young Education Fund and the Krajicek Foundation, which helps disadvantaged children take up sports.

5. Conclusions: lessons learnt

Why does ABN AMRO measure impact? What are the key lessons from measuring and communicating impact? The experience of ABN AMRO shows that measuring impact is essential to create long-term value for stakeholders. Organisations that measure, value, and manage impact can better protect, demonstrate and strengthen their long-term value.

Figure 6. Why we measure impact

Source: ABN AMRO's Impact Report, 2021, 21.

Understanding impact allows to anticipate and prepare for future financially material topics. A topic that may appear irrelevant for financial performance today, can instead prove to be business critical tomorrow. For example, climate change impact is increasingly affecting banks' financial performance via, for example, debt investor appetite, customer attraction/retention and (stranded) asset write off. Similarly, this is the case for other sustainability topics such as biodiversity and human rights. Regulators such as the DNB, ECB and the European Commission are placing greater focus on how enterprises impact people and the planet i.e. 'double materiality'. Understanding (negative) impacts will better equip companies to proactively manage foreseeable risks and challenges, identify value drivers, and set appropriate targets.

Impact valuation allows to create and execute a comprehensive strategy where trade-offs can be compared and managed in terms of risk, return and impacts. Measuring impact using a consistent methodology and in a consistent unit allows to balance and optimize inevitable trade-offs between stakeholders and impacts, and leads to a more transparent decision-making process. Impact measurement translates into awareness of the social, environmental and human implications of an organization's strategy, in addition to the financial implications.

Communicate credibly about value creation and build trust from stakeholders across society. Traditional financial reporting tells the public a lot about the amount of financial capital created for investors, but society increasingly expects more. Banks are expected to demonstrate their awareness and preparedness to tackle the externalities that arise from their activities.

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Chapter 12

MEASURING AND REPORTING ORGANIZATIONS IMPACT: THE CASE OF CAPGEMINI'S IMPACT METHODOLOGY

Fabrizio Granà, Adriana Rossi, Maria Federica Izzo, Camilla De Nardis

Abstract: *This chapter illustrates how organisations measure and manage their social and environmental impacts. In particular, it focuses on illustrating some impact measurement methods used within organisations to make decisions that might improve the short, medium and long-term economic, environmental and social conditions of the communities in which they operate. The chapter describes Capgemini's impact methodological approach developed in 2022 to measure projects' Green House Gases (GHG) emissions.*

Section 1 provides a literature review on the different meanings of impact and its implementation within organisations. Section 2 outlines the basic theoretical assumptions of the "Theory of

Change", which defines the evaluation basis for most of the impact measurement systems currently popular on the international scene. Section 3 sheds light on the most relevant steps to develop an impact measurement system. Section 4 describes the impact methodology developed by Capgemini. Section 5 provides some concluding thoughts on the topic.

Keywords: Impact – Impact methodology – Theory of Change – Reporting practices.

Summary:

1. Introduction

How can impact measurement and reporting play a role in addressing and mitigating social and environmental challenges in an increasingly complex and interrelated world?

The Covid-19 outbreak raised unexpected medical, human, and social challenges that threatened the survival of thousands of people and companies on a global scale. In particular, the pandemic revealed that trade-offs exist between positive impacts on climate change (for instance, due to the decline in air traffic) and negative impacts on decent work and economic growth, poverty, hunger, and other major social issues at a systemic level (Voegtlin, Sherer, Stahl and Hawn, 2022; Muzio and Doh, 2020). In this context, policymakers, intergovernmental institutions, business practitioners and organisations have recognised the need to understand better how to manage, account for, and report their environmental and social impacts (Serafeim, 2020). While accounting scholars have been increasingly required to reflect on the actual contribution of accounting and reporting practices in sustaining organisations as they struggle to address planetary needs (see, for example, the recent 'Opening accounting' manifesto by Alawattage et al., 2021; see, also, Bebbington, Österblom, Crona, Jeoffray, Larrinaga, Russell and Scholtens, 2020; Tregidga and Laine 2021; Cuckston, 2018; Sobkowiak, Cuckston and Thomson, 2020; Gibassier and Arjalies, 2018), the literature still lags behind the exploration of practices and/or solutions to measure organisations' contributions to Social and Environmental Challenges (SEC).

SECs refer to any "specific critical barrier(s) that, if removed, would help solve an important societal problem with a high likelihood of global impact through widespread implementation” (Grand Challenge Canada, 2011, iv – see also George, Howard-Grenville and Joshi, 2016). SEC and impacts are often considered as complex and multivocal problems that extend beyond a single discipline, social or institutional category (Ferraro, Etzion and Gehman, 2015, Campbel, McHugh and Ennis, 2019). According to Ferraro et al. (2015). SECs are typically characterised by three inherent facets: complexity (SECs affect and are affected by multiple actors, multiple locations and multiple time frames); uncertainty, non-linearity and dynamicity (actors cannot identify the root causes and cannot forecast the consequences of their present actions or whether future others will appreciate them); and incalculability (implying multiple criteria of worth, and revealing new concerns even as they are being tackled) (p. 364).

Given the complexity, uncertainty, and incalculable nature of SECs and their impacts (Busco, Granà and Achilli, 2020; Ferraro, Etzion and Gehman, 2015; Maas and Liket, 2011;Campbel, McHugh and Ennis, 2019), organisations and international regulators are confronted with the increasing pressures to develop new forms of corporate reporting and impact measurement methodologies that demonstrate how organisations’ actions and decisions affect the society and environment (Krasodomska and Zarzycka, 2020; IMP, 2020;

Donaldson, Christie and Mark, 2015; Cohen and Serafeim, 2020; Maas and Liket, 2011; Bagnoli and Megali, 2011).

Recent studies have emphasised the role of integrated performance measurement systems and value reporting practices as a way for companies to explain better how they plan to extract value from society and the natural environment and how they plan to minimise the risk of social and environmental disruptions on organisations' value creation plans (De Villiers, Hsiao and Maroun, 2020; De Villiers and Sharma, 2020; Lai and Stacchezzini, 2021; Krasodomska and Zarzycka, 2020; Kim and Ferguson, 2019; Thaker, 2019).

However, although corporate accounting and reporting practices have been developing over time (see for instance the recent publication of the European Taxonomy Regulation, the upcoming EFRAG's Corporate Sustainability Regulation Directive, the proposal for general sustainabilityrelated disclosure requirements from the International Sustainability Standards Board - ISSB), there is still a lack of comparability amongst the different guidelines and practices adopted within organisations (Maas and Liket, 2011; Bagnoli and Megali, 2011). These practices' design, structure and contents are still too complex and seem to be far from helping organisations communicate their intended goals for society and the environment (Achilli, Giovannoni, Busco and Granà, 2022).

Moreover, organisations still have difficulties in implementing suitable performance measurement systems able to reflect the cause-effect relations between the variety of 'capitals' that are used and affected within organisations (de Villiers et al., 2014; Dumay et al., 2016; Gray, 2010) as well as the direct and indirect impacts that organisations' actions and decisions can generate in the short-, medium- and long-term.

2. Understanding and defining organisations' impact

Contemporary organisations face the critical need to identify valuable accounting and reporting practices that represent and communicate their impacts on the environment and society, thus supporting a comprehensive decision-making process for sustainable value creation. Despite the increase in the number of accounting and reporting practices that attempt to model organisations' value creation process (Adams, 2015; 2017; Churet and Eccles, 2015; Adams and Simnett, 2011; Deloitte, 2016; Eccles and Krzus, 2014; 2010; PwC, 2018), no widely accepted scientific approach to impact measurement exists yet. On one hand, this is due to the lack of a shared definition of ‘impact’ (Maas and Liket, 2011; Vanclay et al., 2015). On the other, the concept of value creation is still strictly related to the increase, decrease or transformations of the resources (inputs) used by the organisation’s business activities to generate outputs, thus overlooking the impacts generated by them (Maas and Liket, 2011). Consequently, current reporting approaches mainly focus on communicating to stakeholders how organisations create value instead of measuring and representing the short-, medium- and longterm impact generated by current organisations’ decisions.

Although the most common definition is provided by the OECD [1], which defines impact as the “Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended” to the environment and the society, [1] Table 1 below shows that different definitions of impact exist and are provided by several large agencies, multilateral funds and institutions worldwide.

Table 1. Different meanings of impact by international regulators and institutions

Organisation	Definition

Organisation	Definition
Organisation for Economie Co-operation and Development - Development Assistance Committee (OECD-DAC)6. also used by the UK Department for International Development (DFID)	Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended'.

Organisation	Definition
World Bank (as cited by White 2009)	‘The difference in the indicator of interest (Y) with the intervention (Yl) and without the intervention (Y0). That is. impact = Yl - Y0.’
International Initiative for Impact Evaluation (3ie)	‘How an intervention alters die state of the world. Impact evaluations typically focus on die effect of the intervention on the outcome for die beneficiary population.’
US Agency for International Development (USAID)	‘A results [sic] or effect that is caused by or attributable to a project or program. Impact is often used to refer to higher level effects of a program that occur in the medium or long term, and can be intended or unin tended and positive or negative.’

Organisation	Definition
European Commission (EC)	‘In an impact assessment process, the term impact describes all the changes which are expected to happen due to the implementation and application of a given policy option/intervention. Such impacts may occur over different timescales, affect different actors and be relevant at different scales (local, regional, national and EU). In an evaluation context, impact refers to the changes associated with a particular intervention which occur over the longer term.’
United Nations Development Group (UNDG)	‘Impact implies changes in people’s lives. This might include changes in knowledge, skill, behaviour, health or living conditions for children, adults, families or communities. Such changes are positive or negative long term effects on identifiable population groups produced by a development

Organisation	Definition
	intervention, directly or indirectly, intended or unintended. These effects can be economic, socio-cultural, institutional, environmental, technological or of other types. Positive impacts should have some relationship to die Millennium Development Goals (MDGs), internationally-agreed development goals, national development goals (as well as human rights as enshrined in constitutions), and national commitments to international conventions and treaties’.
Global Environment Facility (GEF)	‘A fundamental and durable change in die condition of people and their environment brought about by the project’

Organisation	Definition
International Fund for Agricultural Development (IFAD)	‘The changes in die lives of rural people, as perceived by them and their partners at the time of evaluation, plus sustainability-enhancing change in their environment to which the project has contributed. Changes can be positive or negative, intended or unintended. In die log frame terminology these “perceived changes in the lives of die people” may correspond either to die purpose level or to the goal level of a project intervention.’
World Health Organisation (WHO)	‘Improved health outcomes achieved. The overall impact of the Organization sits at die highest level of the results chain, with eight impact goals. Outcomes can combine in different ways to contribute towards one or more impacts.’

Source: Authors' own creation.

[1] OECD, Development Assistance Committee definition.

At the organisational level, all definitions of “impact” illustrated above need to be translated into a new business model, through which organisations can demonstrate and evaluate the change or “added value” that their business activity generates for a certain community of stakeholders and the environment. This means promoting a value creation model that takes into account not only the goods or services produced but also the social, cultural, economic, and institutional “benefits” that these goods and services generate.

To gain a concrete understanding of the changes and “benefits” generated by an organization’s business model, the literature frequently associates the definition of impact with the so-called impact value chain, which graphically shows the different steps through which the so-called Theory of Change (ToC) is expressed.

The following section illustrates the different stages of the Theory of Change and how they influence organisations’ approach to impact management and measurement.

3. The Theory of Change (ToC)

Recent accounting studies discuss the term impact predominantly from a methodological point of view (Vanclay et al., 2015; Maas and Liket, 2011; Nicholls, 2006; Mulgan, 2010; Epstein and Yuthas, 2014; Arena, Azzone and Bengo, 2015). Numerous accounting tools and templates are used to measure impact, most of which are based on the Theory of Change (Carman, 2010; Weiss, 1997) or its variations, such as the causal chain (White, 2009), logic model or logical framework.

The Theory of Change (ToC) is developed through a series of steps mapped backwards to define the necessary and sufficient conditions to produce the desired change. Backward mapping allows a better understanding of the ways in which organisations can make their desired impacts happening in the short, medium or long term, thus mapping out a "pathway to change" that lays the groundwork for improved social and environmental impact assessment. Specifically, the ToC consists of five phases: input, activity, output, outcome, and impact. (See Figure 1).

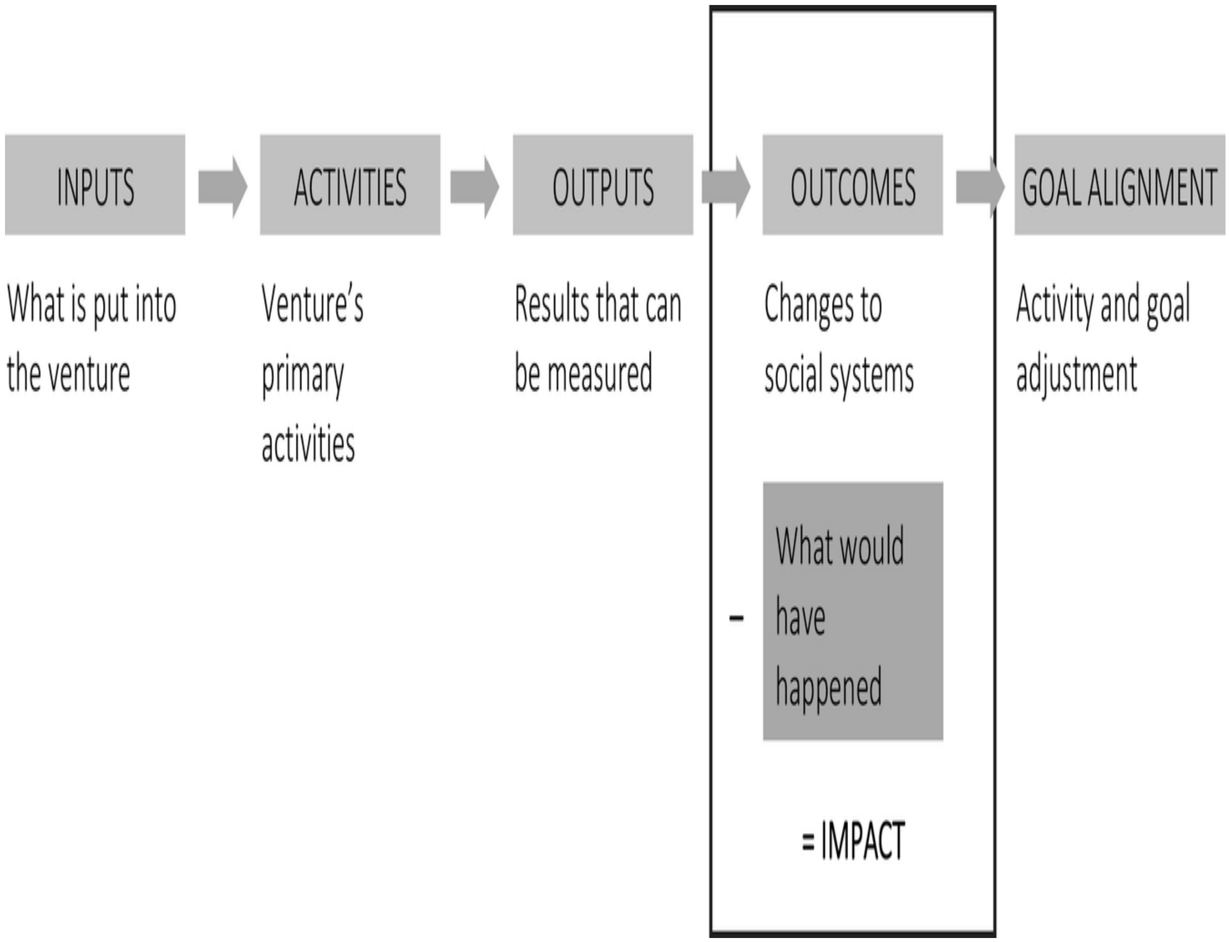

Figure 1. Impact Value chain

Source: Clark et al., 2004, 7.

Inputs are all the different resources (e.g., money, time, goods and subsidised services committed to carry out the activities under analysis) used by organisations to carry out the activities, the value of which is easily measurable and generally known as operating costs.

Activities are the interventions carried out to achieve a given impact and obtain the desired results. *Outputs* are the tangible results that can be measured in the short term, such as products, capital goods and services. Output indicators measure the quantity and quality of goods and services produced by the organisation (output) and production efficiency. Still, they do not extend to the intervention's effectiveness, which is covered by measuring outcomes and impacts.

Outcomes represent the effects (positive or negative changes) observable in the medium to long term (3 to 10 years) achieved or resulting from the outputs developed (e.g., goods, services, projects, program). Outcomes provide information that goes beyond corporate responsibilities and is also influenced by external factors that must be considered when constructing the key performance indicators (e.g., economic and social situation of beneficiaries, possible cultural resistance, obstacles to achieving the set goals, etc.).

The definition of impact (positive or negative, direct or indirect, etc.) is more complex than its measurement. The value of organisations' *impacts* can be determined by taking into account the outcomes of a "counterfactual analysis," i.e., the assessment of what would have happened in the absence of any activity carried out by an organisation. In this regard, the literature calls for an additional stage of analysis to accurately calculate the direct (endogenous) or indirect (exogenous) effects of organisations' decisions and, consequently, understand the causality between decisions, actions and impacts generated. In this regard, the results achieved in terms of impact must be redefined according to the following parameters:

- - what would have happened without any organisation's decision ("deadweight");
- - to what extent the change/impact generated derives from the interven-tion of third parties ("attribution");
- - the extent to which the outcome of the initial action taken is likely to decline over time ("drop off").

Through these steps, the ToC approach provides a circular impact assessment tool that allows organisations to budget and eventually evaluate the impacts of any decisions taken over time. Building on the traditional planning and control approaches, the ToC allows organisations to adjust their decisions and actions according to what can be achieved and predict any possible risks in terms of results, defining corrective activities, or justifying the emergence of unfavourable outcomes.

4. The main steps to design an impact management process

Any impact measurement process must not only be aimed at quantifying the outcome and impacts generated by organisations' decisions towards the environment and the society (i.e., "what needs to be done") but also a model, that is, the "how it needs to be done." Therefore, it is fundamental for an organisation not only to define a measurement tool (i.e., ToC) to evaluate the impacts generated but also to design, even beforehand, a model that involves the participation of multiple stakeholders to understand better their needs and how to meet them. According to Zamagni et al. (2015), a social impact management model should be structured around four main phases (Figure 2).

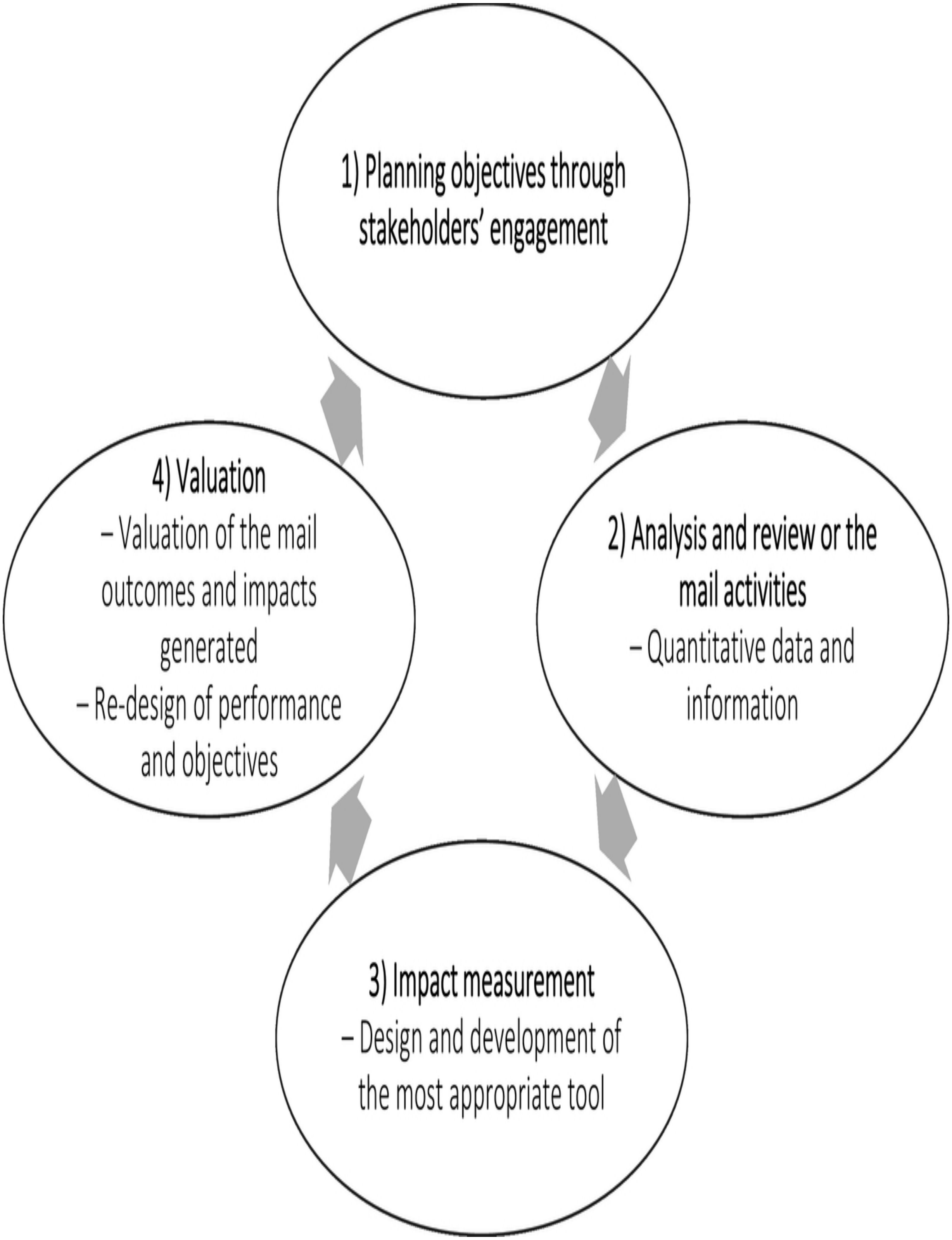

Figure 2. Impact management system

Source: Zamagni et al., 2015.

The first and crucial phase involves "planning objectives through stakeholder engagement". In this first phase, the objectives of the impact assessment process are shared and co-defined with all the stakeholders involved/impacted by an organisation's activity (Phase 1). The two main actions for stakeholders' engagement are:

- - The identification of the organisation's key stakeholders, i.e., the individuals, groups, and organisations whose interests are variously affected by the organisation's activity.
- - The analysis of stakeholders' interests, needs, expectations, involve-ment, and exposure to and how they affect an organisation's strategic orientation and its activities.

This first phase is followed by a second and a third step of "Analysis and review of the main activities" and "Impact measurement", through which organisations identify the most appropriate impact measurement system and proceed to the collection of qualitative and quantitative data necessary for the impact assessment (Phase 2 and 3). The last phase (Phase 4) of the model concerns the "evaluation," in the etymological sense of the term, which means to attribute value to the results achieved by the measurement process and define the positive changes generated (i.e., the social added value of the companies under analysis).

Whilst there is a lively and wide-ranging accounting literature exploring environmental and sustainability accounting, impact (or value) accounting remains significantly under-researched (see Nicholls, 2009; 2010a; Hall, 2014; Hall, Millo, and Barman, 2015; Cooper, Graham and Himick, 2016). In this context, the absence of any established accounting standard for impact measurement creates an obvious mismatch between the demand for, and supply of, information and suggests that a clearer definition of impact accounting is required. In the following session, we introduce the case of Capgemini and illustrate its approach to impact measurement and reporting, going through the different steps taken to develop its impact methodology.

5. The Capgemini case as a relevant actor in the definition of new best practices for measuring carbon impacts

> *"At Capgemini, we believe that innovation must be sustainable, socially desirable, economically profitable, and technologically feasible."* Integrated Annual Report 2021*, 46*

Capgemini is a global company characterised by a strong position on innovation and leveraging technology to enable business transformation. Capgemini operates in 55 countries around the world, employing around 325,000 team members. Created in 1967, the Group today offers a wide range of solutions for its partners, from strategy and design to operations, fuelled by the fast-evolving and innovative fields of cloud, data, artificial intelligence (AI), connectivity, software, digital engineering and platforms.

The organisation supports its clients along their digitisation process, rethinking and designing new business models, consolidating operational efficiency, and enhancing their capacity to innovate (see Figure 3). The Group presents its business model as structured around three main business lines: “Strategy & Transformation”, “Applications & Technology”, “Engineering” and “Operations”.

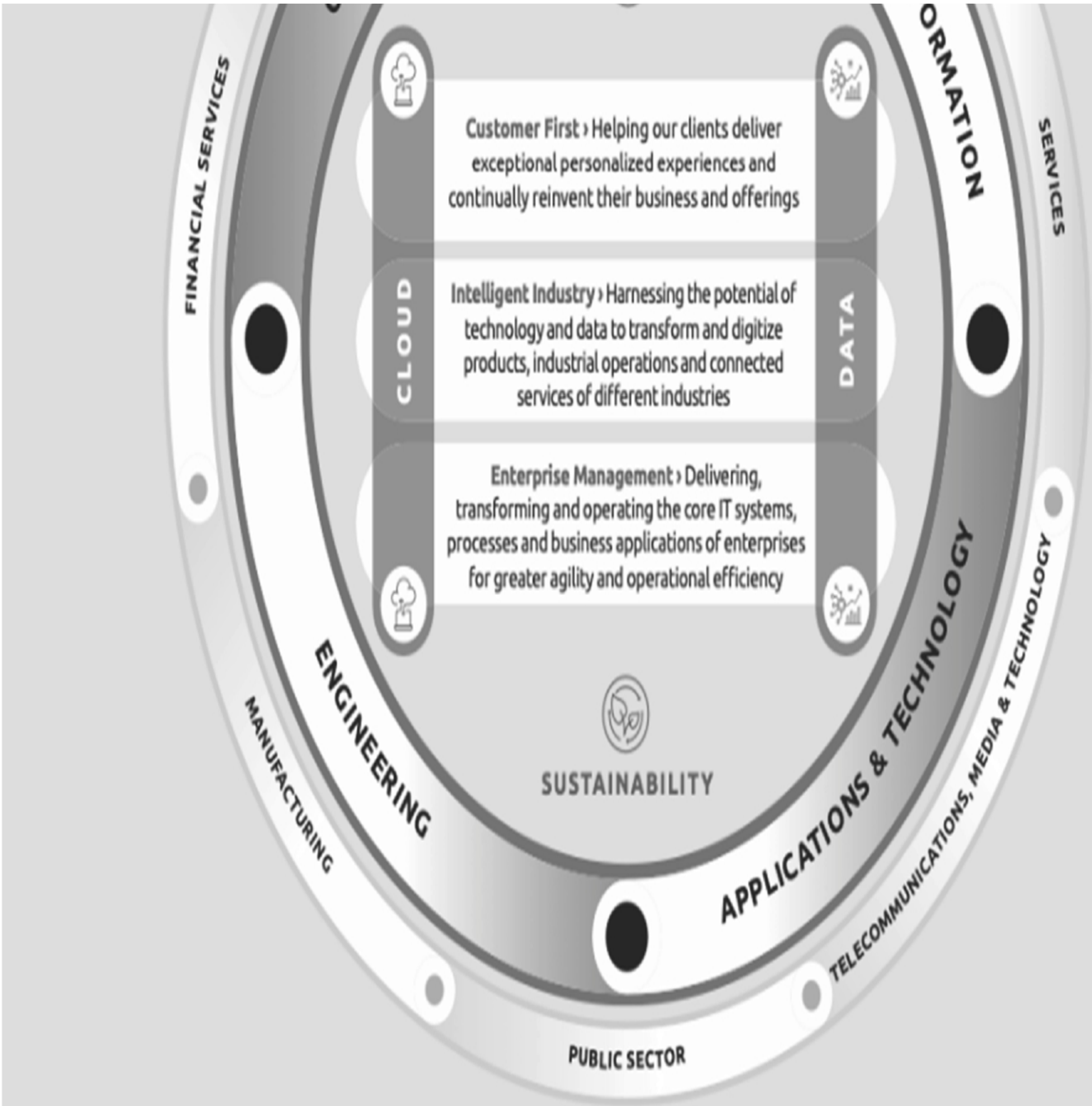

Figure 3. Capgemini Business Model

Source: Capgemini Integrated Report, 2021, 81.

