How Foundations Contribute to SDGs: Exploring the Compagnia di San Paolo Initiatives Related to SDGs Through Text Analysis

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Abstract

This study aims to investigate how the contribution of Compagnia di San Paolo, a generalist grant-making Italian foundation, to the 17 Sustainable Development Goals as defined in 2015 by the United Nations General Assembly can be measured thanks to project description. This may be interesting because SDGs were never explicitly adopted by Compagnia as terms of reference in any of its planning documents, calls or selection processes. The paper therefore assesses the existence of an "unintentional convergence pattern" of SDGs and the independent funding activity of a public-good oriented organization. The vast majority of the activities funded by Compagnia di San Paolo since 2015 to February 2019 (N=4.411 projects) were analyzed in terms of similarity and suitability comparing the description of each project – as formulated by applicants - with a set of SDG-related keywords. In so doing, an approach is proposed for the evaluation of the contribution of foundations and nonprofit organizations to SDGs and discusses the organizational implications of this relation. Data showed that SGDs # 1, 2, 8, 9, 10, 11 proved to be more "objectively grounded" in the funded projects, albeit within a rather limited set of projects. The five departments of the foundation (namely Art, Cultural activities and Heritage, Philanthropy and territory, Cultural Innovation, Social Policies and Research and Health) registered similar scores of adherence with a slight higher relevance of the Philanthropy and Territory and Social Policies departments.

Introduction

In 2000 the United Nations defined a set of eight international development goals named the Millennium Development Goals (MDGs), aimed at increasing the development of society dealing with the main global challenges: the eight MDGs (to eradicate poverty and hunger, to achieve universal primary education, to promote gender equality and empower women, to reduce child mortality, to improve maternal health, to combat HIV/AIDS, malaria and other diseases, to ensure environmental sustainability and global partnership for development), to be achieved by the end of 2015, were clearly defined and monitored through 21 targets and 60 official indicators. As stated by former Secretary-General of United Nations Mr Ban Ki-Moon in the Millennium Development Goals Report (United Nations, 2015) the MDGs Programme was a remarkable effort , *"yet for all the remarkable gains, I am keenly aware that inequality persists and that progress has been uneven".* In 2015, a set of 17 new goals was identified and officially approved by all the members of United Nations through the adoption of the 2030 Development Agenda titled "Transforming our world: the 2030 Agenda for Sustainable Development". The new goals, called Sustainable Development Goals (SDGs), followed the same methodological approach as the previous Millennium Development Goals (Kumar, Kumar & Vivekadhish, 2016; Sachs, 2012) albeit with different purposes and concepts (Saikko, 2016): the 17 goals were articulated in 169 targets monitored by 232 indicators. The SDG agenda takes into account five critical areas: people, planet, prosperity, peace and partnership (UN General Assembly, 2015). Moreover, the SDGs are for everyone to consider and work upon: governments, institutions, corporations, organized civil society, citizens. The SDGs cover a wide range of topics: 1. No poverty 2. Zero Hunger 3. Good health and well-being 4. Quality education 5. Gender equality 6. Clean water and sanitation 7. Affordable and clean energy 8. Decent work and economic growth 9. Industry, innovation and infrastructure 10. Reduction of inequalities 11. Sustainable cities and communities 12. Responsible consumption and production 13. Climate action 14. Life below the water 15. Life on land 16. Peace, justice and strong institutions 17. Partnerships for the goals. Each SDG is further declined in several specific sub-targets, yet it is not always self-evident whether what is done is indeed in line with any of the SDG and to what degree, especially for those organizations (Universities, nonprofit organizations, foundations, municipalities) that promote and support projects at a local level. This is however an interesting and relevant policy-making question to address.

Compagnia di San Paolo foundation is one of the largest philanthropic foundations in Italy; it is an independent foundation emerging from the process of privatization of Savings banks and other State-run banks (Monte, 2016). According to the World Charity Donor Index 2018, Compagnia di San Paolo is the seventh European foundation by amount of donations in 2017. Assets are about 6.3 million Euros. The foundation operates especially in the North West of Italy (the regions of Piemonte, Valle d'Aosta and Liguria) funding high-quality projects implemented by nonprofit organizations and running its operating projects. Geographical scope is sub-national, but by no means exclusively so. From 2015 to the beginning of 2019, Compagnia di San Paolo has funded more than 4,000 projects for a total economic value of almost 700 million euros.

