AN EMPIRICAL ANALYSIS OF GRANT-MONITORING SYSTEMS IN CORPORATE FOUNDATIONS: ORGANIZATIONAL COMPLEXITY AND MONITORING MECHANISMS AROUND THE WORLD

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Abstract

The present research studies the grant-monitoring process in corporate foundations. This process represents a crucial activity because it influences both the effectiveness of grant implementation and the corporate foundation’s reputation. Despite this, specific literature is rare, especially regarding the antecedents of corporate foundations’ efforts in grant monitoring, project complexity, and corporate foundations. This paper is aimed at filling the literature gap by assessing the relationship between the (organizational) complexity of the financed project and the monitoring mechanisms put in place by corporate foundations around the world. The study surveyed 280 projects granted by corporate foundations in the USA and Italy during 2014-2017. The sample included public information on monitoring activities of grantees for ten foundations—four based in Italy and six in the United States.

For each corporate foundation (CF), I conducted a specific analysis of websites to collect all public information on monitoring activities published by these foundations (i.e. newsletters, policies and procedures, reports of projects), developing a database of communicational units. Data were analyzed using a hierarchical linear regression analysis, starting from a base model and analyzing the differences in adjusted R².

This study reveals that, in corporate foundations, the intensity of grant monitoring depends on project complexity. In particular, in Italy, monitoring depends on the number of involved institutions and, in the USA, on both the number of involved institutions and the number of locations of the project. Further ideas for research about corporate foundations are offered.

Keywords: Corporate Foundation, Grant, Monitoring, Project Complexity, Antecedent

1. INTRODUCTION

Corporate foundations (CF) are a specific subset of the broader group of foundations. They are designated by a corporation (founder firm) for a specific, expressed purpose (Anheier & Toepler, 1999; Anheier & Leat, 2006) and are therefore under the formal or informal control of the founder firm (Westhues & Einwiller, 2006).

Research has mainly focused on generic foundations, and empirical studies on CFs are still rare. Studies have noted the existence of different models of CFs (Minciullo & Pedrini, 2011), unpacked the relationship between founder firms and CFs (Brown et al., 2006; Petrovits, 2006; Westhues & Einwiller, 2006; Minciullo & Pedrini, 2015), and explored CFs’ impact on society (Herlin & Pedersen 2013; Quinn et al., 2014; Ou & Osili, 2017). In this context, growing attention has been given to grant monitoring.
monitoring, which has so far not been explored in the literature with specific reference to CFs.

Grant monitoring is the process that CFs, and philanthropic foundations in general, adopt to assess granted projects (Patton, 1999, 2011; Coffman et al., 2013; Patrizi & Thompson, 2011; Coffman & Beer, 2016; Beadnell et al., 2017; Greenwald, 2013). Grant monitoring is gaining importance among CFs because it can influence both the effectiveness of grant implementation (Delfin & Tang, 2008) and a CF’s reputation (Ostrower, 2006).

Despite this, to the best of the authors’ knowledge, there is a general lack of studies on the antecedents of CFs’ efforts in grant monitoring. This paper aims to fill this gap by assessing the relationship between the (organizational) complexity of the financed project and the monitoring mechanisms put in place by CFs. The objective of the paper is to provide an answer to the following question: what are the antecedents of grant-monitoring mechanisms in CFs? I also aim to provide to managers of CFs useful insights in assessing the necessary efforts to monitor a project and better allocate resources to such activities.

To address the relationship between the nature of a project and its monitoring, I surveyed 280 projects granted by CFs in the USA and Italy. Through content analysis of the websites and reports from the CFs, I examined whether a relationship exists between the complexity of a granted project and the efforts of the CF in grant monitoring.

The paper is structured as follows: in the next section, I organize and present the existing literature on the specific features of CFs and their monitoring activities. The methodology section details the design of the research and the variables considered, followed by the results section, which presents the output of the tests conducted and the significance of identified relationships. The paper ends with a discussion of the results, and with conclusions, in which I outline the contribution to existing theory and the insights that can be offered to practitioners.

What are the antecedents of grant-monitoring mechanisms in corporate foundations? Does grant-monitoring mechanism in corporate foundations depend on the organizational complexity of granted projects? What are the differences between Italian and USA corporate foundations?

2. LITERATURE REVIEW

CFs are non-profit entities established by corporations (Westhues & Einwiller, 2006). They are different from other foundations for three reasons: 1) they depend on a firm for funding, 2) they have close ties with this firm, and 3) they nearly always have corporate executives as members of their boards of directors. Grant-making CFs are a subset of these, which provide financing for social investment projects that are mainly US and Italian. The number of visits to the granted project is a critical project dimension that has been examined in the project management literature (Beer & Reed, 2009), capacity-building grants, and operating grants (Brest, 2003), which require varied approaches and tools in CFs (Scotch & Woldendorp, 2008).

