REGULATION AND BEHAVIOR OF GRANT-MAKING FOUNDATIONS IN THE USA

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Abstract

This paper investigates the behavior of two different kinds of grant-making organizations in the USA: independent and community foundations. The paper describes the different tax and legal provisions that regulates these institutions in order to determine the effects of – respectively – the "*minimum pay-out requirement*" and the "*public support test*" on the grant-making performance of the two classes of foundations. Analysis of tax return data – for the period 2000-2006 – shows that the endowment size is positively correlated to the amount of grants paid by foundations. Besides that, independent foundations – generally subject to the "*minimum payout requirement*" – tend to rely on income coming from the endowment in order to disburse grants, while community foundations – subject to the "*public support test*" – rely more heavily on annual donations. Therefore, distinct legal and tax provisions appear to create different incentives to the two categories of institutions.

Keywords: independent foundations, community foundations, minimum pay-out requirement, public support test, grant-making behavior

JEL Codes: L31, K20, D23

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1. Introduction

Philanthropic foundations that donate grants – the so called grant-making foundations - represent one of the most peculiar and well-known institutions of the nonprofit sector in the USA; in fact, their grant-making activities are so characteristic of the North American culture that they have been considered "a unique American answer to the problem of excess wealth in a society with limited income redistribution" (Anheier & Toepler, 1999). On the contrary, grant-making foundations are relatively rare in continental Europe, where operating foundations[1] are much more common.

Grant-making foundations are relevant actors of the US scene not just for their peculiarity, but also because of their economic and social role; in fact, their assets exceeded (in 2007) $ 500 billion - out of the about $ 1 trillion held by the entire nonprofit sector - while they disbursed more than $ 40 billion in charitable grants, funding many cultural, research and welfare activities and organizations.

Because of their peculiarity and their significant economic and social functions, grant-making foundations have interested law scholars, sociologists, political scientists and historians. However, they have not been the object of careful economic investigation and scrutiny; most of all, the effects of the diverse legal and tax laws that regulate these institutions have rarely been considered and analyzed from the economic point of view. This is quite surprising considering that fiscal incentives and tax rules represent a cornerstone of the public policies that support and regulate this very particular industry.

The aim of this paper is to fill this gap in knowledge, concentrating on the peculiar case of the differential regulation of two types of foundations in the US, the independent and the community grant-making foundations.

Generally speaking, philanthropic grant-making foundations are nongovernmental, nonprofit organizations whose assets (the foundation endowment, generally donated by one or more donors) are managed by a board of trustees so as to generate the financial resources that will be distributed in grants (to deserving charitable organizations and individuals) aimed at pursuing a specific goal stated by the donors (Andrew, 1956).

According to the different sources of their endowment, grant-making foundations are often classified into two different groups. The first group is made by the so called "*independent foundations*"[2], whose assets are generally provided by a small group of people, generally members of the same family, or by a corporation. A recent example of this type of foundations is the Bill and Melinda Gates Foundation – by far the best endowed foundation in the USA with more than $ 33 billion in assets and about $ 3 billion giving in 2009. This foundation - in 2001 - received a large donation of Microsoft stocks from Bill Gates and - in 2006 - received from Warren Buffett a pledge to donate – over the following years - approximately 10 million share of its corporation, Berkshire Hathaway, with a market value (at the time) of approximately $ 30 billion. More ancient and probably better known examples of this group of foundations are the Ford Foundation (the second largest in the USA by assets size), the Robert Wood Johnson Foundation and the W. K. Kellogg Foundation, all of them with assets in the excess of $ 5 billion and more the $ 250 million in grants paid in 2009. In the USA there are more than 70.000 private independent grant-making foundations.

[1] Operating foundations are endowed non-profit organizations that directly engage in some sort of charitable activities, such as running museums, hospitals, libraries, nursing homes, etc..

[2] This group is sometimes further split into two parts (that can not be distinguished from a legal point of view): independent foundations, funded by individuals, and corporate foundations, funded by corporations. We do not separate the two sub-groups.

The second group of grant-making foundations is made by the so called "*community foundations*", whose assets result from the donations of wide groups of donors, both individual and institutional ones. Community foundations – with slightly more than 700 organizations – are far less numerous than independent ones, but they include some very large institutions such as the Tulsa Community Foundation (the largest one, with assets close to $ 4 billion) or the Silicon Valley Community Foundation, the New York Community Trust and the Cleveland Community Foundation, all of them with assets exceeding $ 1 billion and grant exceeding $ 100 million in 2009.