Considering the significant role of Compagnia di San Paolo and many other nonprofit institutions in the promotion of projects for the well-being of the people, the community and the society in Italy, the question about the contribution of the foundation to the Sustainable Development Goals is inevitably raised. Today, Compagnia di San Paolo is organized in five institutional departments: Art, Cultural activities and Heritage, Philanthropy and territory, Cultural Innovation, Social Policies and Research and Health. However, the five areas represent little more than a broad label, because the variety of topics inside each department is huge: figure 1 summarizes the current thematic organization of the foundation.

Figure 1. Thematic organization of the institutional departments in 2018-2019.

Art, Cultural Activities and Heritage	Philanthropy and Territory	Cultural Innovation	Social Policies	Research and Health
• Cultural attractors	• Social innovation	• Cultural enterprise	• Welfare	• University system
• Places of culture	• Circular society	• Science and society	• Active inclusion	• International affairs
• Performing arts	• Community philantrhopy	• Culture and civic innovation	• Proximity networks	• Health
• Anthropised ladscape	• Research on the territory	• Contemporary languages	• Wellbeing and education	• Scientific research and technological innovation
• Early access to culture		• Access and participation	• Empowerment and integration	• Economic and social research
			• International co-operation	
			• Employment policies	
			• Agreement	

It is quite clear that a comprehension of how this amount of activities contributes to every single SDG is not immediate. Furthermore, several studies are investigating the interactions and interdependence among the SDGs themselves (Allen, Metternicht & Wiedmann 2018; Pradhan et al. 2017; Waage et al., 2019). If on the one end, the SDGs represent a complex and multifaceted framework and, and on the other hand real life projects, especially at the local level, rarely is it explicit whether they refer to one or more SDGs, thus congruence between the two is difficult to gauge. Is this important for organizations? Adoption of the SDGs is not mandatory but we suggest that a comprehension of how an organization contributes to the SDG framework is useful for more than one purpose: communication, advocacy, feeling part of a world-wide common effort, evaluating one's own choices (explicit or tacit) against the background set by the SDG scheme.

The need for coherence metrics between SDGs and policies, activities and projects, both at national and local level, has already been recognized and numerous studies exist that have mapped the contribution of specific institutions to SDGs. Different types of organizations, agents and professions have been analyzed including, among others, UNESCO

(Bergman et al. 2018), libraries (Pinto and Ochoa, 2017), nursing professions (Benton et al., 2016), ICT services (Ono, Lida, & Yamazaki, 2017), commercial companies (2018), finance (IFC, 2018) health (WHO, 2018) and research (Körfgen et al., 2018). The studies mentioned have adopted various analytical methods, both qualitative and quantitative, to explore this relationship and have found a partial coherence of the activities and topics analyzed with the SDG framework. An interesting approach is to be found in universities and research agencies evaluating their activities through a methodology based on keywords suggested by the Sustainable Development Solutions Network (SDSN), a network of experts in the field of science and technology whose mission is to promote solutions for the implementation of sustainable development goals. Institutions all over the world are involved in this kind of philanthropy exercise, but, to our knowledge, only at a speculative or theoretical level. There are several papers on the response of philanthropy and nonprofits to SDGs: the Rockefeller Foundation has just published a paper regarding practical tools to align the foundations' activities to SDGs (2019), promoting an honest coherence self-assessment. The Foundation Center in New York has activated a platform called "SDG Funders": stakeholders can use the tool to monitor how foundations (mainly American foundations) are supporting SDGs. The Foundation Center has also published a paper focused on the connection between SDGs and impact at the local level (Edwards and Ross, 2016). However, based on our literature overview, there are no studies attempting to verify contribution empirically. The consequences of this work are crucial for philanthropic organizations: an internal reflection about their own mission, a deep comprehension of the coherence of their own current activity with SDGs and a possible transition to new activities more closely linked to SDGs are some examples of what philanthropic organizations could achieve thanks to in-depth research work on SDGs. This is what we have attempted to do in this paper in the case of Compagnia di San Paolo.