In contrast, project complexity as an antecedent of monitoring efforts by philanthropic foundations and CFs has not been studied. Project complexity is a critical project dimension that has been examined in the project management literature more directly related to three main factors:

- The number and typology of the actors that conduct the grant monitoring, such as foundation personnel, consultants, founding corporation personnel, and volunteers.
- The number of controls made on the grantee and project, including financial controls (Greenlee & Trussell, 2000; Ritchie & Kolodinsky, 2003), such as the number of locations of the project, the amount of the grant already spent, the number of persons and institutions involved in the project, the number of services offered, and the number of beneficiaries (Alkin & Christie, 2004).
- The number of visits to the granted project conducted by the foundation (Dowie, 1995).

Corporate foundations are important, also in Europe (Westhues & Einwiller, 2006). Nevertheless, the existing literature is not so wide, especially the studies concerning their operating mechanisms.

In particular, at the moment, there is a general lack of knowledge on the antecedents of their monitoring efforts. Previous studies, in fact, have discussed the typology of grants as an antecedent of monitoring efforts (Britt & Coffman, 2012), but not the organizational complexity of granted projects as
an antecedent of grant-monitoring mechanisms. Furthermore, in the previous literature of CFs, there are no comparative studies on this topic.

This paper offers a contribution to the existing literature for three reasons: 1) it is specifically focused on corporate foundations, and not in general on philanthropic foundations; 2) it is focused on the specific topic of the grant-monitoring mechanisms, and in particular, on their antecedents (not explored by the previous literature on CFs); 3) it offers a comparative study between the USA and Italian CFs, rare in the existing literature.

3. RESEARCH METHODOLOGY

3.1. Procedure and sample

I started by identifying the ten biggest grant-making CFs in Italy and the United States, based on the total value of grants in 2014-2017.

I have considered US CFs because they represent in the world the most important corporate foundations in terms of total value of grants given to projects, and at the same time, they are the corporate foundations with the longest experience in terms of operating mechanisms, especially grant-monitoring mechanisms. On the other hand, I have chosen Italian corporate foundations because: 1) they are a relevant phenomenon in Europe; 2) their grant-monitoring mechanisms are very similar to those used by US CFs (in fact, many Italian CFs have been implemented and modeled on the US experience of corporate foundations); 3) at the same time, they are different from US CFs, in terms of value of grants (Italian CFs have a smaller total value of grants than US CFs).

I have chosen the ten biggest corporate foundations because these foundations, both in Italy and USA: 1) represent more than 30% of the total amount (and projects) granted by the Italian and US corporate foundations, and 2) they support many big projects.

Then, for each CF, I conducted a specific analysis of websites to collect all public information on monitoring activities. The decision to focus attention on public information, rather than conduct a set of interviews with members of CFs, was related to the fact that grant-making foundations do not always open their internal processes to study, thus reducing the opportunity for primary research on their decision making (Diaz, 2001). This choice imposed the limitation that foundations that did not provide public information on specific projects or specific monitoring systems were not considered in the final sample. The final sample included public information on monitoring activities of grantees for ten foundations—four based in Italy and six in the United States.

Starting in April 2014, I reviewed the websites of targeted CFs daily to collect data on projects conducted in 2014-2017. I collected all documents published by these foundations (i.e. newsletters, policies and procedures, reports of projects), developing a database of communicational units.

I content analyzed the collected documents to codify information about monitoring activities related to every project. The coding process was undertaken by three different coders: two working as primary coders and the third as a secondary. Initially, the two primary coders separately analyzed the documents to code monitoring activities for each project. In cases of differences in codification, the secondary researcher checked the report and decided between the two to ensure reliability.

At the end of data collection, a total of 280 grant projects were considered: 102 from Italian foundations and 178 from United States foundations. Of those projects, 126 referred to initiatives realized in the United States, 98 in Italy, and 36 in other countries.

Table 1 shows the final sample for the analysis, specifying the issues addressed by the activities of each CF and the size of the organization in terms of annual giving and the number of projects analyzed.