Although very similar in many aspects - mainly in the grant-making activity they perform - in the USA these two groups of foundations are subject to slightly different regulations aimed at guaranteeing that they operate in the public interest.

In particular, we concentrate on two different pieces of regulation introduced by the legislator in 1969. Independent foundations are subject to a rule – called "*minimum pay-out requirement*" – stating that they should spend at least 5% of their assets in charitable grants. On the contrary, community foundations – considered as a part of the wider group of the so called "public charities" – are exempt from the "*minimum payout requirement*", but are subject to the so called "*public support test*" stating that the donations received should equal at least one-third of their aggregate income. Both rules, with different tools, aim at ensuring that grant-making foundations undertake a reasonable amount of activity in the public interest as will be described in the following section.

Since its introduction, the "*minimum payout requirement*" has been widely debated by legal scholar and practitioners (Troyer, 2000; Marsh, 2002). Some interpreted the rule as a useful device to discipline the activities of the foundations and avoid the risk of private appropriation of public benefits. Others on the contrary disagreed, considering the "*minimum payout requirement*" an excessive state intrusion in the life of private institutions. Nonetheless, only a few contributions have analyzed the impact of this rule on the behavior of independent foundations (see, for example, Steuerle, 1977; Deep & Frumkin, 2001; Toepler, 2004; Sansing & Yetman, 2006). Moreover, to our knowledge, nobody ever compared the grant-making behavior of independent and community foundations trying to analyze the differential impact of the rules regulating these two sets of institutions performing very similar tasks.

This paper examines the effects of the two different sets of rules on the grant-making behavior of independent and community foundations in the USA - for the period 2000 to 2006 - using tax return data produced by the IRS. Section 2 of the paper describes the most relevant legal and fiscal provisions for the two types of foundations. Section 3 illustrates our data and some stylized facts concerning the grant-making foundations industry, as described by our sample. In Section 4 we describe the determinants of the pay-out policies of our sample and try to characterize the differential behavior of independent and community foundations. Section 5 concludes the paper.

2. Legal regulation of grant-making foundations in the USA

Given their not-for-profit nature and their attitude to undertake activities that can benefit society as a whole (and people in need in particular), grant-making foundations – all over the world - benefit from several fiscal incentives (Hopkins, 2007, for the USA; Bater & Habighorst, 2001, for Europe). In fact, in many legal systems, foundations are exempt from income and real estate taxation and – sometimes – donors can deduct donations made to these institutions.

Of course, because of the relevant cost of the tax advantages for the public purse, governments want to be sure that these provisions are well deserved and balanced by a relevant amount of activity undertaken in favor of the public good. When considering operating foundations, measurement of the activity undertaken in favor of the public good is not complex and output measures are quite easy to produce; one could consider, for instance, the amount of free meals distributed to the poor in a soup kitchen, the number of surgeries carried out in a hospital, etc. A little more complex is the measurement of the amount of activity undertaken by a grant-making foundation and benefiting the general public. The main reason of this difficulty is the great variety of actions funded by grant-making foundations, which makes it almost impossible to produce aggregate output measures. For this reason, a frequently used proxy of the quantity of activity producing social benefits undertaken by a grant-making foundation is the amount of grants paid to deserving grantees.

A clear example of this attitude toward grant-making foundations comes from the USA. In fact, the American legislator wants to balance the fiscal exemptions allowed to grant-making foundations and the amount of social benefits produced by those institutions. For this reason, grant-making foundations are subject to a complex set of rules and regulations that – broadly speaking – divides them into two separate categories: "public charities" and "private foundations"[3].

In order to qualify as a "public charity", a grant-making foundation should pass the "*public support test*"; the test is passed if the organization normally receives at least one-third of its aggregate income from individual contributions, each of which not exceeding 2% of the charity's total income. Among the American grant-making institutions, community foundations – usually funded by many individuals every year - generally pass this test and therefore qualify as "public charities".

When failing the "*public support test*", a grant-making foundation is qualified as a "private foundation" and is therefore subject to a further rule, the "*minimum payout requirement*"; the rule states that private foundations should make annual eligible charitable expenditures that equal or exceed approximately 5 percent of the value of their endowment. In case the rule is not met, the foundation should pay a penalty excise tax whose value is approximately equal to 30% of the shortfall. Most independent grant-making foundations fall into this group of foundations[4].

"Grant-making public charities" benefit from a more generous fiscal status than "private foundations". In fact, both types of foundations are exempt from income and real-estate taxes, but while deductions for individual contributions to public charities cannot exceed 50% of the donor's income, contributions to private foundations are generally limited to 30% of the income. Moreover, the private foundation status carries some disadvantages such as a 2% excise tax on the investment income gained by the foundation, as well as penalty excise taxes on "certain taxable expenditures"[5], on "self-dealing"[6], on "excess business holdings"[7], and on "jeopardizing investments"[8].