Methods

Procedure

To give a measure of the contribution of Compagnia di San Paolo's projects to SDGs, we adopted the approach suggested by the Sustainable Development Solutions Network (SDSN) Australia/Pacific and the Australasian Campuses Towards Sustainability (ACTS) that has been used by several universities to map research and teaching activity in this respect. The SDSN and ACTS have developed a set of keywords for each SDG: a total of 847 words have been defined to allow comparisons with other textual resources. They are simple words linked to the main topic of each SDG (i.e. "Africa" for SDG1, "Improved nutrition" for SDG2, "Illegal fishing" for SDG14).

For our research, we had first to translate the entire word corpus in Italian: we did not encounter any particular problems in the translation because the original list was composed of simple and non-technical words. The keywords were reduced to word roots in order to detect word variations. Words with too general a meaning were not considered in the final set. The final Italian SDGs list of keywords comprised 802 words.

Second, we developed an algorithm to automatically calculate a score of similarity between the textual description of each funded project as contained in the Compagnia's database with each set of SDG: the score was calculated as a percentage of the total number of keywords mentioned in the project description out of the total number of keywords available. The score ranged from 0% representing the absence of any keyword to 100% representing the presence of all keywords. A matrix was created with the similarity scores for each project on each SDG.

Sample

5,140 projects funded by Compagnia di San Paolo in the period from January 2015 to February 2019 were extracted from the database of the foundation: the database contains a variety of information about the projects including title and description of the projects, thematic sector, approved amount and date of approval. Description of the project was identified as the target variable because this contains rich textual information about the characteristics of each project. From the database of 5,140 projects, we excluded the projects for which the description was not available (N=684) and projects that did not match any keywords of any SDG (N=45): final sample comprised 4,411 projects. The projects were unbalanced in terms of distribution in the foundation's five departments: Social Policies N=1.632 (37%); Art, Cultural activities and Heritage N=1.502 (34%); Cultural Innovation N=512 (12%); Research and Health N=462 (10%); Philanthropy and territory N=303 (7%)). The distribution corresponds to the current organization of the foundation in which the number of projects and economic resources are not equally distributed among the departments (Compagnia di San Paolo, 2018).

Data analysis

Statistical analysis was performed in order to deepen the contribution of each project to SDGs.

First descriptive statistics on the similarity scores were performed in order to map the coherence of the 4,411 projects with SDGs. Secondly, for each SDG a sub-set of "highly significant" projects was computed, identifying only those projects beyond a significant cut-off threshold calculated as the mean of the total similarity scores plus two standard deviations. The identification of this cut-off allowed us to identify a specific group of projects highly related to SDGs. Further analysis was carried out including the distribution of the SDG potential projects amongst the departments of the foundation. Finally, a correlation analysis was performed in order to understand the potential interrelations among SDGs.

Results

Table 1 summarizes the descriptive statistics of the distribution of similarity scores for each SDG.

SDGs	Projects with at least one keyword	Mean	Standard deviation	Max value
1. No poverty	83%	8,1%	6,3%	42,3%
2. Zero Hunger	79%	4,6%	4,2%	41,7%
3. Good health and well-being	81%	2,9%	2,4%	16,9%
4. Quality education	81%	5,7%	4,8%	29,3%
5. Gender equality	83%	5,4%	4,2%	27,8%
6. Clean water and sanitation	53%	1,7%	2,1%	13%
7. Affordable and clean energy	67%	3,5%	3,5%	41,2%
8. Decent work and economic growth	93%	6,8%	4,7%	28,1%
9. Industry, innovation and infrastructure	89%	6,9%	5,2%	34,8%
10. Reduced inequalities	92%	6%	4,1%	28%
11. Sustainable cities and communities	93%	6,3%	4,2%	33,3%
12. Responsible consumption and production	76%	3,5%	3,3%	26,4%
13. Climate action	62%	2,7%	2,9%	35,9%
14. Life below the water	27%	1,7%	3,4%	50%
15. Life on land	62%	2%	2,2%	19,6%
16. Peace, justice and strong institutions	72%	2,6%	2,5%	15,9%
17. Partnership for goals	82%	5,1%	4,4%	27,8%

Table 1. Descriptive statistics of similarity score on SDGs

Mean values of similarity scores ranged from 1.7% (SDGs 6, 14) to 8.1% (SDG 1): the overall low values are related to the presence of several projects with a similarity score of 0. Considering for each SDG the combination of number of projects with at least one keyword and the mean and max value of the similarity score, SDGs 1 (No poverty), 2 (Zero hunger), 8 (Decent work and economic growth), 9 (Industry, innovation and infrastructure), 10 (Reduce inequalities) and 11 (Sustainable cities and communities) are those more related to the projects. Vice versa, SDGs 6 (Clean water and sanitation) and 14 (Life below the water) are the most underrepresented. There are some specific features to consider: SDG 7 (Affordable clean energy and water) is represented by a niche of projects (Mean score = 3.5%; maximum value = 42.1%) while SDG 17 (Partnership for goals) is covered partially but from a great variety of projects (Mean score = 5.1%; projects with at least one keyword = 82%).