### Table 1. The sample

<table>
<thead>
<tr>
<th>No.</th>
<th>Country</th>
<th>Main issues addressed</th>
<th>Annual giving (€,000)</th>
<th>No. of projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>United States</td>
<td>Human rights protection, poverty alleviation, social safety</td>
<td>101,014</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>United States</td>
<td>Human rights protection</td>
<td>49,458</td>
<td>28</td>
</tr>
<tr>
<td>3</td>
<td>United States</td>
<td>Educational development, environmental protection, poverty alleviation</td>
<td>49,458</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>United States</td>
<td>Disaster relief, poverty alleviation, social safety</td>
<td>43,360</td>
<td>30</td>
</tr>
<tr>
<td>5</td>
<td>United States</td>
<td>Disaster relief, education development, environmental protection, human rights protection</td>
<td>27,100</td>
<td>30</td>
</tr>
<tr>
<td>6</td>
<td>Italy</td>
<td>Educational development, environmental protection, health services, social services</td>
<td>7,500</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>Italy</td>
<td>Health services, social services</td>
<td>6,800</td>
<td>24</td>
</tr>
<tr>
<td>8</td>
<td>Italy</td>
<td>Health services, social services</td>
<td>5,100</td>
<td>30</td>
</tr>
<tr>
<td>9</td>
<td>Italy</td>
<td>Health services, social services</td>
<td>5,065</td>
<td>30</td>
</tr>
<tr>
<td>10</td>
<td>United States</td>
<td>Education development, environmental protection, health services, poverty alleviation</td>
<td>4,810</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>No. of analyzed projects</td>
<td></td>
<td>280</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Italy</td>
<td></td>
<td>102</td>
<td></td>
</tr>
</tbody>
</table>

3.2. Measures

Given the relative novelty of the analysis, I used measures derived from an initial exploratory investigation to understand the relationship between monitoring strength and project complexity. Prior to data gathering, I conducted a two-year experimental analysis based on exploratory interviews with primary officers of CFs, based on which I identified the antecedents of monitoring systems that I included in the current analysis: monitoring strength, involved organizations, involved locations, offered services, project length, and grant value.
Monitoring strength. Starting from the results of the exploratory interviews, I measured the strength of controls using a scale with four items: 1) number of issues controlled within the grantee institution, based on a six-issue list compiled from previous works (Grenée & Trussel, 2000); 2) number of issues controlled within the project, based on a list of eight possible issues (Baccarini, 1996); 3) intensity of control activities, measured on a discrete scale based on the number of subjects/institutions implementing monitoring activities; and 4) frequency of monitoring activities, measured as the number of reports and visits.

To construct the variable monitoring strength, I conducted a principal component factor analysis (KMO = 0.551; Bartlett’s $p = 0.001$; determinant $> 0.141$). The loading values of the four dimensions were positive and all greater than the significant value of 0.40 (institutional issues = 0.33; project issues = 0.70; intensity = 0.54; frequency = 0.831). I also verified the reliability of the scale using Cronbach’s alpha, which was acceptable ($\alpha = 0.92$).

Involved organizations. The main independent variable was a count of the number of institutions involved in the project with the granting foundation. I considered all the organizations (profit, non-profit, or governmental) that collaborated on the project. I constructed this indicator based on the idea that the more organizations involved in a project, the more complex the project will be to monitor (i.e., organizational complexity; Baccarini, 1996). The value of this indicator is 1 when a project is implemented only by the organization that receives the grant but is more when other organizations are included.

Involved locations. This second independent variable represented a count of the number of locations included in the project and measured the geographical extent of the services and programs in the specific project. The measure was based on the idea that the more locations included in the project, the higher the organizational complexity of the process (Baccarini, 1996).

Offered services. This was the number of services offered by the grantee project. Services were a unit defined as a combination of provider and recipient. A higher number of offered services could imply a higher organizational complexity and could increase the monitoring activities.

Project length. The length of the project was measured as the number of six-month periods from the initial financing to the end of the granting of the project. The length of a project was included as a monitoring variable because it impacts on the ability to efficiently manage the project and organize its activities.

Grant value. This was a measure of the size of the grant in terms of value granted by the CF to the project, measured in thousands of euros.

3.3. Data analysis

Data were analyzed using a hierarchical linear regression analysis, starting from a base model and analysing the differences in adjusted $R^2$. In step one I entered monitoring variables in the base model. In step two, I added the independent variables. I used the sign of the unstandardized coefficients to determine the relationships. The hierarchical regression analysis was first applied to the total sample, including all 280 analyzed projects; the analysis was then replicated with the data gathered from CFs based in Italy and the United States separately. The base model analyzed the monitoring variables, while Models 1, 2, and 3 considered the effects of the independent variables of the total sample, Italy, and the United States, respectively.