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[3] This distinction was introduced in the tax legislation of 1969 as "a proxy for the amount of control the donor retained over her gift after dedicating it to philanthropy and taking the corresponding tax deduction" (Marsh, 2002, p. 139).

[4] Therefore, from now on, we'll refer to independent grant-making foundations with the terms "independent foundations" or "private foundations"; we'll refer to grant-making community foundations using the terms "community foundations" or "grant-making public charities"; both couples should be considered as synonyms.

[5] Taxable expenditures are amounts paid or incurred by private foundations: a) to carry on propaganda, or otherwise attempt to influence legislation (IRC 4945(d)(1)); b) to influence the outcome of any specific public election, or to carry on a partisan voter registration drive (directly or indirectly) (IRC 4945(d)(2)); c) as a grant to an individual for travel, study, or other similar purposes, unless the grant meets certain requirements (IRC 4945(d)(3)); d) as a grant to an organization unless such organization is a public charity

Therefore, two institutions that perform very similar tasks (mainly grant-making) are subject to two different sets of rules, both intended to balance their fiscal advantages with a relevant amount of activity for the public good: community foundations are subject to the "*public support test*", while independent foundations are subject to the "*minimum payout requirement*". Hence, while the grant-making activity of the latter is directly regulated by the government through the "*minimum payout requirement*", the grant-making activity of community foundations is only subject to an indirect constraint; in fact, the idea behind the "*public support test*" is that, in order to collect donations from a large set of individual donors, the community foundations should build up and defend their reputation through an effective and abundant grant-making activity.

The aim of this paper is to test the effects of the two sets of rules on the grant-making activities of American foundations, considering both the independent and the community ones.

3. Sample description and stylized facts

We use a pooled cross sections sample of grant-making foundations - active in the USA from year 2000 to 2006 - including data for both private and community foundations.

Information for private foundations comes from data produced by the Statistics of Income (SOI) Division of the Internal Revenue Service (IRS) based on a sample of forms 990-PF that private foundations must file with the IRS every year[9]. Note that "the SOI sample of private foundations is stratified based on both the size of fair market value of total assets and the type of organization (…). The private foundation sample is designed to provide reliable estimates of total assets and total revenue. To accomplish this, 100 percent of returns filed for foundations with fair market asset value of $10 million or more are included in the samples (…). The remaining foundation population is randomly selected for the sample at various rates, ranging from 1 percent to 100 percent, depending on asset size." (quoted from www.irs.gov – 2)

Table 1 represents sample and population counts from the annual SOI studies of private foundations used in our paper.

Forms 990-PF are filed by several types of private foundations; therefore, in order to get information referred only to independent tax-exempt grant-making foundations, we ruled out of the SOI sample: a) all operating foundations (identified through codes Q030 an Q100 of the 990-PF form or defined as those foundations that were not making any grants); b) all foundations that are not 501(c)3 tax-exempt charitable organizations, such as non-exempt charitable trusts (identified through code E050 of the 990-PF form) and c) foundations using a "cash" and not "accrual" accounting method (identified through code E090 of the 990-PF form).

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or unless the grantor private foundation exercises "expenditure responsibility" over the grant (IRC 4945(d)(4)); and e) for any purpose other than one specified in IRC 170(c)(2)(B) (www.irs.gov).

[6] Self-dealing is the conduct of a foundation trustee that takes advantage of his position and acts for his own interests rather than for the interests of the beneficiaries of the foundation (www.irs.gov).

[7] The excess business holdings of a foundation are the amount of stock or other interest in a business enterprise that exceeds the permitted holdings. A private foundation is generally permitted to hold up to 20 percent of the voting stock of a corporation, reduced by the percentage of voting stock actually or constructively owned by disqualified persons (www.irs.gov).

[8] Jeopardizing investments are investments that show a lack of reasonable business care and prudence in providing for the long- and short-term financial needs of the foundation for it to carry out its exempt function (www.irs.gov).

[9] The SOI samples are publicly available at the IRS site (www-irs.gov – 1).