> *"Digital, cloud, and data combined with artificial intelligence: we are present across the entire business value chain of our clients, from customer experience to the design of new products and services, to the digitalization and*

> *transformation of manufacturing and supply chains and the radical redesign of business management systems." (IR, 2021 p.8. CFO)*

Capgemini has a significant position in Europe (52% of its revenues) and North America (29% of its revenues). Still, it is also present in the United Kingdom and Ireland (11%) and the Asia Pacific & Latin America (8%). It serves several sectors, principally Manufacturing (25% of its revenues), Financial services (22%), Public sector (14%) and Telecommunications, Media & Technology (13%).

Years of experience and a strong relationship with clients and partners allowed Capgemini to improve the evaluation of the environmental and social impacts generated by its projects. As declared by the Capgemini CFO in the annual letter to stakeholders, *"alongside our clients, we share the strong – indeed, the crucial – aim of giving meaning to growth and committing ourselves to sustainable development. Capgemini applies the full breadth of its expertise in technology, engineering, and business model transformation to help our clients meet their environmental objectives*".

This is the topic that Capgemini tried to explore, in collaboration with Forum for the Future, to enrich the debate about the role of professional services companies in delivering sustainability outcomes for their clients and partners. Thus, generating positive impacts on society and the environment.

The purpose of the next section is to shed light on Capgemini's recent best practices in terms of carbon impact measurement, introducing a methodology for measuring environmental outcomes in terms of greenhouse gas emissions.

6. Measuring impact: a methodology to inform transformative project design

Over the past 20 years, significant progress has been made in the environmental disclosure and carbon accounting literature. However, a gap remains in carbon accounting – namely, the measurement and reporting of the carbon impacts of projects designed to reduce another organisation's carbon emissions.

In collaboration with Forum for the Future, Capgemini set out a greenhouse gas (GHG) Impact Methodology to address this gap and measure the environmental impact of specific projects and activities sold to clients. The GHG Impact Methodology was developed in 2022 to calculate projects' carbon (CO_2e) impacts, create a foresight approach to impact measurement and enable transformative decision-making from the outset of a project design, potentially avoiding inadvertent secondary carbon effects.

The methodology aims to provide clients and partners with more accurate and transparent insights about the potential carbon impacts of digital transformation initiatives.

Typically, organisational carbon emissions are calculated retrospectively at the end of an agreed reporting period or occasionally at the end of specific projects. However, employing a methodology such as Capgemini's GHG impact methodology enables decision makers to understand projects' likely carbon impacts already at the project's design phase, resulting in more informed strategic decisions on the environmental impacts of projects.

Many factors contribute to project design, and whilst decisions are not made solely upon potential carbon impacts, the possibility to visualise, through adequate quantifiable measures, the carbon impacts of strategic projects is an essential decision criterion to consider.

In this regard, the GHG Impact Methodology developed by Capgemini provides a five-step approach for calculating such impacts. The steps are applied sequentially and are explained further in the following subsections.

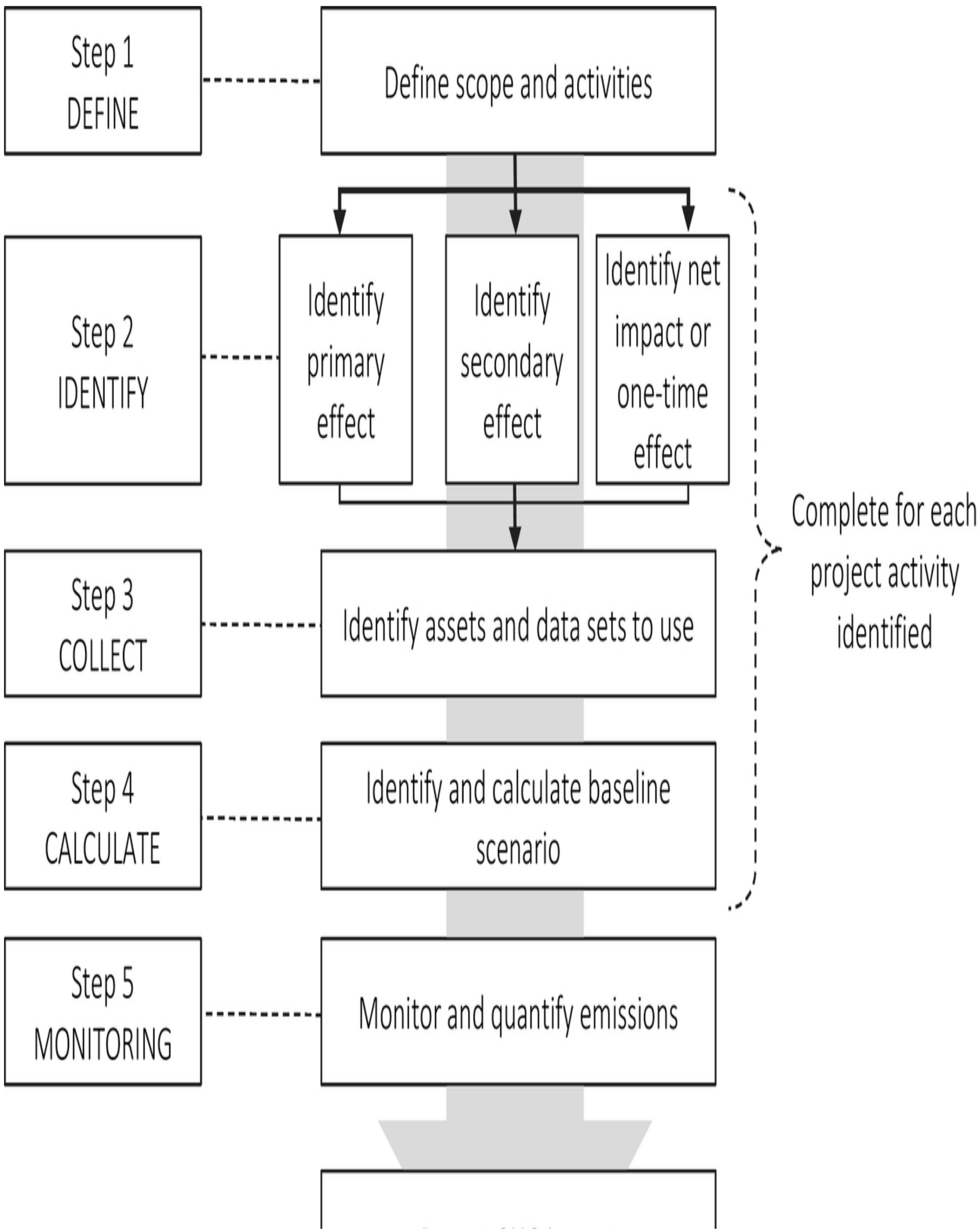

Figure 4. GHG impact steps

Source: Measuring Impact: A methodology to inform transformative project design. Available at: https://prod.ucwe.capgemini.com/wp-content/uploads/2022/09/GHG-ImpactMethodology-Thought-Leadership-Report.pdf.

Step 1: Define – Understanding the Carbon Levers for a Project

To measure CO_2e emissions for any specific project, first, it is necessary to define the scope of a project's potential impacts. To do this, it is necessary to assess the potential and macro-level carbon emission impacts associated with a project by analysing the business-as-usual scenario (baseline) and the post-project (predicted) impacts of delivering the project. These calculations represent the building blocks for developing the final GHG impact assessment.

Figure 5. Project Activity Definition - Potential carbon emission impacts from selection of IT transformation projects

Potential positive carbon levers (Emission reductions)	Potential negative carbon levers (Emissions increases)
Solution allows the client to implement virtual delivery models enabling employees to work at home - potential reductions in office energy (client's Scope l and 2 emissions) and reduction in employee commuting (clients Scope 3 emissions)	"Need to consider the indirect impacts of reducing commuting - employees working at home will use domestic energy (client's Scope 3 emissions - if measured) including the carbon impact of the solution - embedded carbon in new IT equipment as well as required network and datacentre infrastructure (both client's Scope 3 emissions)

Solution migrates client's IT Infrastructure from a standalone equipment running in their office to virtualised cloud solution in supplier datacentre - reductions in office electricity (client's Scope 2 emissions)	Need to consider the emissions associated with the supplier's cloud infrastructure such as energy in datacentre and embedded carbon in IT equipment (both would be client's Scope 3 emissions)

Solution replaces less energy efficient IT hardware (for example: laptops, desktops, monitors) with new low energy devices - reductions in office electricity (client's Scope 2 emissions) and potentially working from home emissions (client's Scope 3 emissions if measured)	Need to consider the embedded carbon associated with the replacement devices (Scope 3 purchased goods and services emissions)

Solution digitises invoicing process reducing need for printed invoices - reduction in paper and postage (Scope 3 emissions) as well as electricity to print (Scope 2 emissions)	Need to consider the embedded and operational emissions of the IT solution - embedded emissions in equipment and electricity to run (Scope 3 and 2 emissions respectively)

Source: Measuring Impact: A methodology to inform transformative project design.

The impacts identified at the macro-level will form the basis of the scope for the project carbon accounting, which is organised in three main stages: i) the estimation of the projected CO_2e emission impacts at the proposal stage to support the client's decision-making process; ii) the monitoring of the project throughout its lifespan to ensure that the projected benefits are delivered; iii) reporting.

Step 2: Identify – Delineating the effects of the project

Once a project's potential carbon emissions' impacts are defined, it is necessary to identify the effects linked with each activity within the project. This enables the transparent reporting of the project's impact, including any negative secondary effects. These unintended carbon consequences are often overlooked while focusing on the identified positive emission impacts. In particular, Capgemini's GHG emissions impact methodology distinguishes two main effects: Primary and Secondary effects.

Primary effects result from activities aimed at reducing GHG emissions through carbon reduction, storage, or sequestration. Following the guidelines of the Greenhouse Gas Protocol [2] for Project Accounting, Capgemini classifies primary effects into five categories: reduction in combustion emissions from generating grid-connected electricity; reduction in combustion emissions from generating energy or off-grid electricity, or from flaring; reductions in industrial process emissions from a change in industrial activities or management practices; reductions in fugitive emissions; reductions in waste emissions.

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[2] The Greenhouse Gas Protocol: The Greenhouse Gas Protocol for Project Accounting https://ghgprotocol.org/sites/default/files/standards/ghg_project_accounting.pdf.

These categories are applicable to different industries, including technology, and can be used for calculating emission impacts. These impacts are measured across a project's timeline, from the design process to the delivery and end of a project, with a post-project analysis.

Capgemini defines as "secondary effects" all other effects associated with an activity – both negative (an increase) and positive (a reduction) in terms of CO_2e emissions. Secondary effects can result from the activities carried out during a project, can be directly associated to an activity within or even outside of the project's main scope, resulting in changes in GHG emissions elsewhere in the client's operations or value chain.

As stressed in the report, although secondary effects are often smaller than primary ones, they require to be carefully identified and considered when defining project boundaries to avoid overestimating positive carbon benefits. Finally, one-time effects are a particular class of secondary effects generally occurring during the project's deployment phase.

Step 3: Collect – Data Identification

To develop an adequate carbon impact measurement methodology, it is necessary to identify appropriate data sets. As mentioned in the previous section, each activity will have a primary effect and possibly a secondary effect, and data will need to be established in each case. Appropriate GHG emission conversion factors will also need to be identified to support calculation. [3]

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[3] In the UK, the most commonly used conversation factors are the Government conversion factors for company reporting of greenhouse gas emissions provided by the Department for Business, Energy & Industrial Strategy (BEIS).

When data is not readily available, proxy measures need to be used to evaluate emission savings. Often a company will know the amount of money spent on, for example, business travel, but not the distance travelled. In the same way, finding the right conversion factors for each activity can also be difficult and may require the help of a carbon specialist.

Step 4: Calculate – Computing the Carbon Impacts

After having identified all the necessary data and conversion factors, the project's carbon impacts can be calculated. With many projects implemented, Capgemini calculates a business-as-usual (baseline) scenario and compares it to the carbon benefits generated by implementing the project.

The business-as-usual scenario represents the continuation of the client's current business activities without the implementation of the project offered by Capgemini. It is critical to document any assumption employed when developing a business-as-usual or baseline scenario, so that it can be validated with the client and adjusted if necessary.

Importantly, the business-as-usual scenario might be dynamic. To develop non-static baseline scenarios, Capgemini notes that a wider range of factors need to be considered, such as:

- - natural decarbonisation over time – without any input from the client, many activities are decarbonising year after year (for example cars, lorries, or planes are becoming more efficient);
- - changing demand patterns – demand for some products and services is reducing each year, consequently driving down carbon in the baseline scenario;
- - legislation may prohibit the future manufacture of a product – conse-quently the baseline scenario may need to exclude carbon emissions related to the forbidden product.

Once the business-as-usual scenario is defined, a project's carbon impact can be computed. Essentially, this involves bringing together the outputs from Steps 2 (defining the effects) and 3 (identifying data sources and carbon conversion factors). One key aspect to take into account when evaluating impacts is the timeframe – how many months or years of carbon emissions reductions should meaningfully be forecasted.

Step 5: Monitoring and reporting – Ongoing assessment of the project

Capgemini's last step of the impact methodology pertains to monitoring GHG emissions throughout the project implementation phase. This requires to quantify the evolution of carbon impacts along a project's timeline and to compare them to those estimated at the project's beginning. Capgemini calculates and reviews the impacts of GHG emissions throughout three main phases of a project:

1. The Design stage: calculations are made during the proposal phase before the client commissions the project. At this stage calculations are usually high level, including assumptions and only a limited number of key activities and are often based on assumptions. These calculations provide the client with an estimate of the project's potential GHG impact.
2. The Project kick-off: more detailed calculations are realized using client inputs and often require validating and adjusting the assumptions made in the design stage.

3. The Project completion (or interim milestone for larger projects): at the end of a project, calculations are made using client data and compared to baseline calculations to assess the actual CO_2e impacts.

These three phases find their realisation in the publication of a documented monitoring plan that includes the assumptions made, any uncertainties observed throughout the evaluation of the impacts, the operating conditions, and the variance between the budgeted impact analysed and the actual results.

Whilst a project's potential carbon impact can be estimated at the design or project kick-off phase, it is likely that the actual impacts will change during the delivery phase. This could be caused by intentional or unexpected changes that impact the project implementation but also by calculation assumptions proved to be incorrect during the delivery of the project. Therefore, it is important to review the carbon impacts of projects after completion.

To successfully using their GHG impact methodology, Capgemini and Forum for the Future recommend following the six principles defined by the GHG Protocol for Project Accounting. See the table below.

Table 2. Capgemini's Impact management and reporting principles

Principle	Definition
Relevance	Use data, methods, criteria, and assumptions that are appropriate for the intended use of reported information.
Completeness	Consider all relevant information that may affect the accounting and quantification of GHG reductions, and complete all requirements.
Consistency	Use data, methods, criteria, and assumptions that allow meaningful and valid comparisons.
Transparency:	Provide clear and sufficient information for reviewers to assess the credibility and reliability of GHG reduction claims.

Principle	Definition
Accuracy	Reduce uncertainties as much as is practical.
Conservativeness	Use conservative assumptions, values, and procedures when uncertainty is high.

Source: Measuring Impact: A methodology to inform transformative project design.

7. Conclusions

This chapter explores how organisations manage, measure, and report their environmental and social impacts. We do so by illustrating the case of Capgemini and the implementation of its GHG impacts methodology.

Recent studies in impact measurement and corporate reporting have shown that impact measurement is a challenging sensemaking activity and that the design of tools, and quantitative and evaluative methodologies give structure to the process of impact evaluation and definition within organisations (Qu and Cooper, 2011; Chenhall et al., 2013; Vieta et al., 2015; Hall et al., 2015).

Although individual actors or businesses cannot shift systems and address environmental challenges, having a structured and well-designed impact management system (like the GHG impact methodology proposed by Capgemini) can make an essential contribution to improving organisations' future accountability and, in some situations, lead to the mitigation of generating significant unintended impacts to society and the environment.

Further, having a logical and consistent approach to measuring organisations' impacts on society and the environment (positive or negative) beyond just carbon is critical to optimise present resources and meeting multiple stakeholders' requests and expectations.

Within our case study analysis, the development of a GHG Impact Methodology enables Capgemini to provide managers, its clients, and partners with valuable insights on how to measure carbon emissions impacts. Ultimately, the impact methodology quantitatively describes the operating context and helps to inform organisational decision-making.

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Chapter 13
LESSONS ON IMPACT MEASUREMENT FROM A CATHOLIC CHURCH IMPACT INVESTOR

Keith Polo, Joelle Birge, Albertina Muema

Abstract: Missio Invest is the non-profit fund manager of Missio Invest Social Impact Fund (MISIF). MISIF is an impact investment fund designed and operated with the overall objective of expanding and strengthening the largest social enterprise network of farms, schools, health facilities, and financial institutions across Africa. These social enterprises are owned and operated by the various congregations, seminaries, parishes, and dioceses of the Catholic Church. In terms of scale and footprint, there are presently 550 dioceses in Africa with thousands of religious congregations owning and operating approximately 42,000 schools, 2,200 health facilities, and thousands of farms and agribusinesses. Further, these social enterprises are run by approximately 70,000 religious women and 65,00 religious

men – forming the largest cohort of faith-based social entrepreneurs in Africa.

MISIF provides such social enterprises with long-term loans from 50,000 to 1MM USD and linked technical assistance and business advisory services. To date, these social enterprises run by Catholic Church entities have not had access to external financing nor technical and business advisory assistance to help them strengthen and grow their impact-first enterprises that provide key basic services to local populations across Africa. Through mid-2022, MISIF has issued 53 loans totaling approximately 10MM USD across 8 countries. Thus far, the loans are successful, with seven of the 51 loans now fully repaid and 98% performance among all loans issued in the last three years. Given that MISIF is an impactfirst investor, impact measurement of both the loans and linked technical assistance and the social impact provided by the borrowing enterprises is critical, yet also challenging to implement. This chapter will explore the approach and methods that Missio Invest has developed to measure and track the impact of Missio Invest's lending operations as well as the social impact generated by MISIF's faith-based borrowers.

Keywords: Impact investing – Social enterprise – Impact measurement.

1. Introduction

Missio Invest is the non-profit fund manager of Missio Invest Social Impact Fund (MISIF). MISIF is an impact investment fund designed and operated with the overall objective of expanding and strengthening the largest social enterprise network of farms, schools, health facilities, and financial institutions across Africa. These social enterprises are owned and operated by the various congregations, seminaries, parishes, and dioceses of the Catholic Church. In terms of scale and footprint, there are currently 550 catholic dioceses in Africa with thousands of religious congregations owning and operating approximately 42,000 schools, 2,200 health facilities, and thousands of farms and agribusinesses. These social enterprises are run by approximately 70,000 religious women (sisters) and 65,00 religious men (priests and brothers) – forming the largest single body of social entrepreneurs in Africa. Furthermore, the Catholic Church is the largest non-government provider of education and healthcare in Africa and the world.

MISIF provides such social enterprises with long-term loans from 50,000 to 1MM USD and linked technical assistance and business advisory services. To date, these social enterprises operated by the various units of the Catholic Church have had little access to affordable private financing or technical and business advisory assistance to help them strengthen and grow their impact-first enterprises that provide key basic services to local populations across Africa. In addition, Church entities such as dioceses and religious congregations have largely remained outside the scope of overseas development assistance (ODA) leaving the single largest development network dependent on internal resources, mainly in the form of inexpensive and under-qualified personnel. At the same time, such personnel are largely indigenous, highly motivated in promoting development and provide a significant degree of sustainability in their interventions, especially to those communities that occupy the so-called “last mile.”

Through mid-2022, MISIF has issued 53 loans totalling approximately 10MM USD across 8 countries. Thus far, the lending approach has been successful, with eight of the 53 loans now fully repaid and 97% performance among all loans issued in the last three years. Given that MISIF is an impact-first investor, impact measurement of both the loans and linked technical assistance, and the social impact provided by the borrowing enterprises, is critical, yet not without its challenges given the frontier nature of the investments. These borrowers are currently all units of the Catholic Church. The reason for this is not denominational as such. Given the uncollateralized nature of the loans, their high-risk development aspect and the relatively unsteady managerial structure and financial acumen at the project level, the need for an appropriate cultural interface that can accompany these small businesses with a high degree of confidence in the data and performance determines that MISIF operates among those entities over which it can exercise a predictable form of oversight and engagement, particularly in terms of financial flows.

This chapter will explore the approach and methods that Missio Invest has developed to measure and track the impact of Missio Invest's lending operations as well as the social impact generated by MISIF's borrowers.

Figure 1. Missio Invest countries of operation

Source: Missio Invest Annual Impact Report 2021.

2. Early impact measurement efforts, processes, and lessons learned

Missio Invest started lending to social enterprises in Africa run by the Catholic Church in 2016. As of mid-2022, 53 loans have been disbursed across 8 countries for a total investment value of approximately $10MM. The fund currently has approximately $33MM in capital committed with an objective of raising another $20–30MM.

Ramp up of lending was initially slow and deliberate and that was intentional for Missio Invest to setup its team, learn its borrowers and local contexts, and to setup both lending processes and reporting procedures for borrowers. The culture shift from an exclusive focus on grants/donations to one of loans and repayment is one of the principle objectives of the approach. Missio Invest is an impact first lender, and thus, the measurement of impact and the sharing of impact results has always been a priority of its approach and work. At the startup phase of Missio Invest, however, there were challenges in identifying agreed upon standards or metrics that could track impact achievements while also being practical for our borrowers in Africa to understand, track, and report on.

Defining impact metrics that the Missio Invest team could compile and communicate externally to interested investors and parties was also of critical importance. The following paragraphs will discuss some of the primary lessons learned during the startup period of Missio Invest.

Starting out

While the term impact investing clearly intends a commitment to generating positive social, economic or environmental outcomes, the ways in which the intended impact is measured, and thus, confirmed, is less than consistent. Given that Missio Invest provides loans and technical assistance to Catholic Church run social enterprises in Africa and because Missio Invest was conceived within the rubric of Pope Francis's 2015 encyclical named "Laudato Si'" (Praise be to you), the overall objectives of Laudato Si' was the logical starting point for Missio Invest to begin to create an Impact Measurement and Management (IMM) system. In particular, the main themes of Laudato Si' include: response to the cry of the Earth; response to the cry of the poor; ecological economics; adoption of simple lifestyles; ecological education; ecological spirituality; and emphasis on community involvement and participatory action. Missio Invest began to design impact indicators related to these themes.

Further, the Sustainable Development Goals (SDGs) were also published in 2015, shortly after Laudato Si', and made significant headway on defining high-level categories of development targets globally. The 17 SDGs focus on five key elements: people, planet, peace, prosperity, and partnership. These SDGs helped inform Missio Invest of high-level objectives that our investments and initiatives could align themselves with in order to not only contribute to local impact but also feed into a broader global impact platform. However, the challenge to define specific impact indicators per SDG category remained difficult on the ground and for a small, growing organization like Missio Invest to develop and roll out. There remained an additional challenge of trying to define impact metrics that could align and be measured against both Laudato Si' and the SDGs. While they were aligned at a high-level, the challenge of designing more specific impact metrics that could be tracked by borrowers and easily compiled by the Missio Invest team remained a challenge.

In order to assist Missio Invest with developing more specific impact indicators, as stated above, that could align with Laudato Si' and the SDGs and the particular sector of agriculture that we began lending into, Missio Invest also consulted the Global Impact Investment Network's (GIIN) impact measurement and management system called IRIS, now

IRIS+. While the indicators developed by IRIS at that point in 2015–2016 where informative, they did not adequately assist with helping Missio Invest and its borrowers to properly and easily measure impact metrics across the unique social enterprise structure of the Catholic Church. This is because few social enterprises run by the Church are managed in isolation. For instance, if a loan is made to a farming enterprise, the farming enterprise is typically linked directly with a school or health facility, or both, run by the same congregation or Diocese. Thus, there were no indicators or IMM in the marketplace that could assist us in measuring those linked impact pathways and what indicators to use.

Such diversity in both the focus and scale of investees' activities also meant that standardized measurement was problematic, and in some cases perhaps not even beneficial or desirable. While a number of standardized metrics and frameworks do exist, there is no one prevailing approach to impact measurement that is universally used and accepted by investors and enterprises globally or in Africa. Thus, Missio Invest embarked on creating its own proprietary IMM system, step by step, understanding that to develop such a framework would take significant time and would, most likely, be an ongoing process of refinement and development over the years.