Table 2 contains the descriptive statistics of the highly significant sub-groups of SDG projects with the evidence of the similarity score cut-off, the number of projects that composed each sub-group and the mean value of the similarity score of the sub-group.

Table 2. Descriptive statistics of the "SDGs projects" sub-group

SDGs	Similar score cut-off	Number of projects	Mean value
1. No poverty	20,7%	146	25,6%
2. Zero Hunger	13,1%	216	16,8%
3. Good health and well-being	7,7%	244	9%
4. Quality education	15,4%	145	19,1%
5. Gender equality	13,9%	105	18,3%
6. Clean water and sanitation	5,8%	260	7,2%
7. Affordable and clean energy	10,4%	176	13,2%
8. Decent work and economic growth	16,1%	157	20%
9. Industry, innovation and infrastructure	17,3%	256	19,6%
10. Reduced inequalities	14,3%	138	18%
11. Sustainable cities and communities	14,8%	132	18%
12. Responsible consumption and production	10,1%	151	13,4%
13. Climate action	8,5%	135	12,2%
14. Life below the water	8,4%	186	12,7%
15. Life on land	6,4%	130	9,2%
16. Peace, justice and strong institutions	7,5%	224	9,3%
17. Partnership for goals	13,9%	191	17,5%

Data confirmed the previous evidence of SDGs 1, 2, 8, 9, 10, 11 as the most closely related to the foundation's projects. The focus on the most significant groups of projects highlighted a strong contribution also on SDG 4 (Quality education), 5 (Gender equality) and 17 (Partnership for goals). On average, the medium similarity score was 19% that is, "SDG projects" contained one keyword every five. The average score decreased significantly for SDGs related to climate change, nature, water etc.

Table 3. Distribution of each "SDGs projects" sub-group in the five departments of Compagnia di San Paolo

SDGs	Art, Cultural Activities and Heritage	Social Policies	Research and Health	Cultural innovation	Philantrhopy and territory
1. No poverty	10% (N=15)	**64% (N=93)**	6% (N=9)	3% (N=4)	17% (N=25)
2. Zero Hunger	**35% (N=75)**	34% (N=73)	6% (N=13)	14% (N=30)	12% (N=25)
3. Good health and well-being	10% (N=24)	**67% (N=163)**	14% (N=33)	7% (N=17)	3% (N=7)
4. Quality education	14% (N=21)	**60% (N=87)**	9% (N=13)	5% (N=7)	12% (N=17)
5. Gender equality	8% (N=8)	**81% (N=85)**	2% (N=2)	6% (N=6)	4% (N=4)
6. Clean water and sanitation	29% (N=76)	**40% (N=105)**	9% (N=23)	7% (N=18)	15% (N=38)
7. Affordable and clean energy	**33% (N=58)**	18% (N=32)	20% (N=35)	19% (N=34)	10% (N=17)
8. Decent work and economic growth	21% (N=33)	**34% (N=54)**	18% (N=28)	8% (N=12)	19% (N=30)
9. Industry, innovation and infrastructure	**26% (N=67)**	15% (N=39)	21% (N=53)	23% (N=60)	14% (N=37)
10. Reduced inequalities	17% (N=24)	**51% (N=70)**	14% (N=19)	5% (N=7)	13% (N=18)
11. Sustainable cities and communities	**38% (N=50)**	35% (N=46)	2% (N=3)	3% (N=4)	22% (N=29)
12. Responsible consumption and production	28% (N=42)	**30% (N=45)**	15% (N=23)	11% (N=17)	16% (N=24)
13. Climate action	23% (N=31)	**28% (N=38)**	20% (N=27)	12% (N=16)	17% (N=23)
14. Life below the water	22% (N=41)	**40% (N=75)**	14% (N=26)	12% (N=22)	12% (N=22)
15. Life on land	**47% (N=61)**	18% (N=24)	6% (N=8)	5% (N=7)	23% (N=30)
16. Peace, justice and strong institutions	12% (N=26)	**61% (N=136)**	15% (N=33)	6% (N=13)	7% (N=16)
17. Partnership for goals	21% (N=40)	**28% (N=54)**	16% (N=30)	14% (N=27)	21% (N=40)

Table 3 shows the distribution of the "SDG projects" in the five departments of Compagnia di San Paolo.