Tax Year	All Forms 990-PF		Private Foundations		Nonexempt Charitable Trusts	
	Sample count	Population count	Sample count	Population count	Sample count	Population count
2000	8,202	72,605	7,236	69,575	966	3,030
2001	6,465	75,643	5,644	72,644	821	2,999
2002	6,301	79,333	5,507	76,307	794	3,026
2003	10,537	81,962	7,302	78,727	3,235	3,235
2004	11,451	84,216	7,805	80,570	3,646	3,646
2005	12,003	86,896	8,244	83,137	3,759	3,759
2006	12,741	88,886	9,112	85,257	3,629	3,629

Table 1: population and SOI sample size for organizations filing forms 990-PF

Information for community foundations comes from data produced by the Statistics of Income (SOI) Division of the Internal Revenue Service (IRS) based on a sample of forms 990 that tax-exempt organizations must file with the IRS each year. Forms 990 are filed annually by a huge number of organizations; in order to consider only community foundations, we decided to use only data referred to community trusts (identified through code S100 11b) of the 990 form. Moreover, given that some community trusts are not "community foundations", we checked each record with the list of community foundations published by the Council of Foundations and ruled out un-appropriate records. (see www.cog.org).

Year	**Community foundations**			**Independent foundations**			**Total foundations** (absolute values)
	Number (%)	**Endowment (%)**	**Grants paid (%)**	**Number (%)**	**Endowment (%)**	**Grants paid (%)**	
2000	13.6	26.2	26.6	11.3	61.0	56.8	6,357
2001	13.5	25.7	24.6	8.4	61.5	58.1	5,028
2002	11.8	21.8	18.8	7.3	59.4	56.1	4,547
2003	6.2	18.6	17.9	9.2	62.8	58.4	6,012
2004	9.0	23.4	18.2	10.7	65.0	64.0	6,868
2005	9.3	21.9	18.8	10.6	69.5	64.2	7,236
2006	10.6	28.0	29.7	11.5	68.3	62.1	7,998

Table 2: Sample size as a percentage of total population

The sample includes about 44,000 observations, most of them representing independent foundations[10]. Table 2 shows the relevance of both types of foundations included in our sample when compared to the general population of grant-making foundations operating in the USA[11].

While the ratio between the number of foundations included in our sample and the total population does not differ so much between independent and community foundations, things are slightly different when assets and grants paid are considered. In fact, when these two variables are taken into account, independent foundations included in our sample represent a higher percentage of the total population than community foundations.

[10] The small number of community foundations in our sample is only a sign of the limited diffusion of those institutions in the US when compared to independent foundations.

11 Data regarding the population of community foundations in the USA comes from Foundation Center, (various years) while data regarding private foundations comes from www.irs.gov – 3.

Our sample shows that independent and community foundations are quite different from each other. First of all, they are different in size, with community foundations that are – on average - larger than the independent ones, as shown in Table 3.

Moreover, there appear to be large differences between independent and community foundations with respect to grant-making activities and sources of income, in particular donations and income from endowments.

Type of foundation	**Observations** (number)	**Mean**	**Median**	**Std. Dev.**	**Min**	**Max**
Endowment						
Community	483	127	55	227	1	2,040
Independent	43,563	50	15	399	0	32,800
Grants paid						
Community	483	9	3	19	0	232
Independent	43,563	3	1	17	0	1,570
Donations received						
Community	483	12	5	21	0	228
Independent	43,563	2	0	25	0	3,690
Total income (w/out donations)						
Community	483	6	1	14	-17	146
Independent	43,563	3	1	30	-401	2,250

Table 3: Summary statistics (million $)

As far as grant-making is concerned, Figure 1 shows that community foundations appear to pay-out larger amounts of resources – as a share of their total assets - compared with independent foundations; moreover, their granting behavior appears to be more volatile over time and shows higher variance.