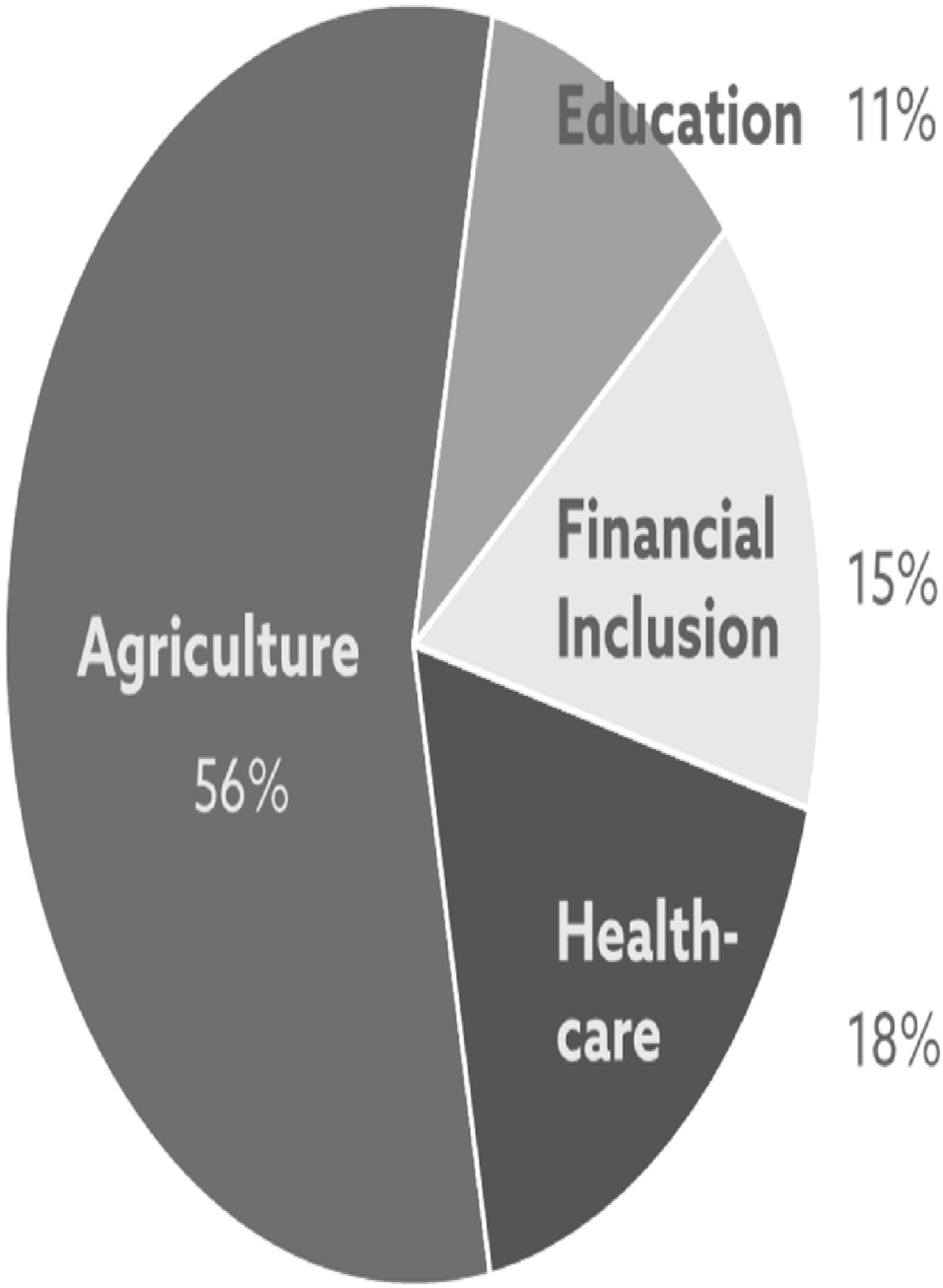


Figure 2. Investment Sectors

Source: Missio Invest Annual Impact Report 2021.

3. Initial years of defining metrics and collecting data

As stated earlier, Missio Invest started lending to Catholic Church run social enterprises in Africa exclusively in the agriculture sector. This approach meant loans supported new or existing farms and agribusinesses that in turn support jobs for local communities, access to nutritious food, environmental care for the planet, and support to other enterprises the respective borrower also ran, such as schools or health clinics. Thus, initial non-financial impact indicators were focused on assessing the impact related to investments in agriculture. Such indicators at that time (2016–2018) included number of jobs created, amount of food produced, number of trees planted, use of renewable energy such a biogas or solar, number of hectares sustainably managed, among other output level indicators.

In the first few years of Missio Invest's lending operation, the basic indicators that were tracked did give a sense of the scale and scope of the lending work that Missio Invest was doing in the agriculture sector. However, the data appeared one dimensional, almost static. We knew that the impact of strengthening the financial and management capacity of so many social enterprises run by the Catholic Church in Africa had multiple positive social effects on local populations but also internally inside the Church. How to better measure such positive change and impact in an unbiased manner and how to better communicate the findings both internally and externally was a key question we needed to address.

Defining a Theory of Change

In early 2019, a small internal impact measurement working group was formed for the first time. After much discussion, it was considered that a general, broad framework of the intended outcomes and outputs of the work of Missio Invest needed to be developed – a Theory of Change.

Uniquely, Missio Invest aims to simultaneously strengthen the social enterprises in which we invest as well as the Catholic Church entities that run them, among other linked social enterprises such as schools and health facilities. How to capture these intentions? How to measure the efficacy of the combined finance and technical assistance that Missio Invest aims to provide? Discussions with staff and borrowers resulted in a first draft Theory of Change, as follows:

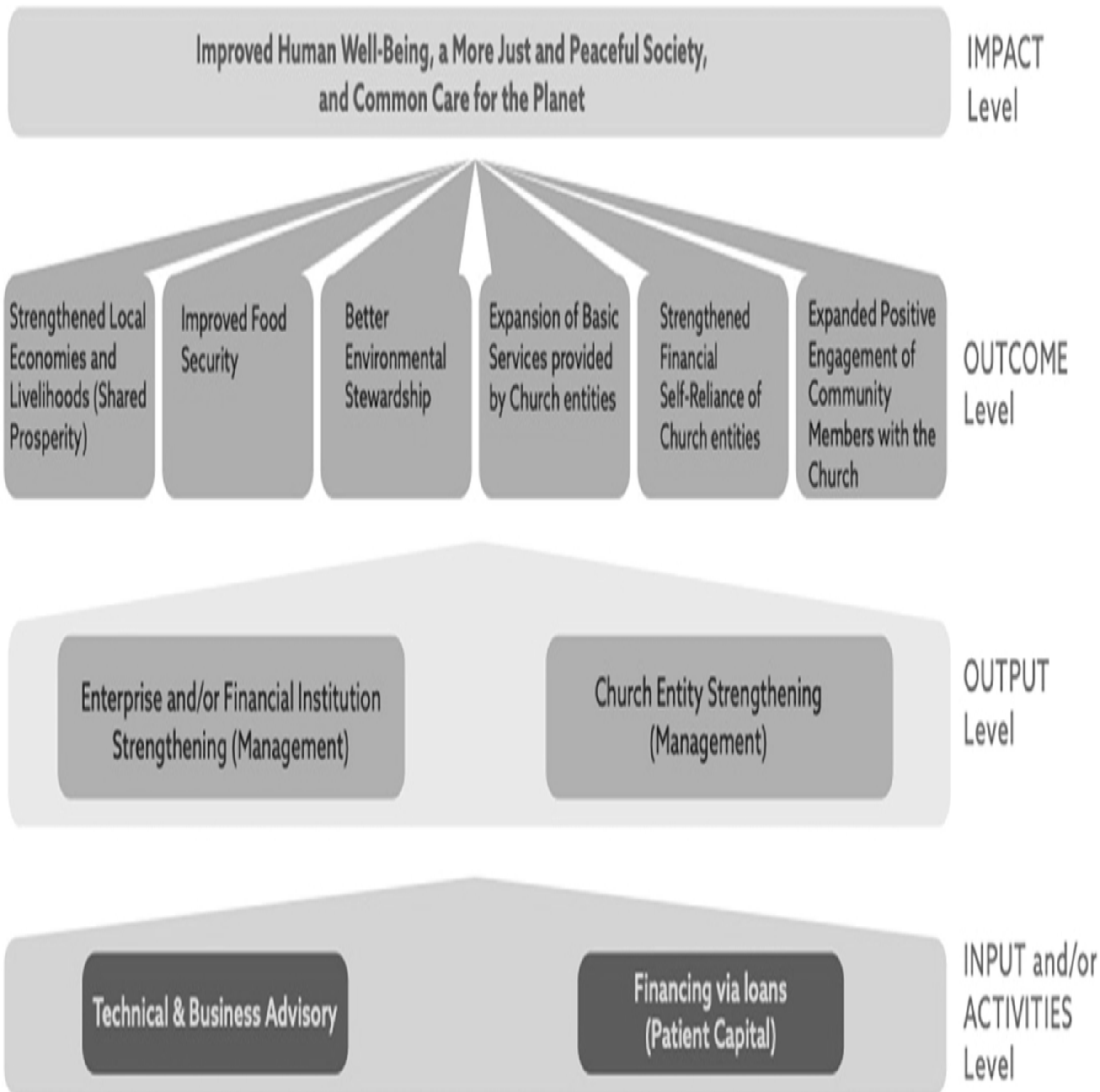


Figure 3. Missio Invest overarching Theory of Change

Source: Missio Invest.

Developing Impact Metrics and a System for Data Collection and Reporting

After developing a general Theory of Change, the next step was establishing clearer and more concise impact indicators. We began by identifying four main impact areas: shared prosperity, resilience / *Laudato Si'*, food security, and strengthened Church entities. Underneath each of these broad categories, we developed sub-categories and concrete indicators based on our experience working with these Church-run social enterprises. We focused on selecting metrics that would be easy for our borrowers to track, while demonstrating the full extent of their impact.

For example, underneath shared prosperity, we created four subcategories: employment, currency injected into local economies, smallholder farmer training (ag. loans only), and smallholder farmer sales & purchases (ag. loans only). Each sub-category then contains indicators such as number of full-time employees (further broken down by gender and age), number of casual laborers, number of farmers trained, and number of farmers buying and selling products and services to / from the investee. We went through this process for each of our four target sectors: agribusiness, education, healthcare, and financial inclusion. Some metrics (such as employment) were common across all sectors, while others were unique to each sector.

Once we had developed our indicator list for each of the four sectors, we established a process for measuring impact pre- and post-financing. To do this, we developed an impact survey which would be shared with borrowers once prior to disbursement and then annually during each year of the loan term. The pre-disbursement survey is called a Baseline Impact Survey and is meant to capture the impact that our borrowers are achieving before receiving a loan from Missio Invest. As part of the prefinancing process, we also ask borrowers to set Impact Goals for each year of the loan term. These goals serve as an impact roadmap which we then compare against each year when evaluating a given borrower's impact achieved.

We began by asking borrowers to fill in this data using Microsoft Excel templates and soon found that this method posed a number of challenges for both Missio Invest and the borrowers. Many borrowers who had weaker computer skills struggled with completing the Excel templates, while Missio Invest had difficulty cleaning and aggregating the data. For example, some borrowers may have entered text in fields that should have been numerical, making it difficult to aggregate using Excel formulas.

In order to distribute these surveys and aggregate data from borrowers more easily, we adopted the use of an online data management system called Proseeder. This system allowed us to develop web-based surveys, send them out to borrowers, and then aggregate the data received. While the online survey was easier than Excel for many borrowers, the process required substantial one-on-one follow-up from Missio Invest's team members in each country. For example, for some borrowers experiencing internet accessibility issues, our Country Investment Managers completed the survey online via phone calls with the project leaders.

Once information was collected from each borrower, Missio Invest then needed to clean and aggregate the data. Although the online survey format allowed for some standardization of the data collected (e.g., ensuring that only numerical values are entered in quantitative fields), we discovered that many borrowers still submitted unusable data, due either to typographical errors or misunderstanding of the questions. To address these abnormalities, we downloaded the aggregated impact survey data to Excel and then asked our Country Investment Managers (CIMs) to review the data collected for each borrower in their countries. In cases where the information did not appear accurate based on the CIM's understanding of the borrower, the CIM would contact the borrower to highlight the potential error and obtain corrected values.

After this data cleaning process was complete, Missio Invest was then ready to aggregate and analyze the impact data. Due to shortcomings in the Proseeder system, this analysis was completed entirely in Microsoft Excel. Using formulas, Missio Invest's team summed the impact data by country, sector, and overall across the entire portfolio. We then highlighted certain particularly compelling metrics for inclusion in the report to be published. As a last step, our part-time impact reporting team member assisted with creating graphics and formatting the selected data into Missio Invest's first annual impact report.

It is worth noting that all data collection, aggregation and analysis was completed by Missio Invest's investment professionals (Country Investment Managers, Analyst/Associate, and Vice President Lending) without any support from full-time impact measurement and management staff. Initially, we found that this approach was beneficial, as our investment staff knows our borrowers well, enabling us to easily identify potential errors in the data, to trouble shoot such inconsistencies with the borrowers, and to analyze and synthesize the data. However, we also knew that such a laborintensive piece of work would need support from an impact measurement professional soon as our loan portfolio grew and the time pressures on our investment team also grew.

4. Refining an impact measurement and management system that is practical for the impact investor and the social enterprise

Following the completion of Missio Invest's first annual impact report, we identified a number of opportunities for refining and improving our process and systems. First, we realized that, although our investment professionals are an essential part of impact measurement and management (IMM), it would be helpful to have a dedicated team member responsible for organizing the impact data collection and reporting process. To address this need, Missio Invest onboarded a part-time staff member focused on impact reporting.

The first task for our new ESG & Impact Reporting Manager was to review Missio Invest's data management system and identify potential alternatives. As mentioned above, the first platform used (Proseeder) had a number of shortcomings which came to light during the production of the first annual impact report. For example, the system did not allow data to be edited after it had been submitted by the borrower. This was problematic, as it did not allow for cleaning of the data in cases where borrowers entered unusable data due to typographical errors or due to misunderstanding of the questions. This inflexibility of the system necessitated the downloading of all data to Excel for cleaning and analysis, which was a cumbersome and manual process.

After conducting a review of several data management platforms, Missio Invest decided to implement a system called ActivityInfo. The new system was much more flexible and dynamic and allowed Missio Invest team members to easily enter and edit data as needed. ActivityInfo also allowed for better visualization of data, reducing the amount of analysis that needed to be done manually in Excel.

In addition to evaluating the data collection system, Missio Invest also revisited the list of impact indicators. After reviewing the data collected in the first set of impact surveys, we realized that some questions caused confusion for borrowers, and some were duplicative and unnecessary. For example, we had indicators asking for the number of full-time managers and part-time managers. We realized that this led to inconsistent reporting of data across borrowers, as some borrowers considered managers to be part-time if they had other responsibilities outside of the social enterprise, while others considered these to be full-time. Missio Invest's investment team went through the indicators with the ESG and

Impact Reporting Manager and rephrased confusing questions, while removing those that were duplicative or unnecessary. The goal was to narrow the list of metrics down to a concise set of indicators that would be practical for our borrowers to track and report on over time (see Figure 4). For an example of the process of collecting data for one specific impact indicator please refer to Figure 5.

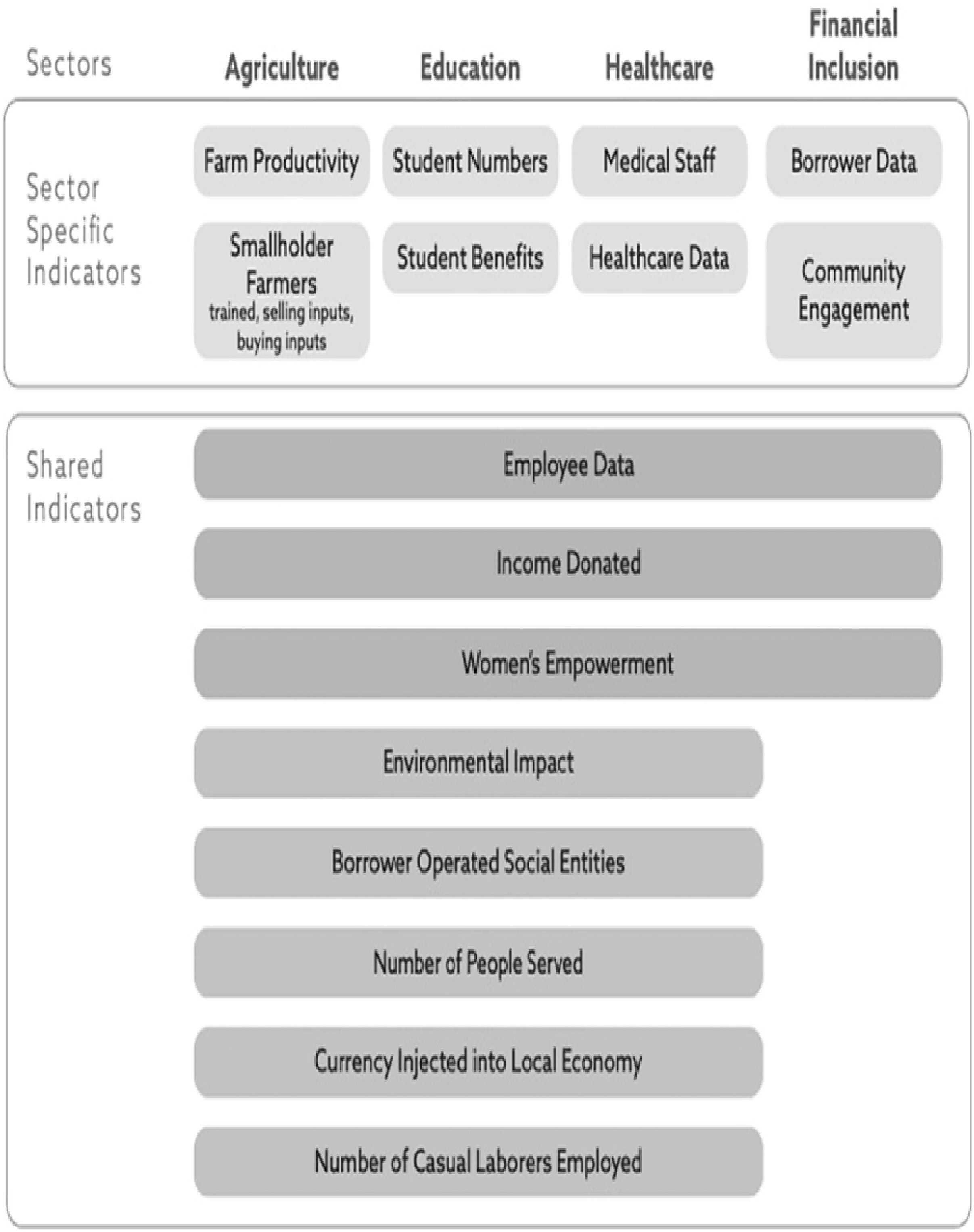
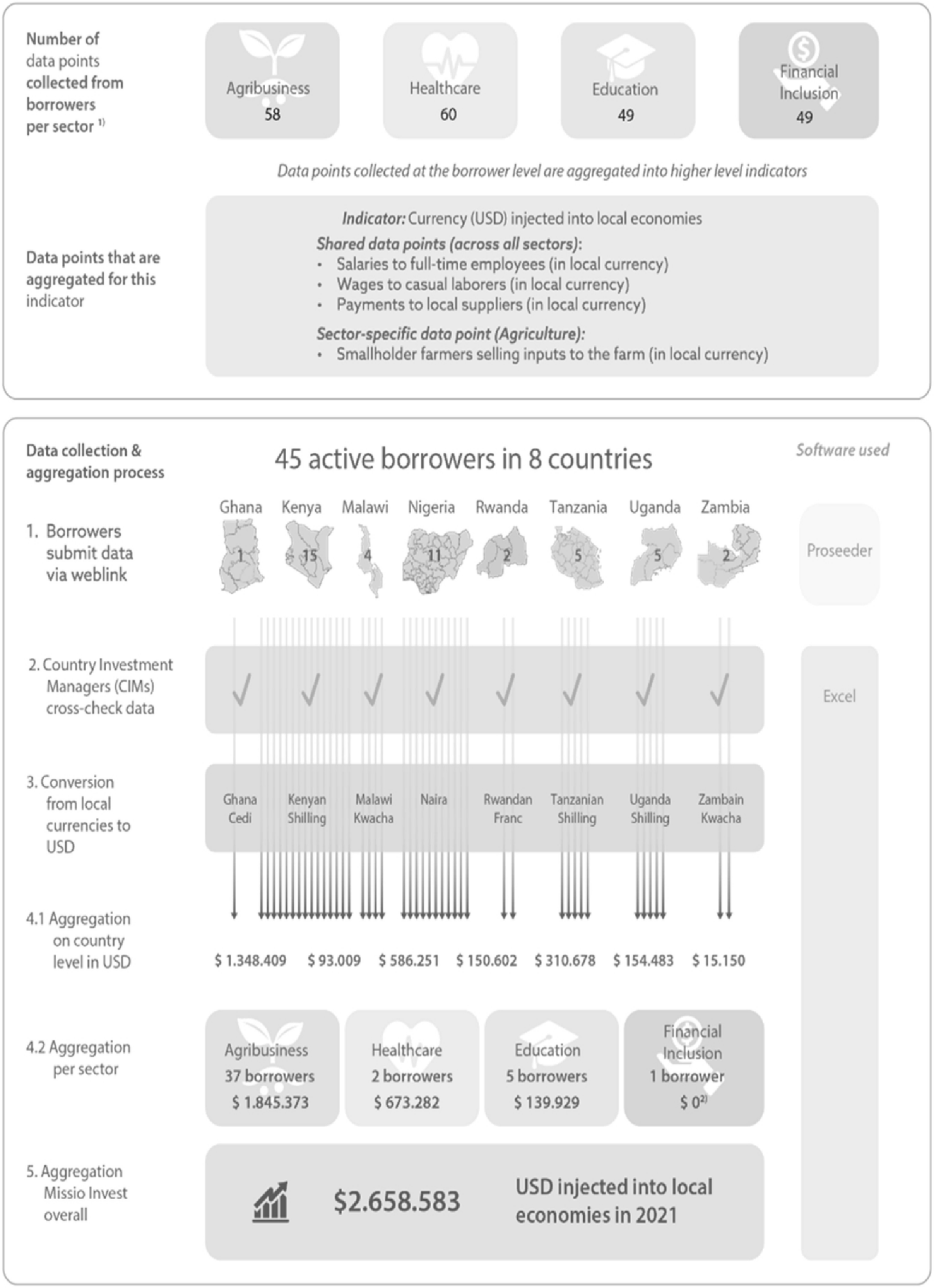


Figure 4. Key impact indicators tracked per borrower

Source: Missio Invest.



[1] For an overview of indictars, please see graph "*Missio Invest - Indicators*"
[2] We did not receive salary /wage / supplier payment information from this borrower

Figura 5. Illustrative example of data collection of one indicator

Source: Missio Invest Annual Impact Report 2021.

Another challenge encountered in the development of the first annual impact report was gathering baseline data from borrowers whose loans had already been disbursed. We realized that it is essential to collect impact data early on in the loan evaluation process and now require that all borrowers complete a Baseline Impact Survey and set Impact Goals prior to disbursement.

The Covid-19 pandemic also tested our data collection method and the resilience of our borrower’s business enterprises. The borrowers faced disruptions economically and socially. They had daily pressure to innovate strategies to balance management of day-to-day operations and the safety of workers. Missio Invest Staff could not visit projects to monitor and review impact goals. However, our remote impact data collection method proved reliable in such an unprecedented time resulting in the production of our first impact report.

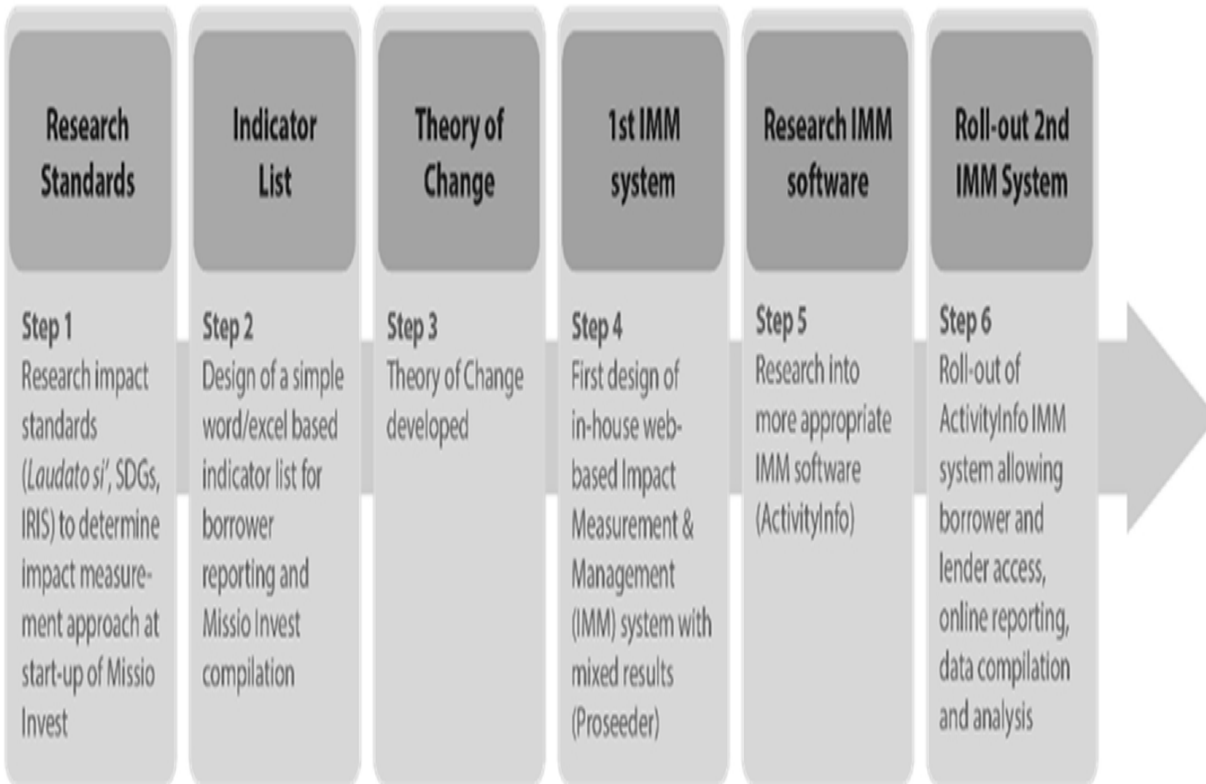


Figure 6. Evolution of impact measurement system at Missio Invest

Source: Missio Invest.

Overall, Missio Invest's development and refinement of an impact measurement and management system has been an iterative process – establishing procedures in collaboration with our in-country team members, gathering feedback from borrowers, and then adapting and improving our systems to better suit our borrowers' needs, while also optimizing for clear and accurate collection and aggregation of impact data. A brief visual timeline of the steps taken in developing our impact measurement system is depicted in the following diagram. For access to Missio Invest's latest impact report, please visit https://missioinvest.org/en/our-impact/#our-impact-report.

5. Conclusion

IMM alignment is vital across the entire impact investment process from due diligence to loan closeout

IMM practices have grown increasingly sophisticated as investors shift from building consensus for IMM to strengthening its integration within investment processes. In the initial years, Missio Invest always considered itself cognizant of integrating IMM into its whole investment process, however, actual integration into due diligence processes and documentation, loan agreements, non-compliance conditions, and reporting requirements took considerable time. A strong organizational culture prioritizing the intention of being an impact-first fund was important and planning for an incremental integration of the IMM process into the investment process is prudent.

Step by step approach

Missio Invest's impact measurement and reporting began with a rather heavy, or unautomated, structure. Surveys had long lists of indicators and were sent to borrowers in word or excel files on a quarterly basis. This work was done by the Fund's investment professionals. While enthusiastic to do this impact reporting work, investment professionals of the first-time fund were overly busy with sourcing new investments, developing lending procedures and providing technical assistance. Enterprise also had constraints on filing out the questionnaires. Many data points were not filled out correctly, or at all, by borrowers during the initial impact reporting systems. We quickly learned that it is important to recognize the realities of business operations and what it makes sense to collect, improving data collection over time.