Social Policies was the department that included the majority of "SDG projects"; 12 SDGs were mainly covered by this area. Social Policies was mainly representative of topics related to poverty, well-being, education, gender equality, water and institutions. The other departments partially covered the SDGs without the same magnitude of representation of the Social Policies department: Art, Cultural Activities and Heritage projects were mainly related to hunger, environment and sustainability. Research and Health projects contributed to climate, energy and technology and innovation. Cultural Innovation contributed to industry and innovation and energy while Philanthropy and territory to the environment, sustainability in cities and work. Some SDGs were widely shared by all the departments like SDG2 (Zero Hunger), SDG7 (Affordable clean and energy) SDG8 (Decent work and economic growth), SDG 13 (Climate action) although some of the SDGs were identified as poorly related to the foundation's projects.

Finally, table 4 summarizes the correlation analysis table among similarity score of each SDG: the analysis was conducted on the entire set of 4.411 projects. Thanks to the large amount of data, all the correlations were statistically significant ($p < .001$): considering the effective size of the associations, the analysis showed three associations that can be considered highly significant (r coefficient equal or above .70). SDG8 (Decent work and economic growth) was highly correlated to SDG9 (Industry, innovation and infrastructure, r=.70) and SDG10 (Reduced inequalities, r=.71). Also, SDG9 (Industry, innovation and infrastructure) was correlated to SDG17 (Partnership for goals, r=.72). Considering the large size our of sample, also moderate correlations (r equal or above .50) can be interpreted as statistically significant (Taylor, 1990): in this case, several other correlations among SDGs were highlighted.

Table 4. Correlation analysis among SDGs similary scores.

	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SD1G 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17
1. No poverty	-	.51	.53	.41	.60	.40	.23	.67	.59	.64	.50	.39	.29	.38	.31	.38	.51
2. Zero Hunger		-	.29	.29	.36	.37	.32	.60	.52	.48	.46	.55	.28	.21	.33	.25	.45
3. Good health and well-being			-	.41	.47	.42	.26	.50	.44	.50	.45	.30	.23	.31	.25	.39	.45
4. Quality education				-	.41	.24	.22	.47	.43	.55	.41	.23	.26	.16	.21	.52	.48
5. Gender equality					-	.30	.12	.54	.38	.59	.32	.21	.20	.18	.21	.48	.34
6. Clean water and sanitation						-	.32	.37	.35	.34	.46	.33	.22	.19	.29	.24	.29
7. Affordable and clean energy							-	.36	.51	.23	.35	.39	.34	.17	.26	.19	.40
8. Decent work and economic growth								-	.70	.71	.58	.54	.36	.33	.33	.44	.59
9. Industry, innovation and infrastructure									-	.58	.53	.55	.37	.34	.31	.36	.72
10. Reduced inequalities										-	.47	.36	.33	.20	.23	.53	.54
11. Sustainable cities and communities											-	.49	.41	.30	.47	.35	.51
12. Responsible consumption and production												-	.38	.33	.31	.23	.51
13. Climate action													-	.24	.32	.28	.41
14. Lifebelowthe water														-	.18	.16	.22
15. Life on land															-	.16	.31
16. Peace, justice and strong institutions																-	.34
17. Partnership for goals																	-

Conclusion

This study aimed at assessing the potential contribution of philanthropic players (namely Compagnia di San Paolo, a large Italian foundation of banking origin), to the Sustainable Development Goals in the early years of adoption of this framework. The SDG framework approved by the United Nations identified 17 relevant goals for the development of the people and the planet: the dimension of this framework is global, that is, everyone, including citizens, governments, companies and countries is encouraged to reach the goals. Many organizations and institutions are analyzing their activity in order to understand if they are contributing to SDGs and in which manner. This is not an easy task. For example, at a very first interpretation, the coverage of topics inside the SDG framework appears to be partial because it does not include some areas that characterize the daily work of many organizations and which are certainly relevant – such as culture. Several studies confirmed in fact that some topics like mental health (Izutsu et al., 2015), human rights (Pogge and Sengupta, 2019) and culture and arts (European Alliance for Culture and the Arts, 2016) have been partially ignored by SDGs. This is an example of how difficult it can be for organizations to detect the connection between their mission and the "good of humankind and the planet" as stated in the SDGs.