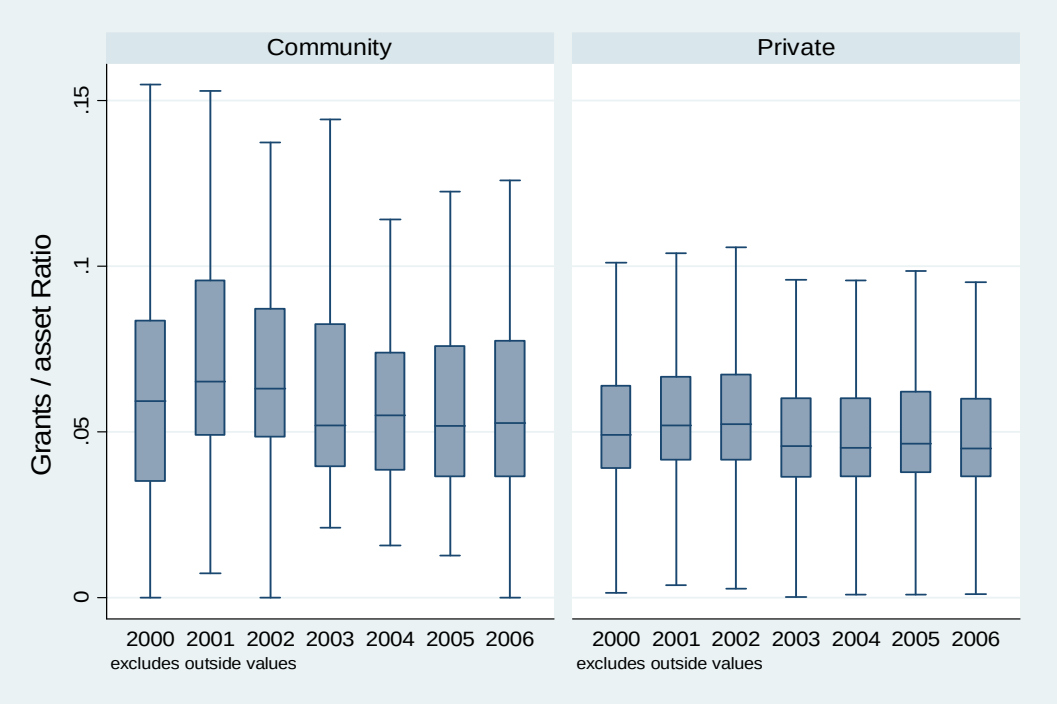

Figure 1: ratio between Grants paid and Total Assets

Moving to the income side, independent foundations get most of their returns from the financial management of their endowments (figure 2) – where they appear to be

slightly more effective than community foundations - while they collect a very limited amount of donations (figure 3). On the contrary, community foundations appear to be less successful in managing their endowments but – not surprisingly - much better in collecting donations.