A migration to a more distilled version of indicators and a means of sending impact reporting surveys digitally on an annual basis has been helpful. Lesson: developing an in-house IMM takes time, effort and resources, so, it is important to take into account the time and resource constraints of both the fund and investee enterprises when designing reporting systems. This can be achieved with the help of dedicated impact IMM staff and a committed and enthusiastic investment staff.

Combine top down and bottom-up reporting practices

Standardized data reporting for upward accountability (proving impact) should be seen as complementary to bottom-up approaches focused on outcomes data that is relevant and useful to the social enterprise itself (improving impact). This is a delicate balance that the impact investment team and the borrower both must appreciate. Both are important.

Standardized output reporting at the fund level can give you a good understanding of the ‘breadth’ of impact across a diverse portfolio of funds. However, these types of aggregate numbers are often unable to shed light on the ‘depth’ of impact experienced locally, and therefore, it is important to delve deeper into specific company results, where feasible and possible, such as across gender, sector, and country lines.

So, reporting on outputs must be coupled with more in-depth analysis of outcomes to truly measure the impact of investments. Regular checking of data is important to ensure the validity/accuracy of the data reported on i.e. reviewing proxies/assumptions on a regular basis. Face to face or virtual workshops or working groups can assist with this. Additionally, at Missio Invest, we utilize a case study approach to do deep dives on impact for multiple borrowers per year in each sector and report out on these deep dive impact measurement exercises in our annual impact report.

Trying to capture systemic impact is important but challenging

The complex and diverse nature of each investee's social impact creates methodological challenges for capturing and conveying it with metrics. This is compounded by the multi-faceted nature of Missio Invest's borrowers' work across the agriculture, health and education sectors. All investees address one or more aspects of individual or community well-being, but because they co-dependent on other social enterprises run by the same Catholic Church entity, the provision of basic services and ensuing community impact is broad and long-term. This makes it difficult to succinctly summarize the impact created by each borrower. The measurement challenges are particularly acute when it comes to intangible and subjective impact areas, such as social capital (relationships and connections, community solidarity, civic engagement and voluntary activities, safety net provision, shared norms and values), well-being, soft skills, and other psycho-cultural factors. This type of information remains highly context-dependent and hyper-local, complicating the task of measuring quantitative impact and drawing comparisons across like investments.

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Part 3

IMPACT MANANGEMENT TO INNOVATE THE PUBLIC INSTITUTIONS

Chapter 14
PUBLIC-PRIVATE PARTNERSHIPS (PPP) IN THE ITALIAN RECOVERY AND RESILIENCE PLAN (NRRP)

Raffaele Parlangeli

Abstract: The study's objective is to identify the different types of public-private partnership (PPP) that can activate the opportunities present in the NRRP, contextualize the investment assessments, with the actions of a regulatory context, and then of impact with actual sustainable actions. The insights that will be developed will help financial institutions and companies that want to activate PPPs to better measure and monitor their performance and develop models that facilitate sustainable financing and investment decisions. More informed and mature use of PPP by administrations and market operators can certainly improve the investment's quality and the economic and social impact on local communities. The case studies will then be articulated with the development of parameters and *analyses that consider the different types of PPP investments, particularly in urban regeneration programs and on the theme of the enhancement of cultural heritage. These reflections can also be helpful to increase the understanding by the Public-Private Management of the causality and materiality of the strategic objectives and decisions of PPP and their measurements and impacts in NRRP, in the Cohesion Policy and the strategic objectives of the 2021–2027 Regional Operational Plans. The possible measurement of ESG and/or Impact Investing criteria and/or SRI (Socially Responsible Investment) can be standardized metrics to help raise awareness that public and private management can use to deepen the economic-financial balance of the Economic and Financial Plans (EFP), and the related data monitoring ex-ante, ongoing and ex-post.*

Keywords: PPP - NRRP - Management - ESG - SRI - Impact investing.

1. Introduction

The Public-Private Partnership (PPP) is indicated by the National Recovery and Resilience Plan (NRRP) as a catalyst for private financial resources (Facondini, 2021), other than the ones already allocated by the European Union, to ensure that the objectives of the Plan are achieved.

While the NRRP does not explicitly provide that a part of the funds shall be used for PPP projects, it can also be a booster for the development of this type of project. In particular, a number of the NRRP target areas are those where PPP schemes (ANCREL, 2021) are typically used (e.g., infrastructure, education, health, and energy transition).

In fact, some projects financed by the NRRP could, thanks to the contribution of the additional investments deriving from the private initiative, have a multiplier effect on the recovery. In this case, the impact would be much greater, considering that the leverage effect (Brugnara and Orlando, 2022) with NRRP funds can attract private investment through the market, i.e.

through public-private partnerships (Osservatorio Recovery, 2021), contributions to investment projects, loans, or guarantees. Although little use has been made to date by public administrations, the PPP (Siclari, 2022) is set to become a key instrument for the implementation of the NRRP in the coming years, through private initiative procedures, where the implementation of the interventions provided for by the Plan in partnership with private parties can be an opportunity to attract not only resources but also skills that will improve and improve the action of the public administration concerned.

2. A new future for the Public-Private Partnership with NRRP

The National Plan of Recovery and Resilience expressly indicates the project financing as the “catalyst” suitable for the Italian recovery and the PPP as a tool able to contribute to the take-off of infrastructure. In particular, the Public-Private Partnership (PPP), provided for in Part IV of the Italian Public Contracts Code referred to in Legislative Decree No. 50 of 2016, is indicated by the National Recovery and Resilience Plan (NRRP) in terms of an accelerator to attract private financial resources, Additional to those allocated by the European Union, to ensure the achievement of the objectives of the Plan.

Allocating some of the resources contained in the NRRP to PPP operations, any project financed by the NRRP could have a multiplier effect on recovery. Public-private partnerships can exploit the peculiarities and potential of the various actors involved: the public sector sees the reduction of the number of resources to be allocated to welfare policies; the private sector expands its investment portfolio by innovating its investment policies in favour of innovative impact-oriented models; the third sector has its knowledge recognized and management skills strengthened; lastly, citizenship is involved in policy design and benefits from more effective intervention models. [1]

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1 D. Sinclari (2022). Il ruolo del partenariato pubblico-privato alla luce del PNRR, *Diritto Bancario*.

In summary, the PPP (Yescombe, 2022; Vinter, Pierce and Lee, 2006; Hoffman, 2008, Finnerty, 2013) allows individuals to propose to the Public Administration the construction of infrastructure of public interest, bearing the risks and the cost, against the concession of the property realized for a time adequate to ensure the economic sustainability of the investment.

The discipline that governs the institute can be found in art. 180 ss. D.Lgs. No. 50/2016, where the PPP is outlined both as a tool for developing horizontal collaboration between citizens and institutions both as a response to the growing need to reduce the costs borne by the State and local authorities for the construction of the works and the provision of services of public interest, without having to renounce high-quality standards and respect for the principles of public evidence and the efficiency of administrative action.

Among the advantages for public administrations that use the PPP, there is:

- the extension of the possibility of investing in projects of public interest without bearing the entire costs of implementation and therefore without affecting the public budget (given the low financial availability of many entities);
- the increase of the interest of private operators to participate in the realization of public works in the role of “partner” of the public bodies proceeding (instead of acting as mere performers of works already planned), with the consequent acquisition of a wider possibility to propose innovative and economically sustainable projects;
- the transfer of risk to the economic operator, that is, as clarified by art. 180, paragraph 3, D.Lgs. No. 50/2016, the

allocation to the private “in addition to the risk of construction, also of the risk of availability or, in cases of profitable outward activity, the risk of demand for services rendered, for the period of management of the work” in accordance with the procedures laid down in the relevant contracts;

- the more careful observance of the c.d. “economic-financial equilibrium”, understood as the contemporary presence of the conditions of economic convenience (the ability of the project to create value over the period of contract effectiveness and to generate an appropriate level of profitability for the capital invested) and financial sustainability (the ability of the project to generate cash flows sufficient to guarantee the repayment of the loan) as a “prerequisite for the correct allocation of risks” (art. 180, paragraph 6, D.Lgs. No. 50/2016).

Precisely in view of these advantages, the legislator has strongly promoted the PPP. In fact, the recent resolution Anac (National Anti-Corruption Authority) No. 432 of 20 September on the use of public-private partnership in the management of funds of the NRRP [2] excludes from the limit of 49% the funds of the NRRP, in many cases non-repayable. It made clear that the resources of European non-repayable funds do not contribute to the calculation of the public contribution. The resolution intervenes on the limit of 49% of public contribution in PPP operations and on the use of European grants.

2 National anti-corruption authority: “The limit of 49% of public contributions in PPP operations (of Legislative Decree No. 50/2016 and subsequent amendments), and use of non-repayable European contributions”, Law No. 432, 20 September 2022, Rome.

3. Public-Private Partnerships and Urban Regeneration Programs

The NRRP, under Measure 2.2.b Component 2, Mission 5 (Integrated Urban Plans - EIB Fund of Funds), provides for a specific financial funding in favour of the fund of funds managed by the EIB [3] which aims to “support urban regeneration projects (Di Giuda, Villa and Devito, 2013) as a means of promoting social inclusion and combating various forms of vulnerability, aggravated by the emergence of the Covid-19 pandemic” and “as well as innovative models for urban regeneration projects, combining the resources of the NRRP with private resources”. In the Italian National Plan (Petrelli, 2021), urban regeneration is only mentioned under “Mission 5”: adopting a transversal approach to the different thematic and structural areas of intervention and identifying investments with a direct and indirect impact on the regeneration of the territory; this scenario is significantly more relevant not only from the point of view of financial resources but also from the point of view of social and environmental impact. The definition of urban regeneration projects (Fondazione IFEL, 2021), will have to be declined together with infrastructure, amplifying, and accelerating the achievement of the plan's objectives in line with the Next Generation EU. Several calls [4] are dedicated to urban regeneration programs and involve the implementation of PPPs, for example in the field of student housing solutions, sports facilities, co-housing, and urban regeneration (Festa and Celata, 2022), in addition to calls for digital infrastructure.

3 Ministry of Economy and Finance (2021). Decree approving Fund of Funds Financing Agreement.

4 M. Fr. (2022). Bandi PNRR, OICE: boom di micro-PPP per riqualificazioni urbane. NT+ Enti Locali & Edilizia. *Il Sole 24Ore*. April.

It is convenient to analyse the impact of horizontal governance between missions (Di Gaspare, 2021), which can guarantee private promoters, including through PPP structures, to develop investments aimed at improving degraded urban areas, for regeneration and economic revitalization, with particular attention to the creation of new services to the person and the requalification of accessibility and infrastructure, allowing the transformation of vulnerable territories into smart and sustainable cities. [5]

5 M. Risi (2021). Smart City: dal PNRR città più intelligenti e connesse. *Osservatori Blog*.

PINQuA, the National Integrated Program for the quality of housing, launched by MIMS and co-financed by the NRRP is the epitome of the attention to the role of the private sector. In the Program interventions of urban construction, infrastructure and social regeneration and great attention to social housing. With its 159 funded projects and a total endowment of 2.8 billion, it is currently the most ambitious national urban regeneration program in the field. As part of the total program, it piles to little less than 700 million the quota financings indicated as «private» from the documents of the ministry, additional regarding the financings of the NRRP, of the national program of the budget law 2020 (paragraph 437) and other local public funding. These are the projects of which conventions between MIMS and regions, provinces, municipalities, and metropolitan cities have been signed to comply with the objective indicated by the NRRP. There are projects of the ordinary selection (i.e., not pilot projects) that have climbed the ranking thanks to the contribution «private»: in Caserta, the attempts to relaunch the urban regeneration project of the southern district of Acquaviva and the former Saint Gobain area (9th in the absolute ranking and 1st among ordinary projects) which has a private funding of 99.7 million, seven times the required contribution to the PINQuA. In the past, the area was subject to investigations by the Public Prosecutor's Office both for the allotments and for the spilling of dangerous substances. In Turin, the intervention in Porta Palazzo is provided by a private contribution of 86 million for interventions such as the Student Hotel, the recovery of the former "Mercato dei Fiori" and the Italgas headquarters. In Piacenza, the additional contribution of 49.9 million concerns the redevelopment of the former "Area Tabacchi".

PINQuA provides for the involvement, in a multi-level governance perspective, of local and regional authorities, which have been called to plan and submit proposals dedicated to giving concrete answers to the needs of the communities and territories of reference in the light of the overall strategies expressed by the program.

The proposals contain planning for interventions in the following five action lines:

- Redevelopment and reorganization of the social housing stock and in-crease thereof.
- Re-functionalization of public and private areas, spaces, and buildings also through the regeneration of the urban and socio-economic fabric and temporary use.
- Improving accessibility and safety in urban areas and the provision of urban and local services and infrastructure.
- Regeneration of areas and spaces already built, especially high-voltage housing, increasing environmental quality and improving climate change resilience through densification operations.
- Identification and use of innovative models and tools for management, social inclusion, and urban welfare as well as participatory processes, also aimed at self-building.

In addition, all measures and interventions must aim at lasting solutions for the regeneration of the socio-economic fabric, the improvement of social cohesion, cultural enrichment, the quality of products, places, and life of citizens, with a view to innovation and sustainability. In this context, the principle of “zero land consumption” is fundamental in the evaluation of proposals, without prejudice to any densification operations, in accordance with the principles and guidelines adopted by the European Union, in line with the principles and objectives of the National Strategy for Sustainable Development and the National Climate Change Adaptation Plan. The measures must also ensure the proximity of services, aiming at reducing traffic and stress, in accordance with the criteria of sustainable mobility and increasing neighbourhood links and social inclusion.

The projects submitted, to be eligible under the Programme, had to refer to the following areas:

- Interventions of extraordinary maintenance, restoration, and renovation of buildings and urban planning, self-recovery.
- Re-functionalization of unused, abandoned and degraded public spaces and buildings.
- Actions and measures to increase accessibility, security, spatial endow-ments and neighbourhood services.
- Redevelopment of public housing districts, as well as interventions aimed at increasing social housing.
- Zero land use interventions (in compliance with the principle of "not causing significant damage" to the environment, or Do Not Significant Harm - DNSH).
- Measures to increase the infrastructure endowment of run-down neigh-bourhoods, integrating extra-residential

functions with residential ones.

- Energy efficiency measures for buildings and adaptation to seismic standards.

From an in-depth reading of the structure of the call and the evaluation systems of the proposals, it can be observed and noted that already from the application phase the urban regeneration programmes, would have had a reward if they involved private actors and would have met a number of criteria, which are reported in an orderly manner in the table below (Table 1).

Table 1. List of the selected projects (extract)

Beneficiary institution	Status	Total Score	Criterion A	C B
Citta Metropolitana di Messina	PILOTA	57,79	●●	●
Comune di Brescia	PILOTA	57,32	●	●
Comune di Milano	PILOTA	51,81	●	●
Comune di Bari	PILOTA	51,55	●	●
Comune di Lamezia Terme	PILOTA	50,09	●●	●
Comune di Caserta	ORDINARIA	45,17	●●●●	●

Beneficiary institution	Status	Total Score	Criterion A	C B
Comune di Foggia	ORDINARIA	44,64	●	●
ComunediTrani	ORDINARIA	43,78	●	●
Comune di Piacenza	ORDINARIA	43,76	●●●	●
Comune di Latina	ORDINARIA	43,65	●●●	●
ComunediTrani	ORDINARIA	42,86	●●●●	●
Comune di Cuneo	ORDINARIA	42,81	●	●
RegioneAbruzzo	ORDINARIA	42,65	●	●
Regione Sicilia	ORDINARIA	42,40	●	●

Beneficiary institution	Status	Total Score	Criterion A	C B
RegioneAbruzzo	ORDINARIA	42,14	●●●	●
Regione Liguria	ORDINARIA	41,99	●●●●	●
Comune di Treviso	ORDINARIA	41,99	●●●	●
RegioneAbruzzo	ORDINARIA	41,82	●	●
Citta Metropolitana di Bari	ORDINARIA	41,65	●●●	●
Regione Campania	ORDINARIA	41,13	●	●
Regione Umbria	ORDINARIA	41,10	●	●
Comune di Imperia	ORDINARIA	40,88	●●●●	●

Beneficiary institution	Status	Total Score	Criterion A	C B
Citta Metropolitana di Milano	ORDINARIA	40,83	●	●
Comune di Varese	ORDINARIA	40,82	●●●●	●
RegioneMarche	ORDINARIA	40,79	●●●●	●
RegioneMarche	ORDINARIA	40,68	●●●●	●
Regione Liguria	ORDINARIA	40,54	●●●●	●
Citta Metropolitana di Bari	ORDINARIA	40,54	●	●
Comune di Reggio Calabria	ORDINARIA	40,45	●	●

Beneficiary institution	Status	Total Score	Criterion A	C B
Comune di Gela	ORDINARIA	40,42	●	●
Comune di Ascoli Piceno	PILOTA	40,25	●●●	●

Source: Data extracted from the 2022 report of the NRRP Mission Unit of the Ministry of Infrastructure and Sustainable Mobility in collaboration with DIGES “PINQuA, Progetti e prime evidenze”, Table 9.

The evaluation criteria assigned are reported in static terms, the synoptic summary is revised in Table 2.

Table 2. Evaluation Criteria

CRITERION A Indicators of environmental impact	Quality of the proposal and consistency with the objectives set by the PINQuA, ability to develop responses to the needs and

	expressed, presence of innovative aspects and green economy, compliance with the Minimum Environmental Criteria (CAM) as well as the ability to coordinate and/or aggregate subjects in associated form in terms of the legality of self-consolidated realities.
CRITERION B Social impact indicator	The extent of interventions in relation to public residential buildings, with preference for areas with higher residential tension, and level of integration both with the context, with particular reference to the implementation of specific regional policies, both with interventions related to social housing buildings (integrated unitary system of housing services) also in terms of social mix and diversification of housing supply and related services.

CRITERION C Cultural impact indicator	The recovery and enhancement of cultural, environmental and landscape heritage or recovery and reuse of significant architectural evidence, even if not directly linked, provided they are connected and functional to the proposed regeneration program submitted; contiguity and/or closeness to historical centres or to parts of identity cities.
CRITERION D Indicators of impact urban-territorial	The result of the “zero balance” of the consumption of new land through the recovery and redevelopment of areas already urbanized or, if not built, included in highly consolidated urban fabric, considering the significance of the interventions themselves in terms of seismic safety and energy upgrading of existing buildings, including through the demolition and reconstruction of the same.

CRITERION E Financial technical indicators	Activation of public and private financial resources, also considering the possible availability of areas or buildings.
CRITERION F Economic and financial indicator	Involvement of private operators, also of the third sector, with involvement and direct participation of interested parties also in an associative form, especially if operating in the area of intervention.
CRITERION G Technological and processual impact indicator	Application for the drafting of the proposal, of the BIM methodology, as well as innovative measures and models of management, support and social inclusion, urban welfare, and activation of participatory processes.

Source: Data extracted from the 2022 report of the NRRP Mission Unit of the Ministry of Infrastructure and Sustainable Mobility in collaboration with DIGES “PINQuA, Progetti e prime evidenze”, 23-27.

The subjects that have presented projects within the PINQuA, are: Regions; Metropolitan Cities; Municipalities headquarters of Metropolitan Cities; Municipalities Capitals of the Province; City of Aosta and municipalities with more than 60,000 inhabitants.

In line with the aims of the Programme and to facilitate the initiative's success, additional funding is allowed through the involvement of the Third Sector of the active communities operating in the territory concerned. The technical costs of design, verification, validation, construction supervision, safety coordination during the design and execution phase are eligible for PINQuA funding, testing, relating to the implementation of the proposed measure and are provided for in the relevant economic framework. All proposals are structured as a set of actions and measures, coherent and functionally linked, able to pursue the objectives and foreshadow the expected results. The proposals identify the priority objectives of the strategy, the main ways of achieving them in terms of organization, management, and timing. They indicate the aims pursued and the strategy developed, in line with the characteristics of the areas chosen based on the analysis of the needs and characteristics of the contexts.

The proposals must also have high-performance standards and be characterized by the presence of eco-sustainable solutions, elements of green infrastructure, Nature-based solutions, de-waterproofing and ecosystem enhancement of areas, technological and typological innovation of the products. The proposers have ensured the coherence of the proposals, for the part concerning social housing measures, with the legislation and sector policies of their region (Brisku, Capone, Ciferri, De Leo and Liccardi, 2022).

Considering these reflections, it can be noted that PPP actions in urban regeneration programs have in fact represented a real "additional financial lever" for NRRP resources.

The reason for these circumstances is traced back to the fact that the usual operators engaged in the public works sector have gained consolidated expertise in the various PPP models to be proposed throughout the years and the test of PINQuA worked. Considering the maturity of the actors involved in these ambitious regeneration projects and considering the modelling of the governance structures of the various programs/projects, a further ongoing and ex-post evaluation system is proposed, which would complement the evaluations and criteria of the ex-ante evaluation algorithm, which has so far have been launched in the start-up phase at 31/12/2022.

In these programs, sustainability can be considered a strategic driver for the growth of the system. Given that the ongoing paradigm shift is affecting not only bank lending mechanisms but also fund investment policies that are inevitably converging towards ESG-compliant targets. In this new dimension, the adoption of a “sustainability report” is useful both to take stock of the state of health of the PPP under PINQuA, and to launch a strategy related to the mitigation of the effects of climate change. A fascinating working method for the future could be to integrate the ESG criteria in the overall information of the PPP Economic and Financial Plan, involved in the various programs, facilitating the reading of the relevant parameters on the evaluation ex-ante, ongoing, and ex-post.

ESG Criteria		
Enviromental	**Social**	**Governance**
– Energy usage – Carbon footprint – Climate change – Waste management – Pollution monitoring – Natural resource conservation – Contaminated property – Hazardous waste – Toxic emissions – Compliance with government environmental regulations?	– Employee welfare – Vendor relationship – Local social welfare programs – Healthcare initiative – Welfare initiatives – Gender equality – Race equality – Religion equality – Education initiative – Clean environment initiatives – Human rights monitoring	– Transparent accounting methods – Investor relationship – Conflict of interest in Board decisions – Business ethics – Opportunity of being heard – Political influence – Legal practices – Whistleblower policy

Figure 1. ESG Criteria

Source: Table extracted from the article “ESG Reporting in India” on *IrisiBusiness*.

For example, we can imagine:

- Analysis of Trends and Scenarios: ESG (Environmental, Social, Gov-ernance) multicriteria analysis of current policies

and projects to support the development of Sustainability Policies and Strategies.
- Internal governance for transversal sustainability actions.
- Internal Stakeholder Engagement for the definition of policies, roles and action plans on Sustainability Management and Agenda 2030 – SDGs.
- Stakeholder Engagement for Sustainability Strategies.

4. Social PPPs and the promotion of cultural heritage

The Ministry of Culture's call for proposals on cultural and social regeneration of small historic villages to be financed under the NRRP, Mission 1, Component 3 - Culture 4.0 (M1C3). Measure 2 "Regeneration of small cultural sites, cultural, religious, and rural heritage, Investment 2.1: "Attractiveness of historic villages'' (Line B). This intervention proposes to restore vitality to places and assets destined for the disappearance and permanent loss. It involves those small towns located in the marginal areas of the country, often characterized by fragile economies, aggravated today by the effects of the Covid-19 pandemic, and marked by the presence of severe demographic and environmental problems in their civil and economic regeneration, activating the best forces of the territory. An integral part of the strategy is certainly the approach of fostering solid public-private collaboration, in line with the Faro Convention on the Value of Cultural Heritage for Society and the European Cultural Heritage Action Framework, which calls for the promotion of integrated and participatory approaches to generate benefits in the four pillars of sustainable development: economy, cultural diversity, society, and the environment. In this logic, emphasis is given to those projects that can directly and explicitly involve both local communities (citizens, families, etc.), productive organizations, profit and nonprofit enterprises, and their intermediary organizations to stimulate collaboration, integration, and partnership in terms of both co-design and collaborative forms of management (Cantiere Terzo Settore, 2022).

Analysing these expressions of interest, the most requested form of partnership is the special one provided by art. 151, paragraph 3 of the Legislative Decree. 50/2016 (hereinafter the Code). In fact, as a form to conduct the interventions, the public-private social partnership (Pellizzari, 2014) that the municipalities can activate with different actors, both economic operators and third sector organizations (the Ministry has clarified that the private subjects are all the private juridical agencies previewed in our legal system). The case referred to by the Notice is the special partnership provided for by art.151 of the Code of Public Contracts (D.Lgs. No. 50/2016), aimed at ensuring the enjoyment of the nation's cultural heritage and encouraging scientific research applied to the protection: the provision allows PP.AA. the owner of cultural goods, to activate special forms of partnership with public bodies and with private entities, aimed at allowing recovery, restoration, scheduled maintenance, the management, the opening to the public fruition and the valorisation of cultural real estate, through simplified procedures of identification of the private partner. In this logic, the common proposer can use the professional resources, financial, experience and knowledge of the territory of available partners, to organize in collaboration the cultural regeneration required by the call (Tonanzi, 2021). The interesting aspect is that the special partnership is also referred to by the Third Sector Code (D.Lgs. No. 117/2017), with a coordination provision with the Cultural Heritage Code (D.Lgs. No. 42/2004). In fact, art. 89/17 provides that, according to Article 115 of Legislative Decree No. 42 of 22 January 2004, the Ministry of Cultural Heritage and Activities and Tourism, the regions, local authorities and other public bodies can activate special forms of partnership with third-sector entities carrying out the activities referred to in Article 5, paragraph 1, letters f), i), k) or z), identified through the simplified procedures referred to in Article 151, paragraph 3, of D.Lgs. No.

50 of 18 April 2016, aimed at providing activities to enhance the immovable cultural property of public ownership. [6] In essence, partnership with third-sector organizations in this area is a form of indirect management of publicly owned cultural assets, through collaboration with non-profit organizations, which deal with the protection and enhancement of cultural heritage and landscape, or the organization and management of cultural, artistic or recreational activities of social interest, including activities, including publishing, promotion and dissemination of the culture and practice of volunteering and activities of general interest or the organization and management of tourist activities of social, cultural or religious interest (Nicotra, 2022). In particular, it will be the agreements between public administrations (Guarino, 2022) that have proposed efficient and effective management of services and activities, flexible and innovative forms of management in the cultural field through the use of publicprivate partnerships, already completed at the time of submission of the application or to be completed within the time limits provided for by the Project in compliance with the relevant legal provisions, also in accordance with the Code of Public Contracts, Code of the Third Sector (Gilli, 2018) and the Code of Cultural Heritage and Landscape (Sciullo, 2021).

6 See Art. 108 - Codice dei beni culturali e del paesaggio (access: https://officeadvice.it/codice-dei-beni-culturali-e-paesaggio/articolo-108/).