Philanthropic foundations can be considered as specially interested bodies when it comes to the SDG implementation practices: they play a major role inside civil society and have a wide spectrum of work: from the arts to the environment, from scientific research to social policies and so on. An understanding of their interaction with and contribution to SDGs can be of relevance for many reasons: to calibrate their activity, to understand the coherence of the foundation's activities with the United Nations' mission and to promote a possible transition to activities more closely linked to SDGs. This is what is happening, so far at very early stage of development, within Compagnia di San Paolo, one of the largest philanthropic foundations in Europe. The comprehension of the contribution of the foundation to the SDGs is not easy and immediate, because the SDGs and the projects promoted by Compagnia di San Paolo have both a high degree of complexity and do not necessarily belong to the same realms of language and conceptualization. While other institutions including companies (Vodafone, 2018) and organizations (Bergman et al., 2018) have already attempted to reach this objective, to our knowledge, no grant-making philanthropic foundations have attempted to verify empirically their contribution to SDGs.

We conducted a study comparing the entire activity of the Compagnia di San Paolo from January 2015 to February 2019 to the SDGs: the textual description of each of the board-approved 4,412 projects was compared to a wide set of specific keywords representing the 17 SDGs in order to detect the SDGs more closely linked with the activity of Compagnia di San Paolo and the possible interrelations among SDGs. First, we found that Compagnia di San Paolo is especially contributing to SDG 1 (No poverty), 2 (Zero Hunger), 4 (Quality education), 5 (Gender equality), 8 (Decent work and economic growth), 9 (Industry, innovation and infrastructure), 10 (Reduce inequalities), 11 (Sustainable cities and communities). SDGs related to climate, water, energy are less covered. These results are consistent with the mission of Compagnia di San Paolo: issues as poverty, education, work, innovation and sustainability are explicitly included in its planning papers. The lack of contribution to environmental topics reflects the current activity, as environment is not singled out as a specific goal but rather a cross-cutting dimension.

Some of these results are similar to those evidenced in the "SDG Funders" platform that summarizes the distribution of donations among SDGs by foundations all over the world (mostly American ones). Quality education is the SDG most closely related to the foundations' grant-making and this stands true also in the case of Compagnia di San Paolo. SDGs "Life below the water" and "Climate action" are rare both as regards Compagnia di San Paolo and the group

of foundations considered in the platform. In the middle there are significant differences, probably due to the mission and the characteristics of the organizations: foundations are contributing significantly to SDG3 Good health and well-being while the contribution of Compagnia di San Paolo is limited. However, although the sample provided by "SDG Funders" platform is partial in the availability of data, the distribution of Compagnia di San Paolo donations to SDGs is similar to other southern Europe foundations.

Secondly, we verified the distribution of the projects most related to SDGs within the five departments of the foundation. As expected, the projects of the Social Policies department are those that contribute most to the SDGs, especially for the topics (poverty, quality education, gender equality etc.) that we found as the most represented by the projects. In addition, we observed several interesting features and some anomalies: SDG2 (Zero Hunger) and SDG15 (Life on Land) have a high incidence of projects of the Art, Cultural Activities and Heritage department. There are two explanations to this particular evidence: first, the five departments can be considered as general labels that contain projects that deal with several themes and, as a matter of fact, transdisciplinary work is explicitly promoted. For instance, in the last few years Compagnia di San Paolo has promoted a specific program called "Turin and the Alps" whose main aim was to support projects that re-invented the relationship between city-dwellers and the mountains. This program was incorporated inside the Art, Cultural Activities and Heritage Department: moreover, the same department deals with the landscape as both a natural and cultural legacy. The Cultural Innovation department has a relevant representation in SDG9 (Industry, Innovation and infrastructure): this is due to the attention of the department to the promotion of the transition of nonprofits (in the field of contemporary art, audience development etc.) towards fully-fledged social enterprise models and to the support of innovative and oftentimes technologically innovative projects. Finally, even though the foundation concentrates its expenditure in the North-west of Italy, there are several projects implemented in Africa and these projects explain further the large contribution of Compagnia di San Paolo to SDG1 and SDG2. Summing up, the blending of domains is clearly detectable and this mirrors the specific transdisciplinary approach adopted by the foundation. Nevertheless we cannot exclude that the identification of the contribution of each project to SDGs could partially depend on the keywords considered and the description of the projects: among the SDG2 keywords, for instance, there are some that are very general and that could be used in other forms (i.e. "productivity", "product"). This anomaly can explain, for instance, the high frequency of projects from the Art, Cultural Activities and Heritage department (i.e. "artistic product").