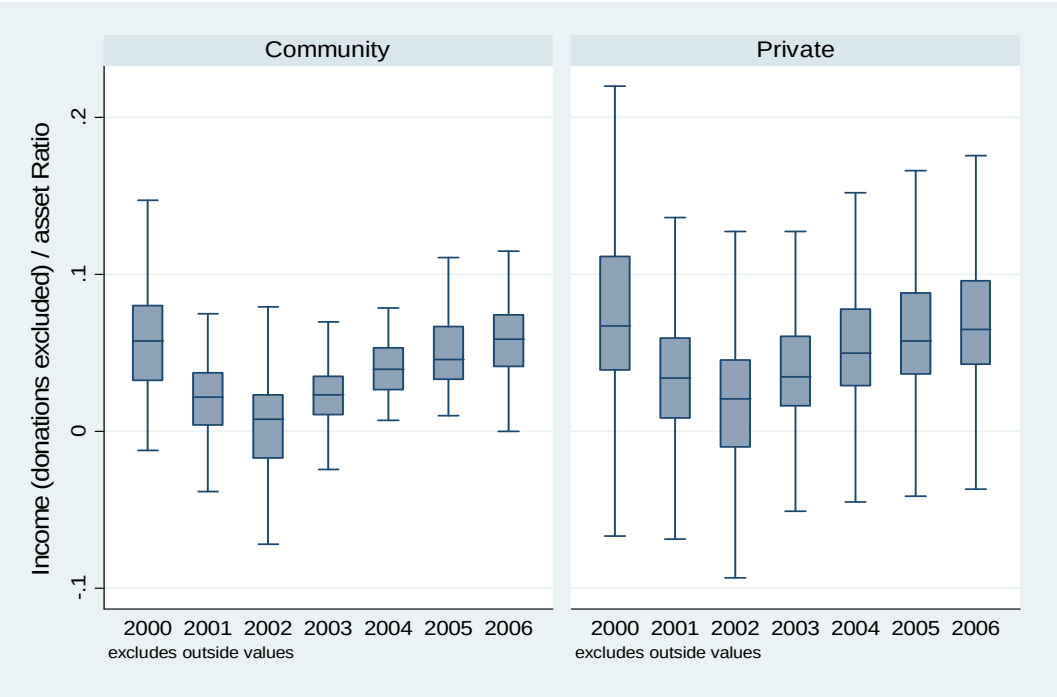

Figure 2: ratio between Income (excluded donations) and Total Assets

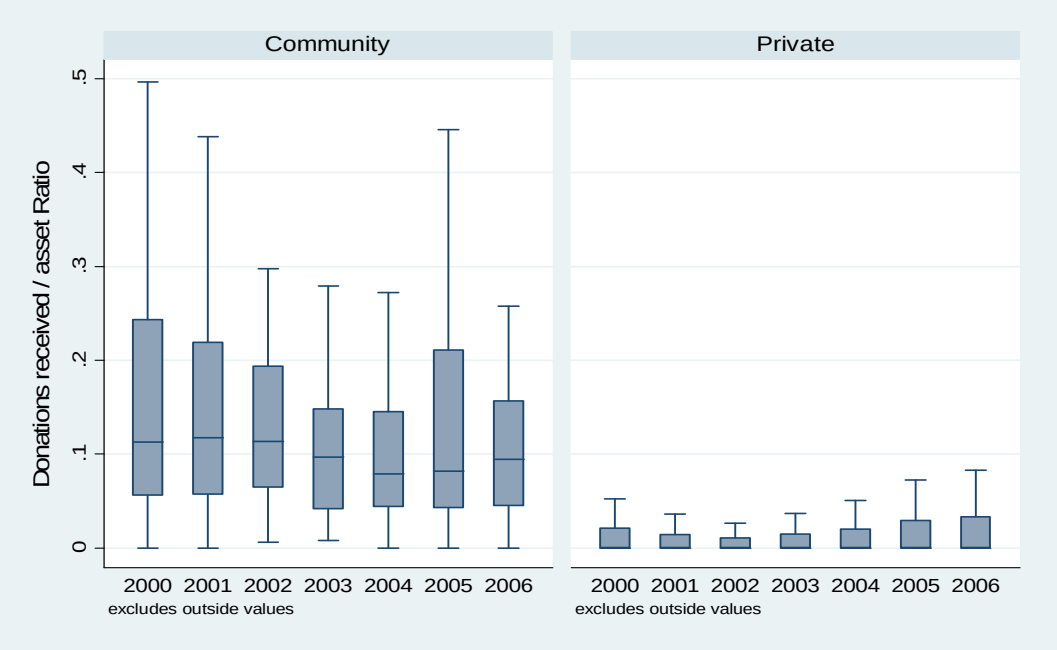

Figure 3: ratio between Donations and Total Assets

As a result of their behavior, independent foundations appear to apply a fixed rule in their grant-making activity, strictly complying – on average - to the "*minimum payout requirement*". This is coherent with the findings of Deep and Frumkin (2001) that – using the 990-PF forms – analyzed a panel of 290 independent foundations for the period 1972 to 1996 and found that "most foundations simply pay out the mandated minimum amount each year, regardless, of other relevant considerations" and argued that "the

minimum rate has gone from being a floor when it was enacted decades ago to a ceiling today".

On the other hand, the granting behavior of community foundations is more volatile (probably as a result of higher volatility in the collection of donations) but – on average – generates more donations.

4. Empirical analysis

Our main aim, in this paper, is to examine what determines the amount of grants paid by independent and community foundations. In principle, of course, we expect to find a strong correlation between the foundation's size (measured by the level of its assets) and the amount of grants that it pays-out. Besides that, our basic hypothesis is that different legal regulations generate different incentives to foundations, modifying the foundation's behavior.

The "*minimum payout requirement"* should give to independent foundations a strong incentive to manage effectively their assets so as to avoid depleting their endowments after paying out the minimum legal amount of grants. Any ineffective management of their financial assets would put the foundations endowments into jeopardy. On the contrary, the "*public support test*" should give to community foundations a solid incentive to increase fund-raising. Any ineffective management of fund-raising activities would put the community foundation's status of "public charity" into danger, therefore making the "*minimum payout requirement*" compulsory. As a consequence of these different incentives, we expect a strong correlation between the grant-making activity undertaken by independent foundations and the total size of their endowment or their success in portfolio management. On the contrary, we expect a strong correlation between the amount of funds raised by community foundations and the grants they pay-out, with endowment size and portfolio management playing a less relevant role.

To test our hypothesis, we estimate a very simple model (Eq. 1):

$$GRANTS_{it} = \beta_0 + \beta_1 X_{it} + \beta_2 D_i + \beta_3 T_t + \varepsilon_{it} \qquad (1)$$

where:

- GRANTS is the dependent variable measured by the logarithm of grants paid annually by each foundation;
- X_{it} is a vector of regressors including the logarithm of the following variables:
    - ENDOWMENT measuring the amount of a foundation's total assets;
    - INTERESTS measuring the amount of a foundation's total interests and dividends coming from its assets management;
    - RENTS measuring the total amount of rents gained;
    - CAPGAIN measuring the amount of capital gains of the foundation
    - OTHER measuring any other positive income;
    - MINUSOTHER measuring any other negative income;
    - DONATIONS measuring the level of donations raised by the foundations.
- D_i is a set of dummy variables including:
    - DPF = 1 if the foundation is an independent foundation and DPF = 0 in case of a community foundation.
    - NO-INTERESTS = 1 if the foundation does not gain any interests or dividends;
    - NO-RENTS = 1 if the foundation does not gain any rents;
    - NO-CAPGAIN = 1 if the foundation does not get any capital gains;

  - NO-OTHER = 1 if the foundation does not gain other positive income;
  - NO-MINUSOTHER = 1 if the foundation does not have any negative income;
  - NO-DONATIONS = 1 if the foundation does not get any donations.
- T_t is a set of year dummy variables for years 2001 to 2006 (with year 2000 as a reference) that control time fixed effects.