The regression analyses were controlled for issues related to multicollinearity and homoscedasticity. Addressing issues of multicollinearity, I verified that the variance inflation factors of all the variables included in the regression were greater than one. For homoscedasticity, I verified the graphical distribution of plot P-P, which was normal.

4. RESULTS

Table 2 presents the descriptive statistics and a correlation matrix for all variables included.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Total</th>
<th></th>
<th>Italy</th>
<th></th>
<th>United States</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Offered services</td>
<td>1.25</td>
<td>0.80</td>
<td>1.57</td>
<td>1.21</td>
<td>1.07</td>
<td>0.25</td>
<td>0.08</td>
<td>0.10</td>
<td>0.24**</td>
<td>0.05</td>
<td>0.25**</td>
</tr>
<tr>
<td>2. Project length</td>
<td>1.50</td>
<td>0.83</td>
<td>1.78</td>
<td>0.78</td>
<td>1.34</td>
<td>0.82</td>
<td>0.18**</td>
<td>0.06</td>
<td>0.14*</td>
<td>0.31**</td>
<td></td>
</tr>
<tr>
<td>3. Grant value</td>
<td>308.02</td>
<td>330.15</td>
<td>320.37</td>
<td>400.10</td>
<td>361.07</td>
<td>630.60</td>
<td>0.18**</td>
<td>0.30**</td>
<td>0.20**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Involved locations</td>
<td>1.43</td>
<td>1.51</td>
<td>1.89</td>
<td>2.28</td>
<td>1.17</td>
<td>0.64</td>
<td>0.30**</td>
<td>0.24**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Involved institutions</td>
<td>1.15</td>
<td>0.69</td>
<td>1.20</td>
<td>0.88</td>
<td>1.13</td>
<td>0.55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Monitoring strength</td>
<td>0.00</td>
<td>1.00</td>
<td>0.55</td>
<td>1.43</td>
<td>-0.32</td>
<td>0.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * $p < 0.05$; ** $p < 0.01$

A closer look at the descriptive statistics revealed differences between foundations based in Italy and the United States. Italian foundations were mainly granting projects with higher organizational complexity than those observed in US foundations. The Italian projects were characterized by a higher number of offered services than those observed in the US, which generally offered only one service. Italian foundations were granting projects for a longer duration and with a higher number of locations than US foundations.

The monitoring strength observed in Italy and the United States was also different. Italian foundations showed high mean monitoring strength, but with a material standard deviation that suggested that the strength of monitoring was different between the projects supported by these foundations. US foundations showed lower monitoring strength with a significantly smaller.
standard deviation. The first result of our study is the observation that US foundations were less confident in the strength of project monitoring than Italian foundations.

Table 2 shows that some variables were correlated, but no critically collinear variables existed in the data (r < 0.60). As expected, all the measures were significantly and positively correlated with the monitoring strength. However, the correlation between the number of involved locations and the number of involved institutions was positive.

Table 3 shows the results of ordinary least squares regression models of the relationship between monitoring strength, involved locations, and institutions. For each country, the base model included only the monitoring variables, and the second added the independent variables.

### Table 3. Results of linear regression predicting monitoring strength

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total</th>
<th>Italy</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base model</td>
<td>Model 1</td>
<td>Base model</td>
</tr>
<tr>
<td><strong>Independent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Involved locations</td>
<td>-0.00</td>
<td>-0.04</td>
<td>0.27**</td>
</tr>
<tr>
<td>Involved institutions</td>
<td>0.89**</td>
<td>1.20**</td>
<td>0.13**</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offered services</td>
<td>0.27**</td>
<td>0.26**</td>
<td>0.10</td>
</tr>
<tr>
<td>Project length</td>
<td>0.33**</td>
<td>0.27**</td>
<td>0.15</td>
</tr>
<tr>
<td>Grant value</td>
<td>0.10**</td>
<td>0.10</td>
<td>0.10**</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.91**</td>
<td>-1.72**</td>
<td>-0.21</td>
</tr>
<tr>
<td>R²</td>
<td>0.16</td>
<td>0.50</td>
<td>0.10</td>
</tr>
<tr>
<td>ΔR²</td>
<td>0.34</td>
<td>0.46</td>
<td>0.46</td>
</tr>
<tr>
<td>F</td>
<td>18.43</td>
<td>56.38</td>
<td>4.75</td>
</tr>
<tr>
<td>ΔF</td>
<td>37.95</td>
<td>22.41</td>
<td>22.41</td>
</tr>
</tbody>
</table>

**Note:** *p < 0.05; **p < 0.01

I began with the analysis of all projects in the data and then proceeded to separate analyses of the two countries. The base model included the monitoring variables; despite showing significant positive coefficients, the model explained little of the monitoring complexity (R² = 0.16, F = 18.43). Model 1 showed the results of including the independent variables in the regression and indicated that the monitoring strength of the granted project was significantly increased with greater numbers of involved institutions. For all the projects in the two countries, only the involved institutions showed a significantly positive coefficient. Model 1 significantly improved the adjusted R², which increased to 0.50 with an improvement of 0.34.