In this sense, it has been deepened that most of the municipalities have oriented themselves towards the “simplified” version as seen in former art. 19 D.Lgs. No. 50/2016, which provides that the award of sponsorship contracts “is subject only to the prior publication on the website of the contracting entity, for at least thirty days, of special notice, with which the search for sponsors for specific actions is made known, or you are notified that you have received a sponsorship proposal, indicating the content of the proposed contract briefly. After the period of publication of the notice, the contract may be freely negotiated, provided that the principles of impartiality and equal treatment between operators who have expressed interest are respected, (...)”. This reduced procedure is extremely simplified and, while respecting the fundamental principles of impartiality and equal treatment, one-on-one negotiation predominates over an objective comparison of proposals – Council of State, sect. V, 28.12.2020, No. 8403. The choice of private partner can therefore be oriented towards the proposer who objectively presents a reasonable expectation of better and safer enhancement of the cultural heritage (Santoro, 2022) Concretely, the instrument and the use of public-private partnership, in the interventions in the fields of culture and tourism, has sometimes been the lever to contribute to the take-off of infrastructure.

The process needed to be approved before the ban's publication, as the more complex obvious procedure for this is found in few concrete cases. Unlike ordinary PSPPs, they are not based on a logic of exchange (price or concession in exchange for services) but on an open collaboration for purposes of General Interest, such as the promotion of cultural purposes in the enhancement of public goods, based on the co-planning and the participation of the Territorial Community of reference, between a public entity that holds a real estate and a cultural operator that acts as an operational point of contact for the valorisation process. [7]

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7 M. Di Franco (2019). *I Partenariati Speciali Pubblico-Privati ex art. 151 del D.Lgs. n. 50/2016*. Fondazione FitzCarraldo, Torino Available at: https://artlab.fitzcarraldo.it/sites/default/files/PSPP%20151_Dalle%20prime%20sperimentazioni%20orientamenti%20operativi%20per%20il%20futuro_Franco%20Milella_0.pdf.

In order to deepen this theme, we analyzed the application dossier on NRRP M1C3 intervention 2.1 – Attractiveness of the historic villages (*borghi storici*) local project of cultural and social regeneration [8] of the Municipality of Colle Brianza and it was extracted from this case study, which is one of the most advanced on this mission of the NRRP.

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8 This information was obtained through direct consultation of ANCI's head of Culture and Tourism Vincenzo Santoro, and Fondazione FitzCarraldo (contact Di Franco Milella).

4.1. Case study Colle Brianza: Borgo "Campsirago"

4.1.1. Brief description

The strategy adopted in this project is characterized by the strong interconnection of the various planned interventions that, in their entirety, aim to:

1. Significantly strengthen the cultural and hospitality infrastructure of the village, through targeted interventions of recovery and "reactivation" of places and cultural heritage.
2. Increase the attractiveness of the cultural and artistic offers already pre-sent both to the outside (tourists, visitors, artists), both internally to current residents and new.
3. Transforming the village of Campsirago as the trigger of a wider process of local development based on culture that

gradually invests the whole territory of proximity and constitutes it as a hub of national and European networks in the field of urban and territorial regeneration cultures based.

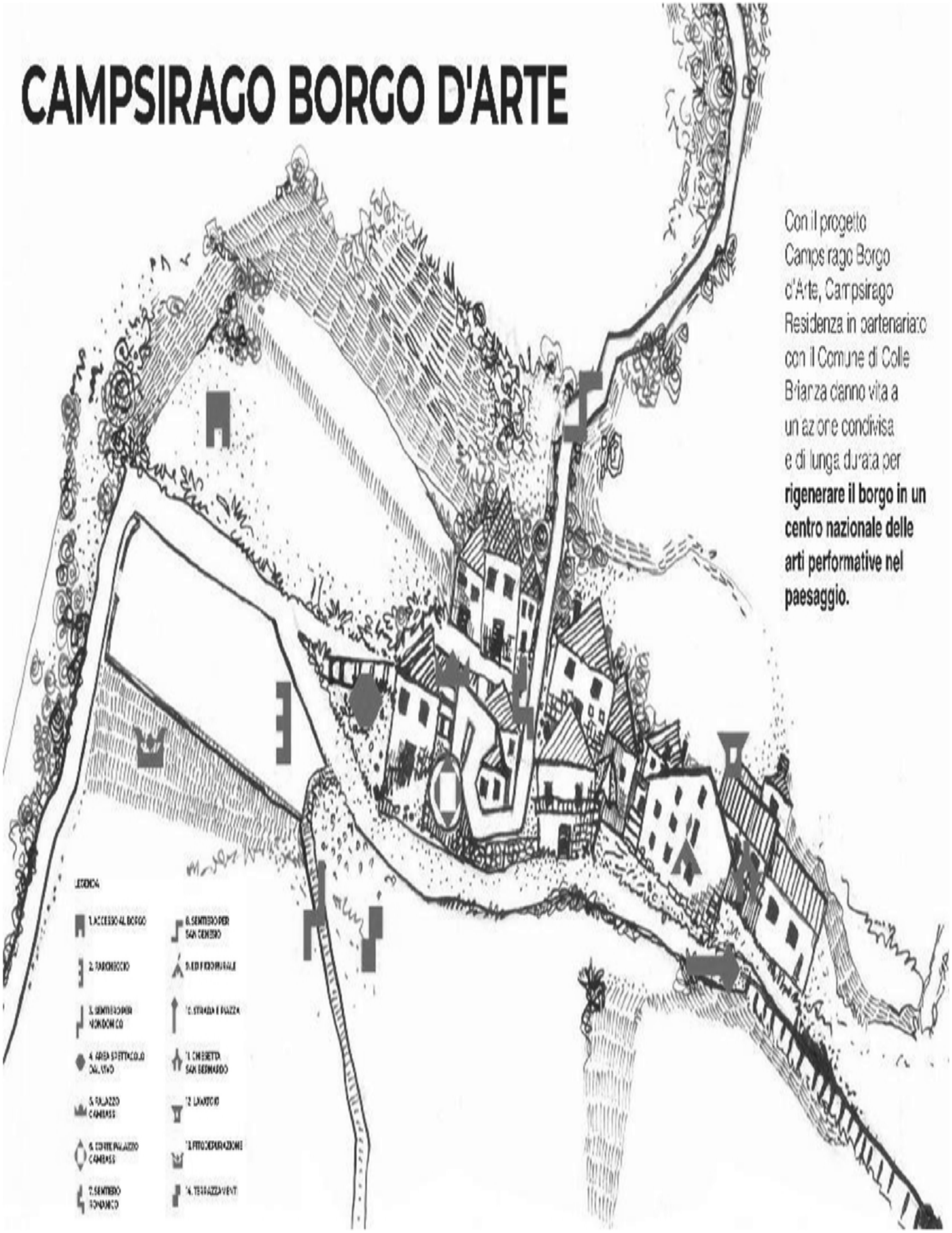

Figure 2. Campsirago Borgo d'arte

Source: Picture extracted from the application form.

The strategy is based on the awareness that it is not enough to intervene in the cultural offer. It must be re-thought as a driver of socio-economic development of the territory, therefore according to logic attentive to inclusion, accessibility, the creation of decent work and employment of young people and women. The work planning has selected the interventions of greater strategic weight and capable of generating services of a permanent nature in the medium-long term, well beyond the duration of this initiative, and on these has concentrated all investments. One of the strengths of this strategy - and, in fact, the pre-condition to ensure the overall resilience and consistency of the action plan - is its maturity. The project was born and is structured starting from the Special Private Public Partnership of 25 years (renewable for another 25), approved, after an intense period of coplanning started months before, in City Council on 29/11/2922 between the Municipality of Colle Brianza and the association Scarlattine Progetti, which operates in the village and on the territory since 2005 and which has been located since 2009 in the east wing of Palazzo Gambassi (sec. XVI) expressing artistic and cultural offer of national and international importance, for the recovery and enhancement of Palazzo Gambassi and the village of Campsirago that, thanks to this project, will become a real driver of local development for the whole territory of reference. In fact, the creation of a guesthouse/ hostel inside a rural building, the transformation of the Church of St. Bernard and other places in location to host events and artistic and cultural initiatives, as well as the widespread interventions on the path of historical and naturalistic value, are not configured as isolated actions, but, expanding the almost twenty-year experience of Campsirago Residenza, are part of an integrated action plan capable of generating a broader impact on the entire village. In this perspective, the selection and design of the interventions related to the infrastructure component have been characterized by the constant attention to the issues of accessibility and use by the public, as well as the assumption that there is no development without the active participation of people, whether they are residents, artists, and creatives, or visitors/tourists. In the same way, cultural and artistic actions have been designed to facilitate communication between individuals, redefine identity, offer cultural and leisure activities, compare and produce new culture, and network with local actors, but also with national and European ones, to interact and to share planning at an international level, to be motor of tourist development and, in this way, to promote other local subjects. In particular, the practice of the "festival yard" will be central, combining artistic actions with urban and architectural, directly involving communities in the process of urban transformation of the village to create open spaces, flexible, generative, and available to change. The construction site is, therefore, not an obstacle but becomes the structure and the graft of the cultural palimpsest and opportunity (among the first in Italy) to implement a “festival site” as a living and inclusive process of regeneration of the place based on culture.

The same chronogram of interventions, concentrated in the first two years, draws strength from this participatory dynamic that wants to make possible the positive transformation of the cultural and economic activities of the village starting from the experience of architectural and urban transformation. Construction site, cultural and craft activities, the presence of a rooted subject, and the grafting of new subjects and spaces able to accommodate remote workers and digital nomads will be the driving force of the entire process, which will lead Campsirago to be the trigger of that local development cultural base that will gradually invest all the territory of proximity.

4.1.2. Public-Private cooperation agreements

In the context of public-private collaboration agreements and agreements between public administrations already concluded at the time of submission of the application for the implementation of one or more interventions, we note:

1. Scarlattine Progetti Association, Special Partner of the Municipality of Colle Brianza. Partnership agreement signed by the Municipal Council on 29 November 2021.
   Role: Implementing entity of the local project, as a special partner of the Municipality of Colle Brianza.
2. FitzCarraldo Foundation based in Turin.
   Role: collaboration agreement for the cultural regeneration of the village of Campsirago - Municipality of Colle Brianza, signed on 15/1/2022 by Scarlattine Progetti Associazione as a special partner of the Municipality of Colle Brianza, after the approval of the technical table governing the special partnership.
   Intervento 14: inter-territorial cooperation actions in Palazzo Gambassi.
3. Convention between the municipality of Colle Brianza and Milan's diocese for public and exclusive use by the municipality of the former church of San Bernardo registered on 4/2/2022, legal representative Don Alberto Pirovano.

1. ***Legally significant commitments to the conclusion of public-private collaboration agreements aimed at the***

implementation of the planned interventions in the project:

1. Terzo Paesaggio Association, Milan.
   Manifested PSPP interest - intervention 13 “Cultural Actions” proposed on 5/3/2022 - the PSPP will be perfected within 90 days.
2. Omniscient, Fukuoka City – Japan collaboration agreement with Scarlattine Progetti as a partner of the Actuator 13 “Cultural Actions” - signed on 15/1/2022.
3. DNA, Donderen – Norgerweg (Drenthe) – Netherlands collaboration agreement with Scarlattine Progetti as a partner of the Subject Actuator Intervention 13 “Cultural Actions” - signed on 15/1/2022.
4. Fedora Cultural Association, Milan collaboration agreement with Scarlattine Progetti as special partner of the Entity Actuator intervention 13 “Cultural actions (cultural accessibility for sensory disabilities in the sites identified in the project)” signed on 15/1/2022.

The stipulation of the operating collaboration is achieved in June, as a result of the assumption of the decision in the Technical Table of the PSPP between Scarlattine Progetti and the deliberation of the Council of the acknowledgment on such decision.

2. ***Adherence to the Project of public and private partners who undertake to contribute to the achievement of the objectives of the Project with resources that do not burden the call.***

Following the Council resolution No. 25 dated 16/2/2022 and published on 23/2/2022, a notice of interest was published in participating in a regeneration project of the village of Campsirago and were collected the following applications as a stakeholder, which contributed to the project objectives:

- Ass. Sburollati, based in Colle Brianza (interest expressed) Stakeholder intervention: intervention 1, intervention 8, intervention 11 does not provide for this investment phase, sharing project strategies.
- Studio Città srl, based in Nerviano (interest expressed) Stakeholder intervention: intangible heritage, tourist-cultural infrastructure, increase in residential attractiveness, support actions for communication do not include in this investment phase, sharing project strategies.
- StaSuDeDoss, based in Cinisello Balsamo (interest expressed) Stakeholder intervention: Palazzo Gambassi, small kitchen with catering does not provide in this investment phase, sharing project strategies.

- Agricultural company Campione dei Colli Briantei (interest expressed) Stakeholder intervention: area downstream of the parking lot, real estate vineyard and the residential unit provides for an investment of 720,000 € (own resources).

4.1.3. Economic and financial plan

The intervention constitutes an intangible investment. The management of the thematic networks to which the village will join includes the service generated by the investment, reproducible over time and relevant for acting on the value of the process of cultural and social regeneration of Campsirago outside its territorial boundaries, stressing the importance of a continuous interaction between endogenous and exogenous factors in determining the different possibilities of development. Ensuring more comprehensive circuits of promotion and performative improvement of the conditions of the attractiveness of the village: Campsirago at the heart of national and European thematic networks.

At the end of the initial investment planned for 2023–2024, networking and participation in the defined thematic networks will be carried out by the PSPP between Scarlattine Progetti, operational partner and implementation of the overall project, and Municipality of Colle Brianza assisted by cultural organizations of the territory. The network's maintenance costs, and the development of projects and activities are quantified in 15,000 €/year divided as follows:

1. annual membership fee 2,000 €/year;
2. communication and promotion activities, primarily through participa-tion in events (e.g., conferences, seminars, fairs, etc.): 4,000,00 €/year;
3. travel expenses for visits to external realities: 2,000 €/year;
4. expenses for hosting external experience contacts: 4.000 euro/year and. organization/coordination of activities: 3,000 €/year.

Other costs or revenues are not foreseeable and will be estimated in direct correlation with the activities developed within the network and any pro quota participation in joint projects.

The above costs will be borne by the PSPP between Scarlattine Progetti and the Municipality of Colle Brianza, which will be activated to find additional resources through:

1. request for regional and national contributions, including in partnership with local cultural organizations, on programs in support of cultural enhancement, international development,

tourism communication/promotion, internationalization, etc.;
2. activation of resources/support (economic and technical) by local organizations and businesses (e.g., Chamber of Commerce);
3. co-financing by local cultural associations interested in developing projects with other territories.

5. Conclusions and discussion

The application of the PPP scheme in projects that leverage the NRRP will clearly have to be configured gradually through experience and comparison with market practices, in a model refined learning by doing, where the jurisprudence still too often is called to a necessary work of substitution, in presence of ambiguous or incomplete normative dictations, being found of the forehead to an institute of Anglo-Saxon matrix that it discounts the typical problematics of “grafting” in civil law, not only in Italian law. One solution would be to monitor several projects in order to collect technical and financial data. In this way, a methodology would be created that could document the actual progress of the works and the compliance with the specifications provided, starting from the initial bankability of the project until the completion of the construction. This would allow all stakeholders (Micossi, 2021) to assess the feasibility of the work properly and know in real time its evolution, ensuring transparency (Istituto di Management della Scuola Superiore Sant'Anna di Pisa, 2021) in the development of public work.

These reflections can also be useful to increase the understanding of Public Private Management, the causality and materiality of strategic objectives and decisions of PPP and the related measurements and impacts not only in the NRRP but also in the context of the Cohesion Policy and the strategic objectives of the Regional Operational Plans 2021 2027.

If the total contribution exceeds the threshold (49% of the total investment cost), planning needs to be reassessed. The main reason for the use of concession contracts is the possibility for the Institution to unload the operational risk on the economic operator in all its forms and variations. A plan that is not sustainable unless there is a solid public contribution would reallocate a significant component of risk on the Institution, thus undermining the core principle of the concession contract.

Different metrics can be used to improve the quality of financial reporting, the monitoring of the economic and financial balance of projects, the relationships with stakeholders, and the economic and social reporting of the PPP investment project. One tool is the ESG (Economic, Social, and Corporate Governance), [9] which is the analysis of all material factors in investment decisions, including environmental factors and corporate governance (KPMG, 2022). From an ecological point of view, we range from energy consumption to the production of environmental waste to a more general climate impact (Zampori and Pant, 2019) from a social point of view, we consider, among others, respect for human rights. Finally, there is the aspect of governance, which measures the company's compliance with the quality of management, transparency rules, and shareholders' rights. It could also be compared [10] with the investments SRI (Socially Responsible Investing), [11] which involves a filter that selects or excludes certain companies based on specific guidelines. For example, a typical SRI investment could exclude all companies that somehow produce environmental damage and include, instead, companies that do action research in the field of alternative energy. The investments aiming to realize specific environmental results are Impact Investing, [12] whose good result is judged by the concrete environmental contribution a specific project brings. To measure a company's tangible and concrete environmental impact, ESG should be integrated with screening and analysis systems that do not necessarily provide a quantitative picture of a company's activity. [13] SRI and Impact

Investing [14] can often perform this function very well. Respectively, these are quantitative metrics that focus on the internal movements of companies and criteria that measure the sustainability of the value chain in broader terms (Bandini and Pallara, 2021).

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9 KPMG (2020). T*owards consistent and comparable ESG reporting.* Available at: https://assets.kpmg.com/content/dam/kpmg/be/pdf/2020/12/The_Time_Has_Come_KPMG_Survey_of_Sustainability_Reporting_2020.pdf.

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10 ESG and SRI, the sustainable investment policies of Italian institutional investors. Third survey on sustainability strategies and integration of ESG criteria in the portfolio of the main Italian institutional investors.

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11 Forum per la Finanza Sostenibile (2014). *Linee Guida per l'investimento immobiliare sostenibile e responsabile* Available at: https://finanzasostenibile.it/wp-content/uploads/2016/08/1410_FFS_FRC_Linee_guida_SRPI.pdf.

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12 Fondazione Social Venture (2022). *Che cos'è l'Impact Investing* Available at: https://www.fondazionesocialventuregda.it/cosa-e-impact-investing/?gclid=Cj0KCQjwyYKUBhDJARIsAMj9lkHrcYSk_5MEEo1HYS6DYGWm2CTyGpI_G5g7GI1RYVQDZzRooOvNd3caAqp2EALw_wcB.

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13 Associazione Bancaria Italiana (2012). *Guidelines for the integration of environmental, social, and corporate governance factors in the investment processes of complementary pension forms*. Available at: https://www.abi.it/DOC_Mercati/Csr/Banche-e-Csr/Doc_Linee%20Guida%20Forme%20Pens_Comp.pdf.

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14 Human Foundation, PWC (2019). *Progettare l'innovazione sociale: Impact Investing e Fondi EU.* Available at: https://www.humanfoundation.it/wp-content/uploads/2019/07/mpact-Investing.pdf.

Further study could include the checklist of verification and control for each sector of intervention, taxonomic requirements, the corresponding legislation, and valuable elements to document compliance with DNSH requirements. [15]

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15 ItaliaDomani (2022). P*ubblicata la guida operativa per il rispetto del Do No Significant Harm (DNSH) nella nuova sezione del sito Italiadomani.* Available at: https://www.italiadomani.gov.it/it/news/pubblicata-la-guida-operativa-per-il-rispetto-del-do-no-signific.html.

It has to be pointed out that in the last semester of 2022, a series of circulars, handbooks, and guidelines have been produced by different Italian ministries and by the Italian Anti-Corruption Authority, which is a clear sign that many pieces of information were missing and, in some cases, had to be interpreted in the light of the latest regulations.

In the traditional fields of application of the PPP, which is in the investments of public works connected with programs of urban regeneration, we find the maturity of public management-private that facilitated the application fields and additional financial levers provided by the NRRP. Integrated public works and service management contract has yet to be launched.

NRRP missions and areas of intervention have their chronograms, their targets and their milestones, and sometimes the complex procedure of the PPP fails to achieve the same goals. Nonetheless, a significant step forward has been made with all the new regulatory systems, for the simplification of administrative procedures.

The Special Public-Private Partnerships (PSPP) for enhancing cultural heritage, thanks to the calls provided in the NRRP, Mission 1, Component 3 - Culture 4.0 (M1C3). Measure 2 “Regeneration of small cultural sites, cultural, religious, and rural heritage, Investment 2.1: “Attractiveness of historic villages” (Line B), have been successful and have already started.

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Chapter 15

AN IMPACT FINANCE INSTRUMENT FOR PUBLIC-PRIVATE PARTNERSHIPS: SIINC

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Abstract: The socio-economic challenges of contemporary society, such as inequalities, poverty, and insufficient access to affordable and effective healthcare, increasingly require from policymakers and economic actors the implementation of policies that can generate both economic and social value.

This context placed the foundation for the development of impact finance's instruments and tools, specifically designed to simultaneously aim for economic and social objectives.

The chapter focuses on the analysis of an impact finance instrument, the Social Impact Incentives (SIINC), an innovative blended finance model co-developed by Roots of Impact and Swiss Agency for Development and Cooperation.

Moreover, the objective of the research is to formalise how the SIINC model can be applied to Officine Mezzogiorno, a project of urban regeneration and the construction of an innovative connection hub in Lecce, Italy. The feasibility study of the application of the SIINC to Officine Mezzogiorno outlines the structure both in economic, financial, and legal terms, with the aim of identifying the specific characteristics and advantages of the model.

The research and economic flow simulations' results demonstrate that SIINC is a blended finance tool not only able to combine economic and social results, but also more efficient than traditional financial tools in the management of contractual relations of financial flows.

Keywords: Social Impact Incentives – Blended finance – Impact investing – Impact organization – Urban regeneration.

1. Introduction

Contemporary international agendas demonstrate the willingness of political and economic actors to find effective solutions for the satisfaction of communities' needs by combining monetary, social, and environmental objectives.

In this context, has progressed with increasing relevance the stream of impact finance, which activities aim at the generation of positive value, obtained through arrangements designed with the aim of bringing together social needs and financial markets' dynamics.

Concurrently emerges, with the same impact purpose, a tool for the coordination of projects with social objectives that involves the collaboration of two parts, one public and one private. This form of cooperation, the Public-Private Partnership (PPP), allows the public sector to realise projects of common interest by supporting one or more private actors in design, management, implementation, or financing activities.

Starting from this conceptual framework, this chapter aims to investigate how and with what benefits impact finance can be an instrument to be integrated within PPPs employed in projects designed to create positive social impacts. Specifically, the research focuses on how the Social Impact Incentives (SIINC), an impact finance tool, can be modelled within the PPP proposed for the Officine Mezzogiorno urban regeneration project, in Lecce, Italy.

The chapter is outlined as follows:

Paragraph 2 describes the methodology applied for the research and the construction of the study. After a brief literature review on impact finance's characteristics and tools in paragraph 3, paragraph 4 focuses on analysis of the SIINC model, endowed with the review of two case studies related to the application of SIINC in LAC countries. Following, paragraph 5 gives an overview of the Officine Mezzogiorno urban regeneration project and describes the financial, economic, and juridical functioning and implications of the SIINC model applied to the project. Ultimately, paragraph 6 comments the study's results and summarises the final considerations.

2. Methodology

Impact finance's framework is the conceptual basis on which the study is based on. After a review of the literature on impact finance research stream, specifically focused on the different financial instruments, the casestudy analysis was based on the SIINC model applied in Mexico and Honduras by Roots of Impact and Swiss Agency for Development and Cooperation (SDC). Once the characteristics of the functioning of the SIINC model have been mapped for the analysed projects, the SIINC model has been integrated in the feasibility study constructed for the integration of a PPP in the Officine Mezzogiorno project.

The study provided for the analysis of the legal and economic framework of the Italian context, finally setting out a guideline for an economicfinancial and legal approach of SIINC in the Officine Mezzogiorno project. The economic-financial approach has been integrated with a simulation of the economic flows between the actors involved in the planning.

3. Impact finance and pay by results

Over the last decade, impact finance has experienced a period of great growth and evolution in terms of concept, instruments used, and volume. As recently as 2010, the debate was about the raison d'être of a new, clearly identifiable *asset class*. However, today we speak of impact finance as an evolved and clearly identifiable industry, associated with a real movement able to offer solutions to the global challenges of communities and the planet.

Impact investing refers to those investments (in companies, organisations, vehicles, and funds) that are geared towards achieving a positive and measurable social, economic, and environmental impact as well as realising a financial return (Moore and Westely, 2012).

The potential and innovative strength of impact investing lies in its ability to propose a new type of investment capable of combining the objectives of traditional investors with those typical of philanthropists. Thus, it is possible to overcome the difficulties linked to the (small) scale of projects that can be financed by philanthropic investors and it contributes to facilitate the possibility of financing large-scale impact initiatives, thanks precisely to the participation of mainstream investors. Ultimately, impact finance makes it possible to 'apply' private capital on a large scale towards solving social and environmental challenges.

The idea behind impact investing is the concept of blended value (or mixed value) (Rosenman, 2019), which refers to the fact that involved investors can and want to address social and environmental challenges, but without having to forgo financial returns (Rizzello et al., 2021). The concept of *blended value* helps unhinge a system organised around competing beliefs and goals, namely, those typical of for-profit investors, oriented only towards achieving financial returns, and those typical of philanthropic investors, oriented exclusively towards solving social or environmental problems. *Blended value* helps distinguish impact finance from both traditional finance (oriented towards financial returns) and philanthropy (oriented towards non-financial returns). As such, impact investments require management of not only financial risk and return, but also social and environmental performance.

It is important to underline how, in the current socio-economic scenario, in which social issues are becoming increasingly complex and urgent while the availability of resources to respond to public welfare needs is showing a trend of budget restriction, social impact investments are perceived as a new and promising approach, which can include new models of public and private partnership to effectively address social and economic challenges.

Without prejudice to the pursuit of *blended value* as the ultimate goal, the analysis of the impact finance market shows that it is populated by different categories of activities that require investments in both financial instruments and real assets. Financial instruments include:

1. equity instruments, which require the participation of an investor willing to risk losing the capital invested;
2. debt instruments, whose investors have a lower risk-return profile than equity investors; investment in debt instruments typically does not imply the possibility of losing the capital invested;
3. hybrid instruments, whose investors are in a subordinate position to absorb losses compared with equity holders; investors in hybrid instruments assume an intermediate risk-return profile between equity and debt holders.

The supply side of impact finance can be identified with all entities and organisations that can provide capital and finance impact investments. These entities include public bodies, individuals, foundations, banks, investment funds, and pension funds.

The demand for impact investments can be identified with the set of subjects that need to be financed in order to implement projects with a measurable impact. This can happen through traditional schemes, such as co-financing or co-guarantee, which typically foresee the presence of a social enterprise and a cooperative.

Alternatively, funding can be provided through ad-hoc organisational solutions, which fall into the category defined as *Payment by Results* (PbR). These instruments involve a contract between service providers, whether public entities or not-for-profit social enterprises, and private investors who provide upfront funding to undertake projects to deliver new services or improve existing ones, thus, achieving specific and measurable social outcomes. These complex contracts involve multiple parties. The commissioning party, typically of a public nature, which is responsible for guaranteeing a certain level of social services, decides to outsource the provision of the service to a party, usually a non-profit social enterprise, which operationally designs and implements the commissioned service. Thus, it delivers the social service to the recipients of these services, known as the target population, on whom a specific impact is expected to be measured. What distinguishes PbRs is the role played by the investors, who pay the initial cost to finance (partially or totally) the social project and accept remuneration according to the achievement of pre-established objectives.