Given the use of a number of group dummy variables and the inefficiency of the FE estimator in this case (because of the correlation between the individual fixed effects and the group variables), in order to control for unobserved heterogeneity among foundations (at least partially), we use a pooled regression model with cluster-corrected standard errors. This specification of the econometric model yields to interesting results (Table 4).

As expected, our outcomes show – first of all - that "size matters". In fact the amount of grants paid is strongly positively correlated to the magnitude of the foundation's endowment (with a statistically significant coefficient at the 1% level): a 1% increase in the size of the endowment determines a 0.68% increase in grants paid by the foundation.

Moreover, our results show that "income matters", as the various sources of income (both donated income and gained income) are directly correlated to the level of grants paid by a foundation, with all coefficients statistically significant (at the usual confidence levels). However, their influence on grants appears to be much smaller in magnitude than the one of the endowment. In fact, a 1% increase in the level of interests and dividends gained by the foundation determines a 0.16% increase in grants paid, and the same happens for most sources of income, such as capital gains (0.07%), rents (0.03%) and other incomes (0.02%). The impact on grants of donations raised by the foundation is also positive and statistically significant: a 1% increase in the level of donations gained by the foundation determines a 0.04% increase in grants paid.

```
Number of obs =   44046                (Std. Err. adjusted for 10086 clusters)
F( 21, 10085) = 1561.41                                Prob > F      =  0.0000
R-squared     =  0.7264                                Root MSE      =  .94664
------------------------------------------------------------------------------
             |               Robust
      GRANTS |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   ENDOWMENT |   .6830032   .0182633    37.40   0.000     .6472036    .7188029
   INTERESTS |   .1562426   .0139777    11.18   0.000     .1288435    .1836417
       RENTS |   .0258236   .0091738     2.81   0.005     .0078412     .043806
     CAPGAIN |    .074542   .0047136    15.81   0.000     .0653024    .0837816
       OTHER |   .0223266   .0035897     6.22   0.000     .0152901    .0293631
  MINUSOTHER |   .0153165   .0081025     1.89   0.059    -.0005659     .031199
   DONATIONS |   .0384095   .0044813     8.57   0.000     .0296252    .0471937
NO-DONATIONS |    .886951   .1144432     7.75   0.000     .6626194    1.111282
NO-INTERESTS |   4.116649   .4093571    10.06   0.000     3.314227     4.91907
    NO-RENTS |   .7944588   .2257632     3.52   0.000      .351918       1.237
  NO-CAPGAIN |   1.999669   .1264829    15.81   0.000     1.751737      2.2476
    NO-OTHER |   .4901682   .0799051     6.13   0.000     .3335383    .6467982
NO-MINUSOTHER|   .3361105   .1869577     1.80   0.072    -.0303639    .7025848
         DPF |   .0083258   .1189374     0.07   0.944    -.2248152    .2414668
       d2001 |   .1769201   .0157437    11.24   0.000     .1460593    .2077808
       d2002 |   .2021184   .0192506    10.50   0.000     .1643834    .2398535
       d2003 |   .0731921   .0162251     4.51   0.000     .0413876    .1049966
       d2004 |   .0380029   .0152864     2.49   0.013     .0080385    .0679672
       d2005 |   .0374651   .0149338     2.51   0.012     .0081919    .0667382
       d2006 |  -.0310165   .0151756    -2.04   0.041    -.0607637   -.0012692
    CONSTANT |  -2.012327   .2033719    -9.89   0.000    -2.410976   -1.613677
------------------------------------------------------------------------------
```

TABLE 4 : MODEL 1

The year dummy variables included in our regression are all statistically significant (at the usual levels) although quite different in magnitude, suggesting some effects stemming from the economic cycle that should be analyzed in greater detail. On the contrary, the independent foundations dummy variable is not statistically significant, suggesting that – at this stage of analysis – there is no difference in behavior between independent foundations and community foundations.