Third, we explored the association among the SDGs: data confirmed our preliminary expectations. Poverty, work and economic growth, innovation, infrastructure and inequality reduction are strictly linked in the activities of the foundation and in fact there was an interrelation among these topics. One example of cross-fertilization is to be found in the concept of social innovation (Mulgan, 2006) that is currently one of the areas of work in which Compagnia di San Paolo is more engaged. Many other significant associations were found, even if of limited magnitude. Once again, topics about environment, climate, energy and water appeared to be isolated with weak association: conversely, there were many associations among all SDGs related to citizens, civic sense and social rights and all their related aspects (cities, work, gender, education).

Evidence suggests that two distinct macro-areas can be traced within the activity of the foundation: the first is related to people and citizens: nowadays Compagnia di San Paolo is working primarily on this theme and this is its major contribution to SDGs. Almost all SDGs in which citizens are the primary beneficiaries are covered by the projects: there

is an intense blending in which the departments act also on topics that are not immediately coherent with their main mission. Moreover, the associations suggest that the same project can contribute to more than one SDG. For instance, active labor market projects contribute in first place to SDG8 (Decent work and economic growth) but also to SDG4 (Quality education) if they provide high quality education and to SDG9 (Industry, innovation and infrastructure) and SDG11. Compagnia di San Paolo currently adopts this approach and data confirmed empirically this perspective. The interrelation among SDGs is not a new finding, because several studies have already showed that links among SDGs are inevitable and that there is a high degree of inter-dependence (Pradhan et al. 2017; Nilsson, Griggs & Visbeck 2016; Le Blanc 2015).

The second area involves climate, water, land, energy: the environment and the planet are the primary beneficiaries but obviously these topics are fundamental also for the long-term quality of life of the people. Compagnia di San Paolo has just started to work explicitly on these goals also they are not mentioned as such in its charter.

This study has some limits that must be highlighted: the use of keywords for the computation of the similarity score could generate some bias. As said, for some SDGs there were keywords general enough to be assigned to projects that were not relative to the specific SDG. For further analysis a more complex strategy of text analysis based on natural language processing is recommended. In our case, the large amount of available data allow us to be confident that the overall data analyzed were reliable and interpretable. Furthermore, the identification of the projects highly related to SDGs was a further strategy to obtain satisfactory evidences. Moreover, the research has involved only one foundation and consequently data refer specifically to Compagnia di San Paolo and are not generalizable: other foundations could adopt our approach and replicate this research with their own data. Moreover, a merging of data from many foundations of banking origin could provide a representation of the entire action carried out by the foundations of banking origin in Italy.

Despite these limits, this study has its merits. From a methodological perspective, it represents to our knowledge the first attempt to map empirically the contribution of a large private philanthropic foundation to the Sustainable Development Goals in the early period of their implementation. Nowadays foundations deal with many topics: SDGs are an interest framework that can be used to understand more deeply and perhaps enhance the foundation's action. As for Compagnia di San Paolo currently, it provides an important contribution to several SDGs, especially those related to the well-being of individuals and the community in different ways and with a blending of themes. Conversely, the foundation contributes less to the goals related to climate, water, energy and land. The in-depth evidence resulting from the study could increase the self-understanding of the foundation, the relation with other national and international institutions and encourage other foundations to replicate this study. Second, from a practical point of view, the study provides a methodology based on text analysis allowing other organizations to gauge in a reliable way their contribution to Sustainable Development Goals.

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