4. Social Impact Incentive - SIINC

Social Impact Incentives (SIINC) is a financial instrument that, rooted in the concept of blended and impact finance, integrates the logic of Pay by Results (PbR) in the regulation of payments between parties. The SIINC model has been developed since 2015 through collaboration between the Swiss Agency for Development and Cooperation and Roots of Impact, an impact finance consultancy that works with public funders, philanthropists, and impact investors globally to finance private sector innovations and businesses with strong potential for positive impact.

4.1 SIINC's financial model

The SIINC financial instrument follows the typical blended finance approach by aligning the interests of investors, investees, and outcome payers to catalyse capital into activities that generate, in addition to economic return, social impact. In doing so, the SIINC model typically involves three actors (Roots of Impact, 2016):

1. ***Impact Enterprise***: High impact market-based organisations that generate positive value through the conduct of their business;

2. ***Outcome Payer***: Impact-oriented actors (such as public funds and philanthropic organisations) that aim to maximise the positive impact generated through their funding;
3. ***Impact investors***: Together with the remuneration of 'classic' capital, these actors enjoy additional returns on the achievement of impact outcomes, thus, combining the objective of an economic return on investment with the desire to stimulate the generation of positive value.

In the SIINC model, the outcome payer and impact enterprise sign a payment agreement characterised by predetermined social impact performance indicators. This means that payments by the outcome payer to the impact enterprise are conditioned by the effective generation of positive value by the latter in a given time, and are measured on the basis of the preidentified impact baseline. This system includes the figure of an external impact evaluator in charge of verifying, through predetermined metrics and indicators, the achievement of impact objectives by the enterprise. The contractual relationship between the impact enterprise and investors, however, is managed separately and is structured based on the specific needs of both parties, as in Figure 1.

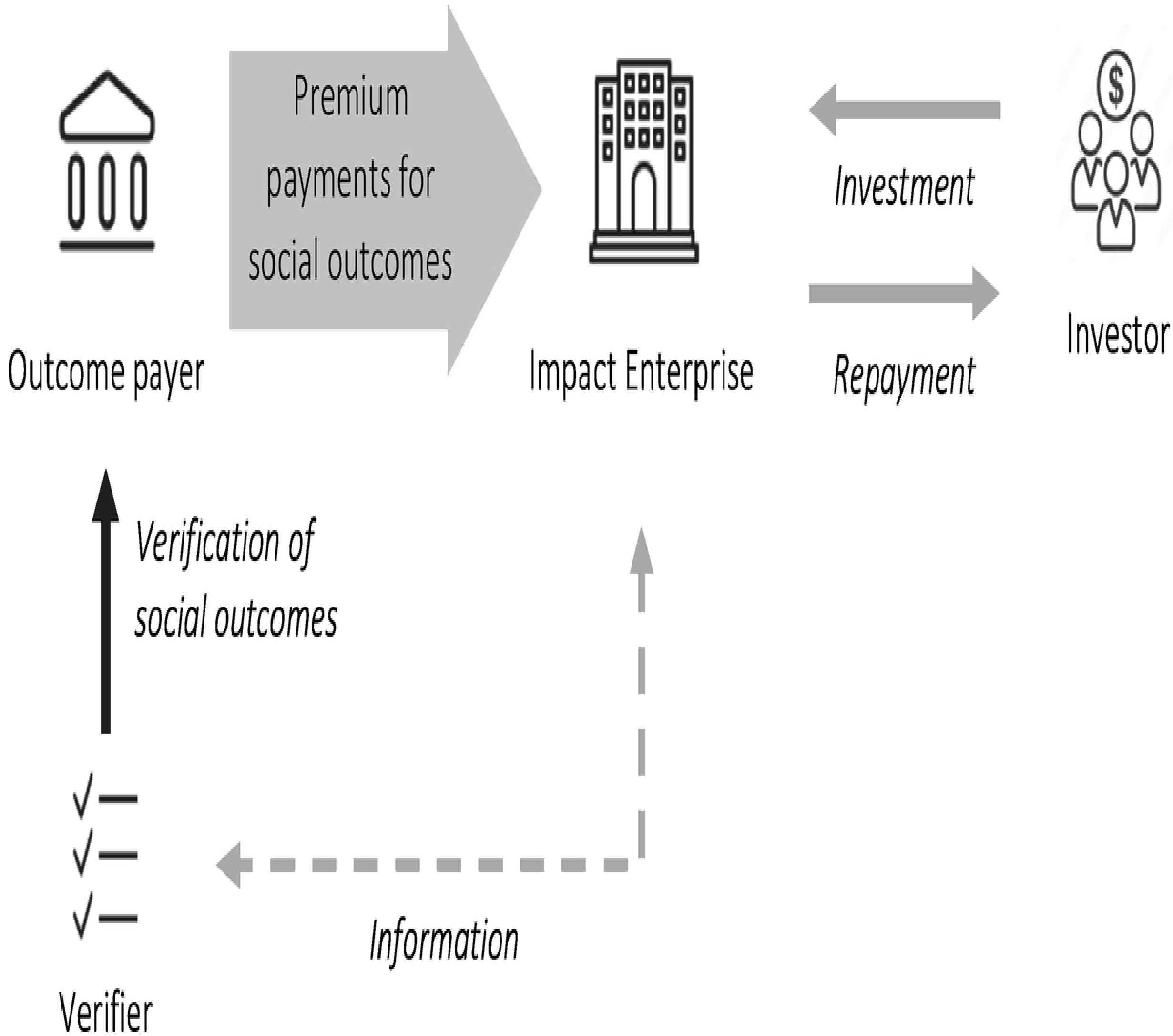

Figure 1. Social Impact Investing: Functioning of the financial model

Source: Roots of Impact (2016).

A fundamental characteristic of the SIINC model, which differentiates it from traditional financial instruments, is the presence of separate contractual frameworks between the outcome payer and impact enterprise and the impact enterprise and investor. In this way, the business risk is shared between the outcome payer and the impact enterprise, and the latter, which is in charge of the value generation activities, has a greater monetary incentive to maximise the positive impact generated thanks to the PbR system.

The separate treatment of the relationships between the parties is not the only advantage of the SIINC model. In fact, empirical evidence shows that the evaluation of the generated impact embedded in the PbR financial model, which is performed by an external evaluator, stimulates the impact enterprise to generate as much positive impact as possible. This allows the impact enterprise to strategically monitor and manage its impact goals and integrate them in its growth and development strategy. Therefore, the success of SIINC also depends on a sound impact management process and effective impact measurement practices.

4.2 SIINC in practice: Mexico and Honduras

After designing the SIINC model, Roots for Impact applied it, starting in 2015, in a pilot programme involving several impact enterprises in Latin America and the Caribbean countries (LAC), in partnership with Swiss Agency for Development and Cooperation (SDC), the InterAmerican Development Bank and New Ventures, with the support of Ashoka.

Specifically, the SIINC model was first put in practice in two projects in 2016, Clínicas del Azúcar (CDA) in Mexico, and Village Infrastructure Angels (VIA) in Honduras. The social enterprises selected for the application of the SIINC are characterized by highly innovative and scalable business models and potential large social gains. The objective is triple: (1) to enable social enterprises to obtain the necessary funds to sustain their initial costs, (2) to promote them to generate the maximum possible positive impact through the PbR mechanism, and (3) to bring together social enterprises and impact-oriented investors (Roots of Impact, 2017).

More specifically, thanks to the implementation of the SIINC impact finance tool, Clínicas del Azúcar (CDA) has been able to improve the insufficient system for diabetes treatment in Mexico, reaching the so-called Bottom of the Pyramid (BoP) patients, part of the poorest segments of the population. Furthermore, through the SIINC, Village Infrastructure Angels (VIA) has been able to achieve its objectives related to energy independence of rural communities and women's empowerment in Honduras.

In the analysed projects, the application of the SIINC model allowed the achievement of both solid economic returns and large long-term positive impacts. Thanks to the impact assessment system embedded in the SIINC, the impact enterprises have been able to continue to monitor and fulfil their impact objectives and, at the same time, attract the correct type of impact investors.

The key characteristics of the SIINC model applied to CDA and VIA case studies are summarised in the Table 1.

Table 1. SIINC model applied in Mexico and Honduras

Location	Impact enterprise	Outcome Payer	Verifier	K
Mexico	Clinicas del Azucar (CDA)	Swiss Agency for Development and Cooperation (SDC)	Roots of Impact	1 B a a n
				2 I i le B
Honduras	Village Infrastructre Angels (VIA)	Swiss Agency for Development and Cooperation (SDC)	Roots of Impact	1 le c s f a

Location	Impact enterprise	Outcome Payer	Verifier	K
				2 h n s w
				3 a e v f c

Source: Author’s elaboration.

5. SIINC application to Officine Mezzogiorno

The characteristics of SIINC make it the right financial instrument to effectively coordinate the relationships between actors involved in social impact projects that are partially financed by a public fund or a philanthropic organisation and are highly attractive to impact investors.

One of these projects is Officine Mezzogiorno, which aims to develop a coordination centre for activities and services supporting a nascent network of hubs dedicated to social innovation in the city of Lecce, Italy. The challenge of Officine Mezzogiorno is to generate value through new opportunities for training, growth, inclusion, employment, and enhancement of existing talents and realities.

The intervention takes the form of an urban regeneration project in which spaces will be created to be managed in order to produce positive social impacts, thanks to the location of businesses with the common characteristic of generating positive social impact.

The intervention is not limited to urban redevelopment. It focuses on the pursuit of social objectives through the creation and management of a hub connecting businesses and activities, which is functional to the enhancement of new civic economies with the best possible impact in terms of innovation and training.

The launch of the intervention is partly financed using the Social Innovation Fund, in a partnership between the Municipality of Lecce, Italiacamp, and the Qube.

A PbR financing system has been linked to the realisation of the intervention according to the SIINC scheme, in which are foreseen premiums that the public administration periodically pays to the social enterprises involved in the initiatives, in accordance with the real social impact progressively obtained by the latter.

For this reason, a feasibility study of the SIINC financial model applied to Officine Mezzogiorno has been included in the planning of Officine Mezzogiorno. The latter, together with the subsequent experimentation phase currently underway, has the aim of understanding the extent to which this instrument can be attractive to impact-oriented investors, and how SIINC can represent an alternative to traditional financial institutions in the management of economic relations between the subjects involved.

5.1 Defining the financial model: a comparative analysis

Given the innovativeness of the instrument, it has been necessary to develop a customized SIINC to define modalities, timing, and structure of PbR remuneration and to define the characteristics and legal-administrative preconditions for an effective integration in Officine Mezzogiorno. This last aspect is functional to the identification of the modalities of the involvement of the Public Administration (PA) in the system of relations of the SIINC model, which also involves third sector/profit enterprises and private financiers.

For this purpose, the structures of the SIINC models applied to the projects developed in Mexico and Honduras were deepened, owing to which it was possible to focus on similarities and differences with the structure of Officine Mezzogiorno.

In summary, the most relevant aspects are:

Sector:

- The interventions carried out through SIINC in Latin America are part of two sectors that have always been the elective destination of impact finance interventions, typically implemented through Social Impact Bonds. They are health

in Mexico and access to sustainable energy sources in Honduras.
- In the case of Officine Mezzogiorno, the implementation of SIINC is not in a single sector, being a project tangential to several dimensions (education, professional and personal training, civic participation, and territorial regeneration and enhancement).

Impact enterprise:

- Both projects structured in Latin America have developed a solid record of achieving specific impact and they aspire to attract new investors to scale their interventions. Furthermore, the scalability of these interventions is reinforced by the fact that the replicability of the projects is independent of the local context in which the SIINC is implemented. In other words, the enterprises' innovative methods of combating diabetes and providing solar energy to low-income farming populations effectively are in fact business models that, if successful, could be exported and replicated in many other areas of the world.
- In the Officine Mezzogiorno project, the heterogeneity of the planned interventions requires the involvement of a multiplicity of social enterprises, and it cannot be taken for granted that all have developed solid practices of

intervention and impact measurement. In addition, the specificity of the project's implementation context raises critical issues in its effective future replicability and scalability.

Metrics, whose numerosity and simplicity are factors that cannot be separated from the area of operation of the intervention:

- Both projects structured in Latin America involve the use of a few key metrics (2 in Mexico and 3 in Honduras), which measure the ability of beneficiary social enterprises to scale their interventions through SIINC.
- Officine Mezzogiorno Project: The heterogeneity of the activities that will contribute to the achievement of the multiple objectives makes the definition of summary metrics capable of measuring the impact achieved by each activity and the use of mere quantitative metrics complex.

Compensation Profiles:

- Structured SIINCs in both Latin American countries provide payments from the outcome payer to the social enterprise commensurate with verified social outcomes. As a result, the higher revenues enable the social enterprise to pay a higher return stream to investors in case of success. Payments are limited to a maximum period ranging from 2–2.5 years (Mexico) to 4 years (Honduras), beyond which it is assumed that projects will be financially self-sustaining. The definition of a maximum payment spread over a maximum period of 2 years is clarified.

- Although implemented in an economic and financial context that is profoundly different from the one in which Officine Mezzogiorno will operate, the essential characteristics of the SIINCs already implemented in Latin America appear to be inherent to the structure of SIINC, and will, therefore, be adopted for Officine Mezzogiorno. In a nutshell, a return for investors must be defined that is commensurate with the degree of success achieved, not exceeding a maximum level, and over a maximum period of time, beyond which the project will prove to be self-sufficient, and therefore, permanently financed by impact investors.

Investors:

- Both CDA in Mexico and VIA in Honduras, being companies already operating in the sector that is intended to be scaled up through SIINC, present themselves financed by impact investors: institutional investors for CDA, angel investors, impact investors, crowdfunding platforms, and donations for VIA.

- For the Officine Mezzogiorno project, the definition of investors interested in SIINC cannot be based on a pre-existing impact investor base. Given the level of development of the Western financial and banking market, which is profoundly different from that of Latin America, turning to banks and foundations seems the most natural solution in the first phase.

Outcome payer:

- The economic and financial context of the countries where both SIINCs were implemented motivates the configuration of an outcome payer in the figure of a Development Cooperation Agency (DCA), which for both projects is the Swiss Agency for Development and Cooperation, co-creator of the SIINC model.
- In the context of Officine Mezzogiorno, the economic, financial, and social context of the Italian region where the project will be implemented does not require the presence of an entity similar to the Swiss Agency for Development and Cooperation (SDC). The involvement of a local public body is, therefore, a natural outcome payer profile.

5.2 Funding methods

Considering the differences found between the economic and financial environments in which the Latin American projects have been implemented in respect to the ones related to Officine Mezzogiorno, several possible solutions have been hypothesised regarding the funding of SIINC in the Italian context:

1. **Non-repayable financing**: It is supplied by a foundation, possibly a bank, or another company (including for-profit ones) whose corporate purpose allows the provision of such financing;
2. **Loan financing**: For this purpose, it is possible to imagine different solutions, also in the light of the time frame of the financial requirements. By imagining a time frame of 5–6 years maximum, it is possible to hypothesise:
    1. 2.1. The issue of a bond: possibly purchased by an institutional investor and held to maturity, as listing is difficult. Possible profiles of the investor in question include a banking foundation (or a company with a non-limiting corporate purpose) or a financial intermediary, such as a bank or insurance company. Pension funds are excluded because, generally, the resources are managed by external entities through individual management mandates defined by a formalised upstream tender. In this context, reference could possibly be made to pension

funds. The issue of a bond could have an advantage and a disadvantage. Specifically:

1. 2.1.1. The advantage is represented by the opportunity to permanently collect financial resources that would remain allocated until the maturity of the bond with the financed entity;
2. 2.1.2. The disadvantage is represented by the costs with respect to bank financing, both direct related to the pricing of the bond and indirect related to the issuing process. Here, the 'direct' costs linked to remuneration could be mitigated through:
    1. 2.1.2.1 The consideration of a minimum return plus an incentive recognised to the purchasers of the bond in the event that social objectives are achieved against the economic recognition of cash flows, by an external party in the second case. In this case, the financial profile of the bond must be carefully communicated to potential investors;
    2. 2.1.2.2 The consideration of a market return, without prejudice to the fact that the issuer may benefit from an economic compensation by an external party, in case of achievement of the social objectives, which would, thus, mitigate the debt service charges. In the second case, the agreements deriving from the

achievement/non-achievement of the social objectives would remain within a restricted and bilateral framework, without necessarily having to be shared by external lenders.

2. 2.2. **Issuance of a bank loan**: This is issued by a commercial bank or a bank oriented towards the non-profit sector. In terms of orientation, a bank loan could be issued at a variable rate, such as *Euribor* + *spread*, where the spread could be relatively limited in light of the public guarantees provided by the borrower. This choice offers:
   1. 2.2.2. As an advantage, lower pricing compared with a bond, both from the point of view of direct costs and especially in terms of issuance costs;
   2. 2.2.2. As a disadvantage, the possibility that the loan can be called before maturity, albeit in unusual cases (liquidity tensions in the money market, strengthening of capital requirements, changes in base rates), causing a decrease in the 'stability' of the resources flowing to the financed entity.
3. 2.3. A third possibility could be represented by a mix of both these policies in which, for example, a bank financing arrangement could be configured, supported by a bank bond issue. This opportunity would result in lower cost compared with the direct issuance of a bond (but higher

cost compared with bank financing not supported by direct sight deposits). It would also increase the stability of the financing compared with ‘pure’ bank financing (supported by direct deposits), even though it would be lower compared with the level of stability offered by a direct bond issue.

Ultimately, the path to be taken for the funding of the SIINC connected to Officine Mezzogiorno depends on the investor; however, the loan formula emerges as the most straightforward.

5.3 SIINC financial model at work: a simulation

In line with the evidence that emerged from the comparative analysis, a simulation of the application of the blended finance SIINC model to Officine Mezzogiorno was elaborated for the feasibility study, with the stakeholders being the Municipality of Lecce as outcome payer and Italiacamp as impact organisation.

The model has the logic of a financing approach in which a quasimarket return is provided to investors, who finance the implementation of activities that generate social value for the city of Lecce. The outcome payments are set in proportion to the levels of achievement of results and not with a binary approach (all or nothing). In this way, a minimum level of outcome payments will always be guaranteed in addition to the capital invested, which will then increase depending on the degree of achievement of the expected objectives.

Below, as a blueprint, is presented a possible model of flows for each of the actors involved in the SIINC and the relative payoff.

The model simulation, represented in Table 2, considers two scenarios and their payoffs:

Table 2. SI INC model simulation for Officine Mezzogiorno

Scenario 1. Minimum outcome level is not achieved			
	Year 1	**Year 3**	**Payoff**
Investor	— C	F	+ i
Italiacamp (Impact enterprise)	—S +C +E	F -F	—S + C + E = Q1— E

Scenario 1. Minimum outcome level is not achieved

	Year 1	Year 3	Payoff
Lecce Municipality (Outcome Payer)	— E	-F	— [E + (C + ill < S

Scenario 2. Maximum outcome level is achieved

	Year 1	Year 3	Payoff
Investor	— C	+ [(F + Inc(A)]	i + Inc(A)
Italiacamp (Impact enterprise)	—S	+ [F + Inc(I4]	E + [Inc(L) — Inc(A)] — Q1
	+ C	— [(F + Inc(A)]	

Scenario 1. Minimum outcome level is not achieved

	Year 1	Year 3	Payoff
	+E		
Lecce Municipality (Outcome Payer)	—	— [(F + IncInc(L)]	— [E + (C + i) + Inc] < S

Source: Author’s elaboration.

Variables
A = Project initial costs
Q1 = Total costs of activities Year 1
S = Expenditure incurred by the enterprise in Year 1

Variables
R = Outcome payer's savings
E = Expenses incurred by the Outcome payer
C = Share of financed capital
i = Interest rate (below market rate)
F = (C + i)
C=A
S = A + 01
R = S — E
Inc(L) = Impact enterprise's impact incentive =% R
Inc(A) = Investor's impact incentive = % Inc(L)

- **Scenario 1**, in which it is assumed that the minimum outcome level is not achieved;
- **Scenario 2**, in which the maximum level is assumed to be reached.

As can be observed from the simulation of Scenario 1, the model foresees a minimum contribution to the start-up of the project from the outcome payer (E), while the remaining initial costs (S) are sustained by the impact enterprise and in part covered by the investment (C) received by the investor in Year 1. At Year 3, the investor is returned the share initially invested (C) inclusive of interest (i) and of a possible impact incentive (Inc(A)), proportional to the impact generated by the impact enterprise.

Since the minimum level of expected outcome has not been reached, with regard to payoffs in Scenario 1 it is observed that the investor does not suffer losses, the impact enterprise does not obtain bonuses but manages to sustain the start-up costs thanks to the initial funding, and the Municipality of Lecce sustains lower costs than those sustained if it had fully funded the project in the initial phase (S).

In Scenario 2, in which it is assumed that the maximum level of impact has been reached, it is possible to note that, given the same flows in year 1, at the maturity of the SIINC, the investor receives the capital (C) including both interest (i) and the impact incentive (Inc(A)), and the impact enterprise receives, from the Municipality, the value corresponding to the financing with an impact incentive (Inc(L)). The latter is proportional to the cost savings for the Municipality (%R) and is greater than the impact incentive that the implementer will owe the investor (Inc(A)). In this way, the impact enterprise will succeed in remunerating the investor and be able to keep a part of remuneration for the activities carried out (equal to the difference between Inc(L) and (Inc(A)).

The Municipality, as an outcome payer, will remunerate the financing and the impact incentives, sustaining a total amount of costs that is nevertheless lower than the expense it would have had to sustain financing the project in its initial phase (S).

The same scenarios are illustrated for clarity with a numerical example in Table 3, assuming the initial value to be 156,000 € (A), the total cost of operations in Year 1 to be 240.000 € (Q1), the annual interest rate to be 3%, the value of the impact incentive remuneration to the impact enterprise (Inc(A)) to be equal to 45% of the cost savings obtained by the outcome payer, and the value of the impact incentive remuneration to the investor to be equal to 10% of the repayment received by the implementer (Inc(L)).

Table 3. SIINC model simulation for Officine Mezzogiorno: the monetary flows

Scenario 1. Minimum outcome level is not achieved			
	Year 1	**Year 3**	**Payoff**
Investor	- 156	+ 160	4
Italiacamp (Impact enterprise)	-396	+ 160	- 100
	+156		
	+ 140	- 160	
Lecce Municipality (Outcome Payer)	- 140	- 160	- 300 < - 396

Scenario 1. Minimum outcome level is not achieved			
	Year 1	**Year 3**	**Payoff**

Scenario 2. Maximum outcome level is achieved

	Year 1	**Year 3**	**Payoff**
Investor	- 156	164	8
Italiacamp (Impact enterprise)	- 396	203	- 61
	+ 156	- 164	
	+ 140		

Scenario 1. Minimum outcome level is not achieved			
	Year 1	**Year 3**	**Payoff**
Lecce Municipality (Outcome Payer)	- 140	- 203	- 345 <- 396

Source: Author’s elaboration.

Variables	**Simulation values, EUR thousand**
A = C Project initial costs	156
01 = Total costs of activities Year 1	240
S = Expenditure incurred by the enterprise in Year 1	396

Variables	Simulation values, EUR thousand
R = Outcome payer’s savings	96
E = Expenses incurred by the Outcome payer	140
C + i	160
Inc(L) = Impact enterprise’s impact incentive = 45% R	43
Inc(A) = Investor’s impact incentive = 10% Inc(L)	4

As represented, in Scenario 1, the risk is shared between the outcome payer and the impact enterprise, while in Scenario 2, the investor obtains a higher remuneration, the impact enterprise amortises the costs incurred, and the outcome payer obtains both a cost saving and the generation of positive social value.

The model simulated foresees, in summary, the birth of the project from a public-private partnership (PPP) and, thanks to the characteristics of the SIINC financial model, the sharing of the risk. As a result, all the participants involved in the SIINC benefit from greater cost savings than those obtained from the application of a traditional financial instrument for the granting of financing.

To recap, through this mechanism it is possible:

- For the Municipality to benefit from a cost saving consisting of the dif-ferential between the costs it would have had to bear for the start-up and development of the project activities and what is then remunerated.
- For the implementer to obtain a form of remuneration for the outcome achieved, given according to the differential between the repayment received by the outcome payer and the value returned to the investor that allows the reduction of the amount of costs incurred.

5.4 Juridical analysis considerations

In juridical terms, the construction of an impact finance instrument consists of the preparation of adequate regulation – public and, above all, private/contractual – obligating the parties involved in the financed operation to pursue and reward positive externalities. These are to be inserted in the negotiation relationship as objects of contractual performance, whose fulfilment must be monitored for the purposes of the payment of a bonus, which is dependent on their achievement. The financed operation must, therefore, be regulated as an intervention that produce both a profit and a result qualified as a collective benefit (which, with the legal instrument of the contract or measure, is deduced as a necessary part of the operation, of which it represents an added value). The regulation makes the operation a remunerative form of investment, which is, above all, socially sustainable and productive of social development. For the realisation of this instrument of innovative impact, it is necessary to start from the contents of the contractual relationships that will regulate the relations between the potential interested parties, both public and private.

In particular, it is necessary:

- to identify the actions that, in line with existing legislation, can be cov-ered by the SIINC;
- to design two types of negotiated relationships, which bind the public administration, the impact organisation, the funder, and the evaluator.

In the first phase of analysis, the focus was on the relationship between PA and the implementing party, which is the most complex contractual element to define.

5.4.1 SIINC content

Impact finance is applicable to high social impact activities for requalified urban spaces, given the full consistency of this financing instrument with social interventions that, by their nature, do not present a fully consolidated competitive market that the Public Administration can refer to in order to obtain the desired performance levels. Therefore, with regard to the possibility that the municipal administration – or any other PA – may employ public resources within the contractual schemes of impact finance in order to guarantee rewards for the social impact of the planned interventions, no specific problems of public accounting are to be found. In fact, for such profiles, the necessary contractual schemes are well framed in public financing schemes supporting private social activities. To this end, it is appropriate for the Municipality to prepare a detailed performance plan – more appropriately "Piano Esecutivo di Gestione" (PEG) [1] – that outlines how the social impact interventions, rewarded with public resources, are inserted in a conscious budget framework (with adequate and coherent resources) and in the overall logic of public action (with the pursuit of public interests for which the authority is competent).

[1] Executive Management Plan.

On the contrary, with regard to the possible use of impact finance towards the urban redevelopment of public buildings, a number of critical aspects must be highlighted with respect to Italian legislation in terms of the rules on State aid, public contracts, and public accounting, which would lead to due respect for selective procedures for the transfer of the asset.