Separating the data between Italy and the US, the model conserves this predictive value. In both, the introduction of independent variables produced a significant improvement in adjusted R², increasing to 0.56 in the Italian-based analysis, an increase of 0.46, and to 0.73 in the US analysis, an increase of 0.30.

The results showed different situations in Italy and the United States. In Italy, the only significant dependent variable was the number of involved institutions, with a positive coefficient of 1.21. In the US, both the dependent variables were significant, showing that monitoring strength was positively related to the numbers of both involved institutions (0.27) and locations (0.13).

Regarding the monitoring variables, the models indicated that the granted value was not a significant predictor of the monitoring strength, because in all models analyzed, it showed a coefficient close to zero. This is an interesting result that indicates that monitoring strength was not strictly related to the financial value of the grant, but was related to other dimensions of the projects. I also found that project length was correlated with monitoring strength only among US foundations, indicating that, in this country, the more long-term a project’s involvement with a foundation, the greater the foundation’s efforts in monitoring the project.

5. DISCUSSION

This study reveals that, in CFs, the intensity of grant monitoring depends on project complexity and, in particular, the organizational dimension. In Italy, monitoring depends on the number of involved institutions and, in the USA, on both the number of involved institutions and the number of locations of the project.

The results confirm that CFs do not use the same monitoring processes for all grants (Beer & Reed, 2009; Teles & Schmitt, 2011; Brest, 2003; Scherer, 2015). Monitoring efforts are based not just on the value or nature of the granted project (Beer & Reed, 2009; Brest, 2003; Scherer, 2015), but also on the specific organizational complexity of each project. Our results indicate that, when granted projects involve many locations and involved institutions, the grantee increases monitoring efforts. These results are consistent with contingency-based research, which has a long tradition in the study of management control systems (Chenhall, 2003).

The research findings are also in accordance with the existing literature on project complexity. As indicated by Baccarini (1996), complexity makes a difference in the management of projects: certain project characteristics provide a basis for determining the appropriate managerial actions required to complete and monitor a project successfully. As projects become more complex, there is increasing concern about project complexity and its influence upon the project management process. According to Morris et al. (1987), complex projects demand an exceptional level of
management, and the application of conventional systems developed for ordinary projects may not be appropriate for complex projects. Our results open a new stream of research on the antecedents of monitoring and mean that CFs could simultaneously implement different monitoring systems and different degrees of effort.

6. CONCLUSION

The research presented in this paper opens many opportunities for further development around the topic of monitoring within non-profit organizations. Our results show that monitoring strength varies between different projects in the same organization, but I did not explore the relationship between the strength of monitoring and the effectiveness of individual projects. Further research could unpack this relationship to better understand the impact of monitoring efforts as an antecedent of project effectiveness.

The second stream of research that could be initiated from this study is understanding the relationship between experience and strength of monitoring. Further research could verify whether a previous relationship between the CF and a specific non-profit entity may impact monitoring efforts. The last aspect emerging from the present research, which has not been studied in the literature on CFs, is the question of whether the monitoring strength applied to a granted project has a positive or a negative impact on both the CF’s reputation and the founder corporation’s reputation, in both the short and long terms. When a CF, for whatever reason, increases the strength of monitoring of a granted project, it is probable that, in the short term, the grantee becomes less happy. However, this sentiment may change, and in many cases does, during the partnership. Judgments of the CF’s approach, and of the corporation, at the end of the partnership usually depend on the positive learning impact on the grantee generated by the monitoring process. There are currently no specific studies that explore monitoring strength as an antecedent of corporate and CF reputations.

The present research has some limitations that could impact the generalizability of results. First is the limited sample, both in terms of number of CFs included in the study and in geographical scope (US and Italian CFs). Second, a longitudinal study is needed to better understand the evolution of monitoring; the present research focused on only three years of observations. Third, I used only public data, and insights from management would help to provide a better understanding of monitoring. Fourth, I was unable to collect all necessary control variables for the projects. Not all agreed indicators for assessing project effectiveness, the nature of the relationship between the corporate founder and the grantee, the frequency of meetings between partners and the CF, and the characteristics of coordination mechanisms between CFs and grantees, were found.

REFERENCES