For this reason, the actions covered by the impact finance tool in the first trial of the SIINC for Officine Mezzogiorno will not relate to the redevelopment of the property and the impacts arising from this process. Reference will be made exclusively to the project actions of training and acceleration, the related costs, and consequent expected impacts.

5.4.2 Introductory analysis of the contractual model

The operation to be hypothesised is atypical and ends up involving several subjects linked by different negotiations, who are called upon to intervene in different ways. In the SIINC model, the PA is an outcome payer since it can benefit from a financial value deriving from savings in its budget thanks to the impact actions carried out.

However, in order for the PA to be able to remunerate the private financer, it is essential that the connection between public expenditure (rewarding the social impact) and the effective public interest realised already emerges in the measure and negotiation structure of the operation. This connection must not only be transparent, but also be predefined in order to guarantee both competition among operators to obtain this advantage and identification by the PA of the best operator at the best conditions. Moreover, this applies both when the PA acts as a direct outcome payer, and when it accepts to be a bonus payer as an indirect promoter of new social benefits (from which, however, it does not benefit in terms of reducing the structure of the previous expenditure without making a saving on its own budget).

In order to best meet this need for transparency, in the case of a public outcome payer, it seems necessary for the implementing party to act as a filter for the PA, in order to guarantee greater flexibility and avoid the development of non-transparent relationships. Thus, remuneration for social impact can occur usefully through the payment of the premium in a single payment to the social enterprise. The latter will then be responsible for quantifying the remuneration for the social impact of individual investors. In this way, the PA will have a single direct contractual relationship with the implementing party. This relationship has peculiar features that can be traced back to the category of public-private agreements, which are often termed differently (conventions, partnerships, PPP, etc.), and can replace or supplement the traditional ways of implementing administrative actions such as measures and unilateral acts.

For these reasons, the procedure for concluding the partnership agreement, its content, and execution must be in line with the principles and provisions on public evidence laid down by Italian law.

To this end, it will be necessary to provide for an initial public phase of unilateral definition of the social impacts desired by the PA.

This will be followed by a public evidence phase in which the administration will identify the best private projects for implementing activities (which will also be fully private) designed to achieve those impacts. Given that the rewards are to be qualified as economic benefits granted by a public to a private body, the procedure to be followed should align at least with the provisions of Italian law, which requires compliance with the principles of transparency, impartiality, and good performance through the determination ex ante of the criteria and procedures to be followed for the provision of resources.

Such conditions must be established in general rules based on the legal framework applicable to the individual administrations. Obviously, this does not exclude the possibility that regulatory acts may refer to general administrative acts, such as notices, in order to determine the specific content of certain conditions regarding funds granting.

The implementation phase, following the conclusion of the partnership contract (PPP), will see the public administration mainly, if not solely, committed to the future payment of bonuses, against results consistent with the social impacts present in the contract (impacts actually achieved that will have to be certified by an external and independent assessor with respect to the public administration). Therefore, the PA does not immediately disburse an economic benefit that can be revoked only in the event of ascertainment of a failure by the recipient. In fact, the logic of the public contribution being revocable in case of failure to achieve the intended social goals is reversed, and in this lies the innovativeness of the impact finance tool.

6. Conclusion

Impact finance provides effective tools able to combine economic goals and the development of positive social value.

Particularly, the Social Impact Incentive (SIINC) system emerges as a functional blended finance instrument for the coordination of public and private actors in the correction of some market failures. As demonstrated in the pilot projects in LAC countries, the SIINC has enabled the development of activities in contexts where traditional economic and financial instruments have failed to meet the needs of certain segments of the population.

In fact, the SIINC is a profitable financial arrangement for the management of PPPs that combine economic and impact results, thanks to the integration of PbR and impact evaluation logic.

Moreover, the tool adds a traditional element of impact management to the management of the PPP, through the provision of a monitoring and evaluation system of predetermined impact KPIs. This impact evaluation system, when pursued over time, is able to trigger a virtuous circle for impact enterprises, allowing them to strategically plan impact targets and attract additional impact investors.

The SIINC's versatility enables the adaptation of the model to contexts that differ in terms of legal regulation of PPP and in terms of the involved actor's nature. Therefore, a feasibility study was built for the application of the SIINC model to Officine Mezzogiorno, a project with large potential for impact and scalability.

The objective of this study was to design the structure of the economic and contractual relations between, specifically, the Municipality of Lecce and an impact enterprise for the regeneration of an infrastructure, accordingly to the typical hub setting, aimed at the construction of a coordination centre of activities and services for the whole community.

The simulation of the economic flows, covering two scenarios of maximum and minimal attainment of predetermined impact goals, has quantitatively demonstrated that the application of the SIINC to Officine Mezzogiorno's PPP give the means to reduce costs for all the actors involved, thus representing a preferable alternative to traditional non-impact oriented financial tools.

Moreover, the feasibility study identified the appropriate structure for the management of economic relations, funding possibilities and it outlined the peculiarities of the legal contractual regulation of the model. Specifically, the analyses undertaken in the feasibility study, currently being tested, have outlined a model with the following legal specifications:

Investor's nature	**The investor should preferably be a financial institution.**
Contract matter	The SIINC contract, for compatibility with the Procurement Code (Codice Appalti), does not include the renovation of the infrastructural property, but it exclusively concerns training and acceleration activities planned for Officine Mezzogiorno.
Administrative innovation	Outcome payer's involvement modalities (Lecce Municipality) in the SIINC financial model require to the public administration an administrative innovation, that is preparatory and necessary for the correct economic and contractual functioning of the SIINC.

The model proposed for Officine Mezzogiorno, therefore, indicates an approach to innovation based on the concept of institutional empowerment, which is also based on a strong synergy between public and private actors aimed at enabling administrations to identify their needs for renewal and, more generally, to interpret their mission in a strategic and anticipatory way.

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Chapter 16

IMPACT MANAGEMENT FOR URBAN INNOVATION: AREXPO FOR MILAN INNOVATION DISTRICT PROJECT

Ludovica Testa, Martina Bovi, Alberto Mina, Alice Visconti

Abstract: Climate change, social inequalities, demographic transition, digital revolution are some of the main challenges that, due to the rapid evolution of the socio-economic context, most Western countries are facing. In this context, urban regeneration has become an essential driver for economic and social development. In Italy, the increasing relevance of urban regeneration is further demonstrated by the allocation of European Union funds to territorial redevelopment processes, in the framework of the 2021 National Recovery and Resilience Plan.

The Chapter aims to outline how innovation drivers can be functional elements to the development of impact management processes, with a focus on urban regeneration *projects. Accordingly, the research analyses Arexpo's urban regeneration project MIND -Milano Innovation District developed by Arexpo for the regeneration of the areas that hosted EXPO 2015 and the project's innovative elements in terms of impact management.*

The results highlight that MIND is an example of how the impact management process can be applied in urban regeneration projects aimed at the generation of positive economic and social impact.

Specifically, the innovative elements in MIND that respond to the logic of impact management are threefold: model innovation, process innovation and innovation in engagement.

Keywords: Urban regeneration – Impact management – Social impact – Innovation District – Social innovation.

Summary:

1. Introduction

The work developed in this Chapter analyses how drivers of innovation (technological and process) can be considered as functional elements to the development of planning and management processes for projects aimed at the generation of positive social and economic impact. The research considers the specific field of intervention of urban regeneration, due to the growing importance that this aspect is assuming in Italy. Europe has, in fact, implemented Next Generation EU, a 750 billion euros programme launched in 2020 to recover European economy, which has been translated in Italy in 2021 into the National Recovery and Resilience Plan (Piano Nazionale di Ripresa e Resilienza - PNRR) where 9 billion have been allocated to territorial redevelopment processes. The urban regeneration issue is therefore perceived as essential for Italian economic and social development.

To achieve its goal, the analysis considered the innovation district model of urban regeneration and its concrete application for the project MIND (Milan Innovation District), the first urban regeneration project developed in Italy by Arexpo.

The analysis, therefore, aims to identify possible elements of connection between the model of innovation district, in its declination for the MIND project, and the characteristics of the theorized impact management process.

This chapter, after an introduction on the methodology applied to the analysis (paragraph 2), outlines a presentation of the two analysed models: the impact management model (paragraph 3) and the innovation district model (paragraph 4). Finally, paragraph 5 reports the analysis of the specific MIND case, which considerations and results are then summarised in the conclusions (paragraph 6).

2. Methodology

The stream of research carried out by the GIIM Observatory on Impact Management issues is the theoretical and analytical foundation from which the construction of this analysis starts. Specifically, studies are taken into consideration which propose a modelling of the Impact Management process in which the component of innovation is integrated (Busco, De Luca and Scettri, 2022). A literature analysis was carried out on the impact management processes and the innovation district model. The second step was an empirical analysis of Italy's first Innovation District: the Milano Innovation District (MIND), a project launched and implemented by the public company Arexpo and private international partners. The empirical analysis, developed through interviews with the Arexpo operational team and documentary analysis, aimed to highlight the salient features of the planning and management process in the case of MIND, making the project a virtuous example of impact management and which can be replicated for similar projects in different contexts.

3. Impact management for innovation: the model

Public and private actors are called to respond to the following global challenges: raising awareness that it is no longer possible to consider economic development and achieving economic goals without considering sustainability issues and the positive or negative impact generated. Therefore ‘sustainable success’ is central to organisations’ strategic planning. The same corporate governance code for listed companies incorporated in 2020 was the precise indication that managers must achieve results of sustainable success, understood as the creation of value in the long term for the benefit of shareholders, taking into account the interests of other stakeholders relevant to the company.

For this reason, the search for planning, management and monitoring models that can integrate sustainability and social impact is becoming central. In this context, the research and modelling activity developed by the Governance of Innovation & Impact Management Observatory has led to an initial modelling of the impact management model and its salient features. It is shown in the model (Busco et al., 2022) in Figure 1 how to create sustainable value through an impact management process; it is necessary to consider different elements simultaneously: purpose, materiality, strategy, innovation and impact/performance.

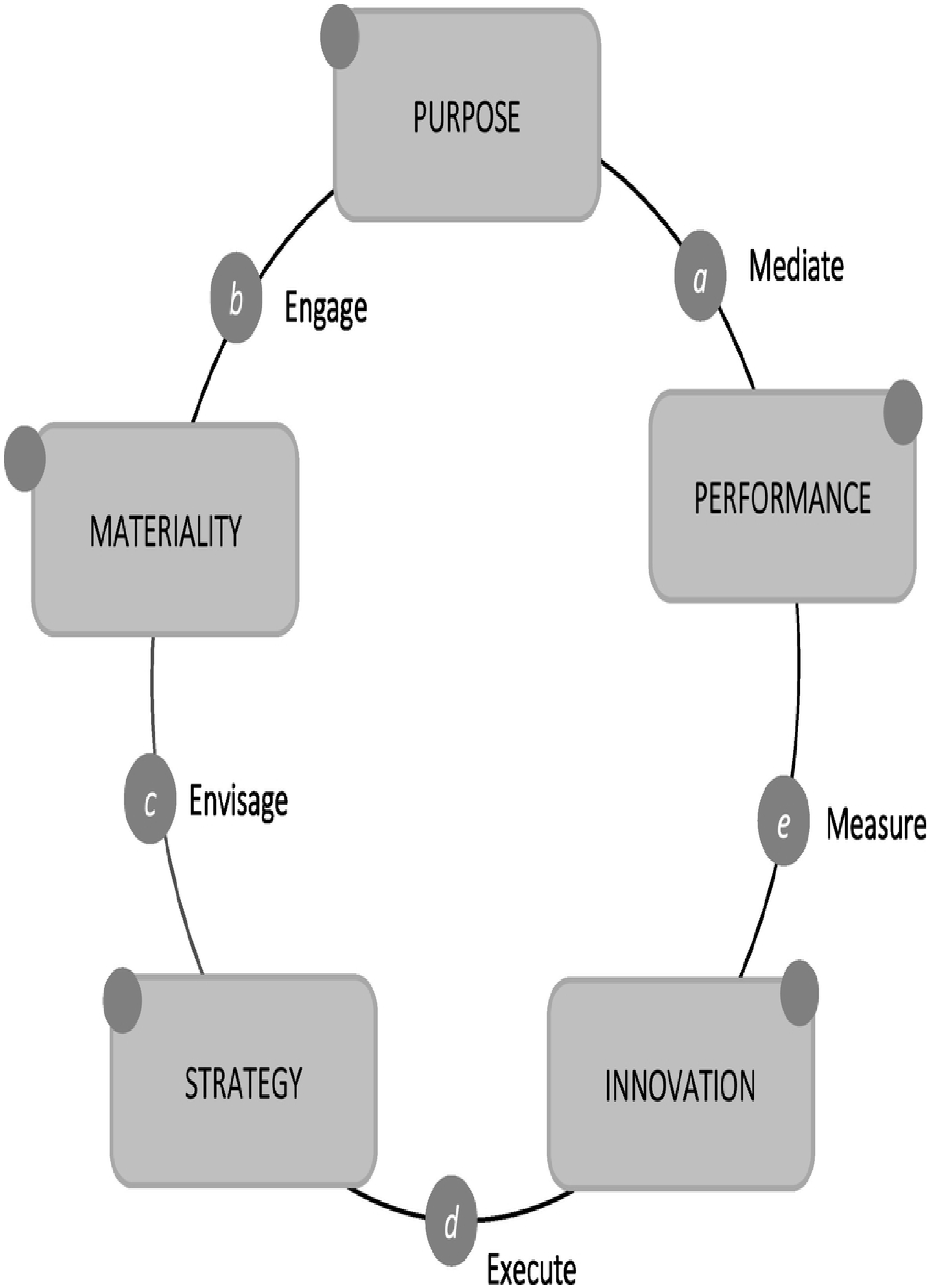

PURPOSE
a
Mediate
PERFORMANCE
e
Measure
INNOVATION
d
Execute
STRATEGY
c
Envisage
MATERIALITY
b
Engage

Figure 1. The impact management process

Source: Author's elaboration from Busco, De Luca and Scettri, 2022.

Each project or organisation must start from the definition of a *purpose*, the reason for the existence of that project, and the ultimate goal that arises from a *mediation* process as the result of a combination that relates the needs and expectations of different stakeholders. To move from purpose to results, it is necessary to *engage* the stakeholders to understand what is *material* for them and act on these aspects by defining a *strategy*. Because of the direct engagement of stakeholders, materiality allows one to adopt a complete perspective on the issues relevant to them and to manage the risks and opportunities related to the value creation of the project or organisation.

Therefore, the path to generating positive value necessarily passes through the definition of a strategy guided by the materiality and objectives defined ex-ante. Starting from these, the methods and actions necessary to achieve results and create value over time are identified. Considering the complexity of the systems, *effective strategy execution* requires a process of innovation. Thus, innovation represents the tool through which the purpose and strategy are put into practice, and therefore performance (*impact)* is achieved. It is necessary to measure and subsequently use it as a mediation/agreement/planning tool between the parties involved in the impact management process to verify the strategy's effectiveness and achievement of the impact. The measurement and evaluation of impact triggers/activates a process of revision, integration, and verification of the objectives of a project/organisation in coherence with the results already achieved.

The impact management framework described can be an effective model for managing projects in urban districts. It combines the generation of positive social impact for stakeholders with the integration of innovation. Urban regeneration, in fact, typically aims to respond to the emerging needs of local communities by generating positive value through the redevelopment, with innovative models, of city areas. Innovation, therefore, is configured in urban regeneration projects as a driver for creating value over time in the framework of the impact management process.

4. Innovation district: a model of urban regeneration

Climate change, social inequalities, demographic transition, the digital revolution. These are just some of the main challenges that, due to the rapid evolution of the socio-economic context, most Western countries are facing. In this context, cities represent the first place, physical, in which it is necessary to identify new solutions to respond to these challenges (Fioretti, Pertoldi, Busti and Van Heerden, 2020). Therefore, national and supranational policies strive to promote sustainable urban development, capable of making cities, once again, leading places and promoters of economic growth. Cities have always played a driving role in the economic development of an area (Accetturo, Lamorgese, Mocetti and Sestito, 2018; Frick and Rodríguez-Pose, 2018) – a 'delimited' physical space in which people, economic resources, and know-how circulate, thus activating relationships, exchanges, and collaborations, all determining components in innovation processes (Fioretti et al., 2020).

Over the centuries, the concentration of the described elements within a territory, more or less large, has represented an opportunity for the birth of what is defined as agglomeration economies, as in the case of industrial districts. The phenomena of agglomeration and clustering have been identified as drivers of innovation and, therefore, of the competitiveness of an area by various economists, such as Paul Krugman and Michael Porter, as early as the early 1980s (Esmaeilpoorarabi, Yigitcanlar, Kamruzzaman and Guaralda, 2020).

On the basis of these considerations, therefore, in some areas policies have encouraged clustering phenomena to foster the formation of urban knowledge and innovation spaces. New land use has emerged: innovation districts (Adu-McVie, Yigitcanlar, Erol and Xia, 2021).

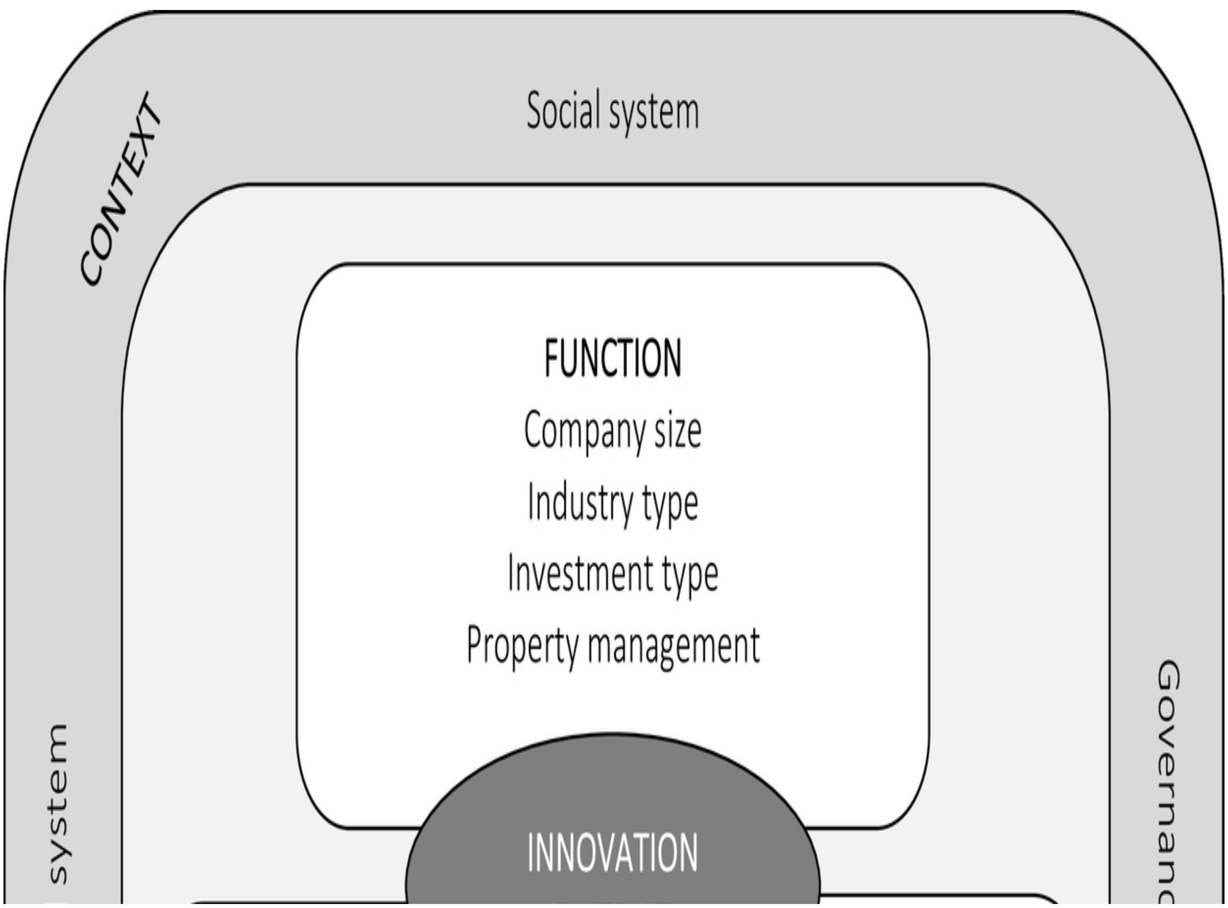
Currently, there is no single definition of an innovation district. Indeed, the term is often used in broad terms and to refer to 'knowledge and innovation spaces', 'innovation clusters', 'innovation milieu', 'knowledge (community) precincts', and 'innovation precincts' (Yigitcanlar, Adu-McVie and Erol, 2020), or as 'high technology districts', 'science and technology parks', 'innovation and cultural districts' (Adu-McVie, Yigitcanlar, Erol and Xia, 2022). Wanting to define the concept of an innovation district, it is possible to refer to one of the first and main theorisations provided by Katz and Wagner, who describe districts as a '*new complementary urban model is now emerging*' and specifically identify them as '*geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators, and accelerators*' (Katz and Wagner, 2014).

Among the various definitions in the literature, the one that has been taken as a reference in this paper is by Esmaeilpoorarabi et al. (2020), which defines innovation districts as a *'Nexus of* *knowledge-based development in cities, where public and private actors work towards fostering, attracting, and retaining investment and talent with an aim of revitalising urban areas, and boosting knowledge and innovation economy activities.'* Within this definition are all the qualifying elements of the concept of innovation district: public-private partnership, the attraction of economic and non-economic resources, economic growth and competitiveness of a territory, and redevelopment of urban areas. The new innovation districts, in contrast to the previous ones generally located in peripheral locations with low population density, have adopted open innovation models defined on the basis of crossing boundaries, encouraging movement and exchange and integrating it with the social network (du-McVie et al., 2021). Integrating innovation clusters into the urban fabric has enabled the use of urban infrastructure, increased place identity and fostered positive social characteristics such as accessibility, heterogeneity and diversity. Such physical proximity enables the provision of jobs, opportunities, resources and services, reducing the social divide often created in other contexts of agglomeration economies and promoting social sustainability in neighbourhoods. However, there are still few contributions in the literature that analyse how innovation districts are the engine of social dynamics (Martinez and Potts, 2009). The evolution of the conformation of innovation districts is also a result of the emergence of the Open Innovation model as the dominant innovation design (Cohendet, Chenier, Simon, and Stojak, 2022).

No single framework completely delimits the concept of an innovation district, its functions, or its characteristics (Yigitcanlar et al., 2020). The innovation districts combine different elements on the basis of territorial and social characteristics, available resources, network and strategic objectives. In this way, innovation districts are born, unique, and non-replicable because they adhere to the specific characteristics of the territories. However, all innovation districts contain economic, physical and network resources. The economic resources consist of companies, institutions and organisations, which can be defined as innovation drivers that drive the market by developing products and services, innovation cultivators that support the growth of individuals, companies and their ideas, and neighbourhoodbuilding amenities that provide the supporting services. Together with a risk-taking culture, their combination generates an innovation ecosystem and fosters a synergistic relationship between people, firms, and places that enables idea generation and, thus, economic development (Katz and Wagner, 2014).

The physical resources are the public and private spaces that stimulate high levels of connectivity, collaboration and innovation. They can be accessible, act as a bridge between the district and the city, or make the innovation district close to the community. Network resources are the relationships between actors, such as individuals, companies and institutions, which are the drivers for generating and accelerating the development and circulation of ideas. More or less formalised ties can be strong in case there is a high level of resource sharing and collaboration or weak if contacts are rare (Katz and Wagner, 2014). Innovation clusters, therefore, while always characterised by the presence of economic, spatial, and networking assets can be vertically analysed considering different criteria such as the specific function, characteristics and quality of space (Yigitcanlar et al., 2020). Looking at the specific function, it is possible to identify areas that differ in industry, sector composition, and business functions. There are districts characterised more by the creative component, some by technology and others by knowledge. Considering the *features*, they are distinguished with respect to the area's territorial and social characteristics, the network's proximity, and the entrepreneurial innovation component.

Finally, they can differ in the use of space, both in terms of design and size and finally by type of governance models, such as double, triple and quadruple helix partnership models (Yigitcanlar et al., 2020). Recently, Yigitcanlar et al. (2020) attempted to construct a framework for the classification of districts (Figure 2) that considers the dimensions ‘Context’, ‘Feature’, ‘Function’ and ‘Space use and design’, applying 16 indicators (four for each dimension) and 48 metrics (three for each indicator). Specifically, ‘Feature’, ‘Function’ and ‘Space use and design’ are identified as primary classification dimensions, while ‘Context’ is seen as a secondary classification dimension, as it relates to the supporting context at the city or region level (Adu-McVie et al., 2021).



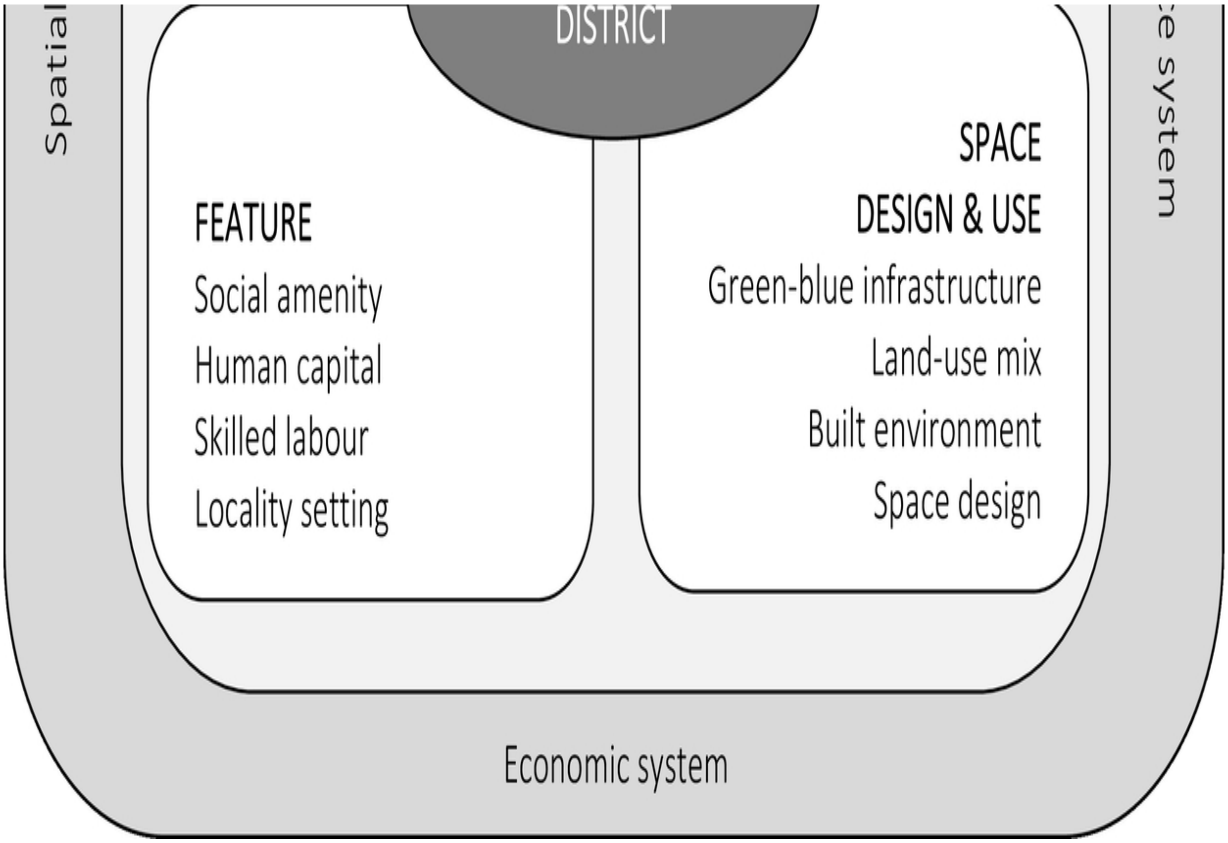


Figure 2. Conceptual framework of innovation district classification

Source: du-McVie, Yigitcanlar, Erol and Xia, 2021.

The ulterior element of rationalisation of the model at the base of the innovation districts aims to identify the categories of stakeholders that converge inside the districts and the relative modalities of interaction, exchange, and collaboration. Districts are represented as models in which a series of helices are combined and related, each of which is representative of a particular category: we move from double-helix to triple-helix to quadruple-helix models (Carayannis and Campbell, 2009), applying open collaboration models involving a wide range of different stakeholders (Cohendet et al., 2022). Among them, the four-helix model has been increasingly identified in recent years as a model of Social Innovation in urban contexts, depending on the interaction between the private sector, public sector, civil society and academia, working together to achieve innovative systemic change (Yigitcanlar et al., 2020).

The four-helix model, one of the most popular frameworks in the field of social innovation, has its roots in the three-helix model, which sees the connection between academia, industry and government in an open innovation model. The integration of the three-helix model with civil society, proposed by Caraynnis and Campbell (2009), was born in response to the changes observed in the knowledge society. Indeed, the four-helix model incorporates the growing awareness of civil society in responsible innovation and its increased participation in innovative social and urban development processes (Cai Y and Lattu, 2021). In Figure 3, the four main components of Innovation Systems are involved in a multi-layered, dynamic and multi-directional interaction process in which society plays the leading community integration actor (Schütz, Heidingsfelder and Schraudner, 2019).

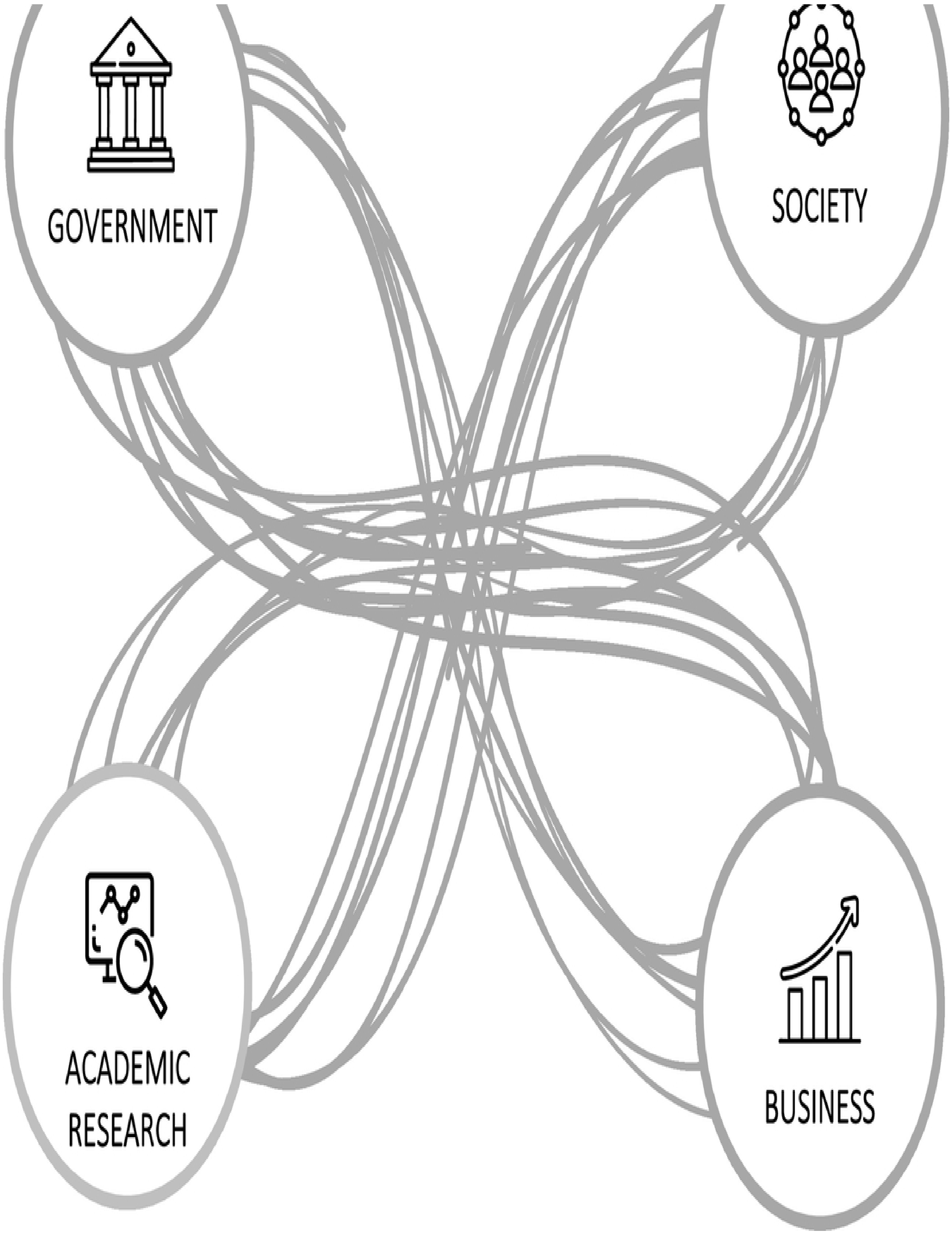


Figure 3. The Quadruple Helix Model

Source: Schütz, Heidingsfelder and Schraudner, 2019.

The four-helix model emphasises the importance of the active participation of a plurality of different actors, from small and large firms to academia and the community, in innovation development and knowledge diffusion. Through the fourth helix, the notion is outlined that information flows through all spheres of society in the modern knowledge society and that the interaction between them is necessary for social innovation systems (Schütz et al., 2019). Among the modes of possible interaction between the public and private sectors is the Public Private Partnership (PPP), a formal arrangement in which the private sector contractually establishes a longterm cooperative partnership with the public sector, which typically transfers a design vision and public resources with the shared goal of achieving long-term social impact goals (Wang and Ma, 2020). For its effective integration into urban social innovation models, it is paramount to understand how civil society is involved in the knowledge-based development process within Innovation Districts. Quantitative research conducted by Esmaeilpoorarabi et al. (2020) highlights different types of public engagement within innovation districts, such as attending meetings and conferences, participating in social activities, using recreational facilities and shopping.

5. Milan Innovation District: the application of Arexpo

5.1 MIND project

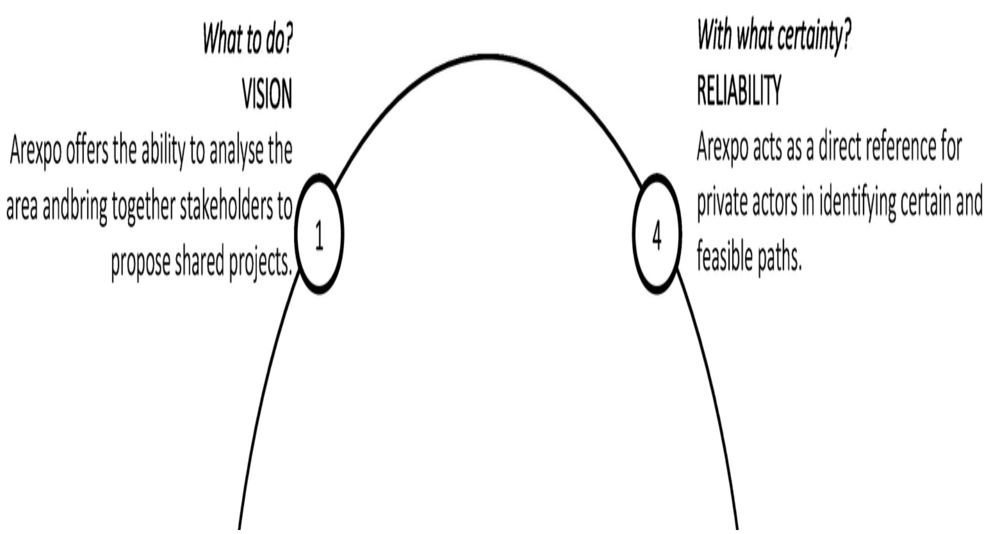
One of the first applications of the innovation district model in Italy was promoted by Arexpo with the MIND (Milano Innovation District) project. Set up in 2011 to acquire the areas that hosted Expo Milano 2015, the company has a public majority. Its shareholders include the Italian Ministry of Economy and Finance, the Lombardy Region, the Municipality of Milan, the Metropolitan City of Milan, the Municipality of Rho and Fondazione Fiera Milano, the only 'private' shareholder. Arexpo's purpose is to give value to strategic areas to be regenerated, transforming them into living places for the community through innovative partnerships. In short, it builds places for people with people.

Arexpo's operating model is based on elements that coexist and interact with each other:

1. Vision. The action is based on a shared growth perspective with a longterm vision, which includes the lasting involvement of developers in the regeneration and then building strong, long-term partnerships. This approach is a

key driver for the organisation to ensure a strategic, sustainable vision and to create a dynamic place over time.

2. A strong international partnership that takes shape through agreements with numerous national and international organisations to develop its interdisciplinary platform in the direction of a very broad concept of open innovation.
3. Urban quality. Innovation is the compass of Arexpo's activities: the combination of research, higher education and private capital is the effective recipe for high-quality urban projects.
4. Importance of the individual and the community. An integrated process of virtuous and effective planning stimulates the birth of attractive places, creating community and bringing benefits to the territory in terms of new capital, work, culture, sociality, and nature.



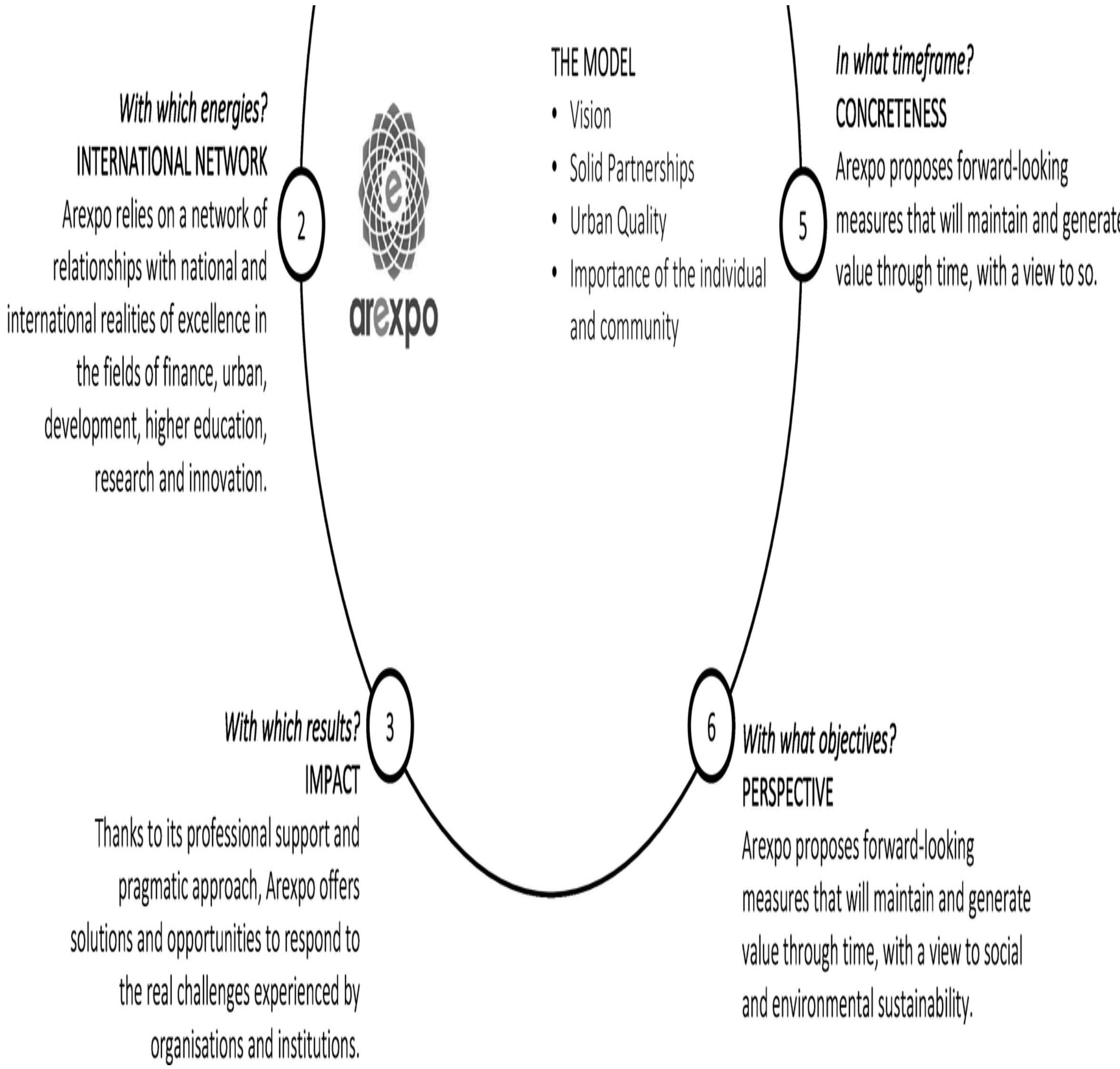


Figure 4. Arexpo Public-Private Partnership with strategic value

Source: A New Model of Public Action, Arexpo (2022).

In line with the pillars identified, Arexpo aims to provide strategic, technical and administrative support for redefinition areas transforming. The organisation accompanies the various phases of the regeneration process, studied in the light of international benchmarks, in which areas are valued according to their potential and in which environmental, social and economic sustainability is guaranteed. The first territorial redevelopment project launched by Arexpo arose from the need to redevelop the area that hosted Expo Milano in 2015. About 1 million square metres with the related infrastructural work already carried out on which the objective was to intervene to enhance the investment already made and, at the same time, restore and redevelop the space for the city and its citizens. Thus, MIND was born with the *ambition* or *purpose* of being the central innovation district in Italy, focusing on life sciences and smart cities. The definition of *purpose* arises from the need to redevelop an urban area and rethink its future through a *mediation* process that considers both the *material* expectations of the stakeholders involved (*engage*) and the needs of the territory and the community.

The strategy promoted was to recreate a vital space for the territory by establishing complete innovation districts by 2030 to regenerate the urban areas that were the scene of Expo 2015. The *execution* of this *strategy* must be based on a series of innovations with which it is possible to build the city of the future, reaching the organisational purpose. Innovation, therefore, becomes the tool to generate long-term sustainable value. The MIND project also envisages the development of an innovation district according to the four-propeller model of innovation, as follows:

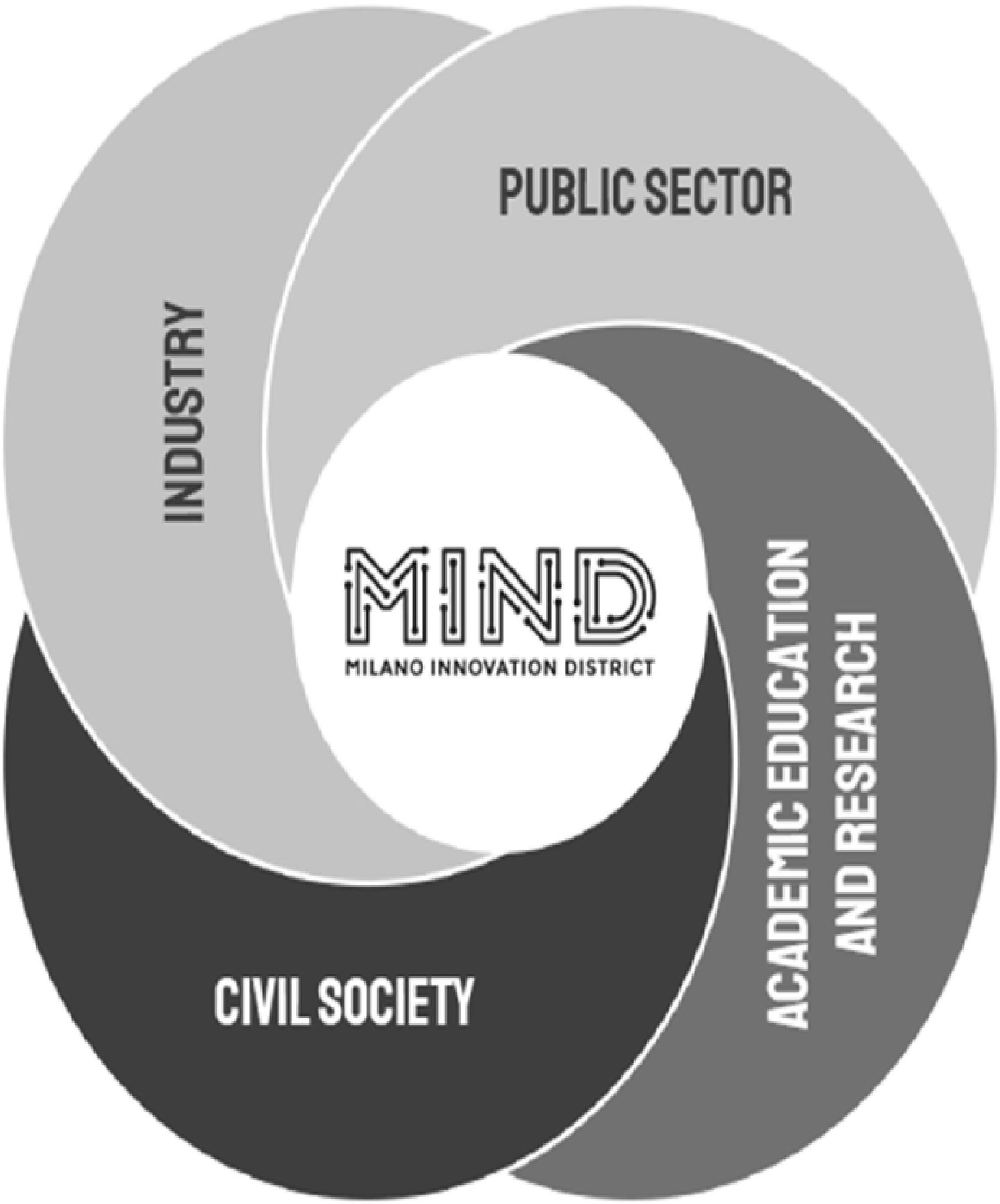


Figure 5. MIND Quadruple Helix Model of Innovation

Source: A New Model of Urban Regeneration, Arexpo (2022).

Academic research and education: the scientific and higher education component is extensive and well-defined. This helix is represented by the State University, the IRCCS Galeazzi, and the Human Technopole, the new Life Sciences research and study hub. The availability of 3,000 student residences is also planned for the MIND area.

Industry: Lendlease, as a partner and private developer, is committed to attracting tenant companies, start-ups and organisations, including by creating an ecosystem of knowledge through creating a community of innovators even before the construction of the new buildings. With this spirit, Lendlese and Cariplo Factory have created the **Federated Innovation** model**.** Federated Innovation is an innovative project that brings together companies that want to collaborate in a virtuous environment to accelerate the translation of ideas into new products, processes and services that contribute to the country's economic recovery. To date, 36 companies are part of Federated Innovation @MIND, leaders in their respective sectors on a national and international level, but new companies join periodically.

Public: The face of the public, on the other hand, is Arexpo, whose partners include the national and local governments, and which, above all, has the role of the pivot, the task of making those propellers turn together and in the best possible way.

Civil society: Fondazione Triulza is the MIND ecosystem player specialising in Social Innovation. Fondazione Triulza represents a network of the leading Italian third sector and civil society organisations. It involves local communities, institutions and stakeholders in the planning and development of the area to create an inclusive and vibrant community. To put social and environmental impact at the heart of the site development project, Fondazione Triulza will involve civil society, communities, local areas and citizens in the future development of MIND. The project plans to dedicate more than 100,000 square metres of MIND area to public spaces, which will be populated by civil society.

Arexpo operates with the 17 SDGs, the Sustainable Development Goals foreseen by the UN 2030 Agenda, in mind. The theme of sustainability is central to the development of the project: each of the innovations promoted, in terms of infrastructural development and otherwise, is implemented, taking into consideration the theme of environmental and social sustainability. Zero impact has been an immediate obligation, and partnerships have been developed only with companies, suppliers and other subjects in line with this philosophy, that is, net zero carbon by 2025. By 2040 the district is committed to being zero carbon, looking for new ways, using alternative energy sources and innovative systems to reduce consumption, and leveraging the MIND ecosystem, which is in itself a place created to experiment with solutions, materials and ideas.

There is no shortage of examples of these “new roads”. One is the new Galeazzi Hospital. The top two floors will be dedicated to the systems that run the structure, such as the thermal system and air treatment plants, but they will be primarily based on photovoltaics and solar energy. The materials chosen for the construction are eco-friendly, self-cleaning, and capable of absorbing smog, while the coatings are designed to better manage thermoregulation. A further aspect is mobility. Throughout MIND, the traditional road network will be substantially reduced to zero, and visitors will travel by electric vehicles and bicycle paths. The MIND Village, the area that, in addition to the companies, will also house most of the housing facilities, is planned as a large testing area for driverless technologies. Further examples are the projects and initiatives promoted and coordinated by Arexpo aimed at the territory and generating positive impacts and spin-offs on the community:

MIND Education*:* is the programme promoted by MIND's partners that involves students in the realisation of innovative and original projects for the Milano Innovation District, which this year reaches its 6th edition. In recent years the programme has been structured and has grown to pursue the following objectives with increasing effectiveness 1) to improve the social welfare of the population, with particular reference to the target student and related families; 2) to provide skills and contributions to support quality training/education; 3) to involve young people and students in the co-design and co-creation of a sustainable and inclusive city; 4) to create networks, synergies with universities and students by connecting them with companies and institutions in the MIND ecosystem (talent attraction).

The TOPOGRAPHY at MIND*:* 94% of the streets in Italian cities are dedicated to men or deeds carried out by men, while only about 6% are dedicated to women. Based on this data, Arexpo and the MIND partners decided to initiate a process of social, cultural, and urban change with the launch of the project, submitting a proposal for the naming of MIND streets containing the names of 46 women and 32 men to the competent authorities, the Municipalities of Milan and Rho, for evaluation.

The 2121 Programme aims to enhance the social inclusion of people under a restriction of their freedom in the Lombardy penitentiary system. Promoters of the agreement include the Department of Prison Administration and the Milan Court of Supervision, the Lombardy Region, the Metropolitan City of Milan, LendLease, Arexpo and the Triulza Foundation. The agreement aims to develop synergies of useful interventions to promote the social inclusion of people subject to criminal proceedings through work. The treatment program provides a path that provides external work activities to enhance the project participants' potential, facilitating their exit from the delinquent system. Giving a detainee permission to work increases his sense of responsibility and autonomy, develops a strong motivation and interest in new skills that can be used once released and, above all, leads to a high reduction in the risk of criminal recidivism. This agreement

is the first activity in the area of social inclusion that will be one of the cornerstones of MIND's innovation ecosystem. While we cannot speak of 5propeller innovation, this seems to be the direction taken by the project that strongly focuses on environmental impact.

5.2 The innovation district model and the impact management process: the MIND case

The analysis of the MIND case has highlighted how, both in the ex-ante and in itinere development of the MIND project, there are several elements peculiar to impact management processes. Among these, the definition of a specific purpose and strategic objectives were well delineated ex-ante. MIND aims to be a hub for the creation of knowledge, the attraction of companies and the growth of start-ups. A place to live, animated by a community of researchers, students, professionals and residents, a vital part of Milan's urban fabric. All of the MIND's spaces focus on technology, architectural quality, and the environment, with widespread green areas and sustainable mobility solutions, for a system capable of renewal over time. With this in mind, the regeneration and partnership model stands out from other scientific or business centres for its close interpenetration between different uses and the coexistence of high-level private and public functions.

This is not the only innovative element of the project. MIND also makes innovation the critical element in engaging the stakeholders through the four-helix model. This is true, particularly for the attraction of private partners and investors. For this purpose, at the start of the project, Arexpo launched a call for proposals to find a private partner able to design a masterplan for the area, develop the private part of the district for a concession period of 99 years: a partnership model that in Italy is innovative both in terms of size and timing. The call led to the launch of the public-private partnership with Lendlease, a leading international group in the real estate and infrastructure sector present in Australia, Asia, Europe and the Americas and with approximately 12,350 employees worldwide, which has chosen to invest in MIND approximately 2.5 billion euros, out of the total 4 billion euros needed to complete the project.

All these elements make MIND an innovation ecosystem: a context in which the quadruple helix of innovation is brought to the highest level of collaboration. Innovation as a salient element of the model represents the third element that links the MIND model to an impact management process. Finally, purpose, strategy and innovation are combined with the desire to monitor and evaluate the effects generated not only by Arexpo but also by private investors. Specifically, Lendlease has chosen to monitor and evaluate the social and economic impact already being generated in itinere and will be further integrated at the end of the redevelopment work.

6. Evidence from the case

The MIND project launched by Arexpo is an example of how the process of impact management can be applied to urban regeneration processes in paths, such as that of the innovation district, capable of integrating the desire to generate positive social and economic value with innovative models of partnership, investment, collaboration and regeneration. MIND represents an example of how innovation, in all its forms, is an enabler tool that can be used strategically to generate impact on the territory.

The innovation conveyed by Arexpo in the MIND project is of various kinds:

1. Model innovation makes it possible to apply the logic of the innovation district to urban regeneration processes, combining the desire to generate economic and social value.
2. Process innovation, in the experimentation of an open innovation model with four helixes that, through the interaction of different actors, manages to create the conditions for development that consider the needs and expectations of all stakeholders.
3. Innovation in engagement because it promotes this model of urban regeneration thanks to an innovative form of public-

private partnership. The innovative character lies in the 99 years of entrusting, which makes possible a dynamic and long-term collaboration between the public guarantor and private investor. In this way, the different interests converge, allowing a dialogue between the parties, which is the precondition for achieving sustainable development.

The path of involvement, exchange, and contamination between the various helixes of the innovation district undertaken for MIND will not end with the completion of the regeneration work, scheduled for 2030, but will be an ongoing process. Arexpo, together with Lendlease, is developing a process that can lead to the definition of an ecosystem of innovation capable of renewing and evolving for an area's economic, social and environmental development.

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