This first model is probably too simple to understand the impact of the different variables on the grant-making behavior of the two kinds of foundations we are dealing with. Therefore, we introduce a second model where all our explanatory variables are interacted with the independent foundations dummy (Table 5) so as to estimate different equations for the two different types of foundations.

Results remain – nonetheless - not satisfactory as none of the coefficients of the interacted variables appears to be significant. One may conjecture that the size of a foundation, besides its nature, influences its granting behavior in ways that are not directly captured by the endowment coefficient.

```
Number of obs =   44046                (Std. Err. adjusted for 10086 clusters)
F( 28, 10085) = 1234.03                                Prob > F      =  0.0000
R-squared     =  0.7274                                Root MSE      =  .94507
------------------------------------------------------------------------------
             |               Robust
      GRANTS |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   ENDOWMENT |    .581397   .1697746     3.42   0.001      .248605    .9141891
ENDOWMENT-PF |   .1062011    .169002     0.63   0.530    -.2250764    .4374786
   DONATIONS |   .0926648   .0412829     2.24   0.025     .0117421    .1735875
DONATIONS-PF |  -.0553296   .0408271    -1.36   0.175    -.1353588    .0246996
   INTERESTS |   .2498242   .0819541     3.05   0.002     .0891777    .4104706
 INTEREST-PF |  -.0973916   .0809561    -1.20   0.229    -.2560817    .0612984
       RENTS |    .021187   .0156722     1.35   0.176    -.0095336    .0519076
    RENTS-PF |   .0045113   .0123349     0.37   0.715    -.0196675    .0286901
     CAPGAIN |    .074502   .0080055     9.31   0.000     .0588097    .0901943
  CAPGAIN-PF |  -.0005695   .0070182    -0.08   0.935    -.0143265    .0131876
       OTHER |   .0377079    .012411     3.04   0.002     .0133799    .0620358
    OTHER-PF |  -.0164873   .0120883    -1.36   0.173    -.0401828    .0072081
  MINUSOTHER |  -.0132192    .052114    -0.25   0.800     -.115373    .0889346
MINUSOTHER-PF|   .0290589   .0485844     0.60   0.550    -.0661762    .1242939
NO-DONATIONS |   .8612563   .1130684     7.62   0.000     .6396197    1.082893
NO-INTERESTS |   4.162453   .4037157    10.31   0.000      3.37109    4.953817
    NO-RENTS |   .7930006   .2263886     3.50   0.000     .3492339    1.236767
  NO-CAPGAIN |   1.980535   .1259064    15.73   0.000     1.733733    2.227337
    NO-OTHER |   .4691951   .0793151     5.92   0.000     .3137217    .6246686
NO-MINUSOTHER|   .3417074   .1850473     1.85   0.065    -.0210221    .7044369
         DPF |   .6935556   1.819587     0.38   0.703    -2.873197    4.260308
       d2001 |   .1748544   .0156318    11.19   0.000     .1442129    .2054959
       d2002 |   .2004941   .0190243    10.54   0.000     .1632028    .2377855
       d2003 |   .0692165   .0161273     4.29   0.000     .0376037    .1008293
       d2004 |   .0347971   .0151682     2.29   0.022     .0050643    .0645299
       d2005 |   .0346114   .0149461     2.32   0.021     .0053142    .0639087
       d2006 |  -.0331288   .0152755    -2.17   0.030    -.0630718   -.0031859
    CONSTANT |  -2.690167   1.819072    -1.48   0.139    -6.255911    .8755772
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TABLE 5 : MODEL 2

Therefore, we split both private and community foundations into 3 groups (respectively small, medium and large foundations) on the basis of their endowment's size. We consider as "small" those foundations with total assets lower than the 25% percentile of the asset distribution, while large foundations are those with assets higher

then the 75% percentile[12]. Dummy variables are defined for each group[13] and interacted with the whole set of our explanatory variables[14] (Table 6), with large private foundations being considered as the reference group.

When considering these interactions, it appears quite clear that the role of the endowment in influencing grants is more limited for community foundations (whatever their size) than for large independent foundations. In fact, while a 1% increase in endowment determines a 0.75% increase in grants for large independent foundations, the value decreases to 0.34% for small community foundations (although the coefficient is not statistically significant at the usual levels), 0.26% for medium size community foundations, and 0.31% for large community foundations (coefficients statistically significant – respectively - at the 5% and 1% level). Therefore, in community foundations, an increase in size generates a smaller increase in grants than for large independent foundations.

On the contrary, grants paid-out by community foundations appear to be greatly influenced by the donations received, much more than in the case of independent foundations. In fact, a 1% increase in donations raises grants of large independent foundations by no more then 0.04%. Conversely, it determines a larger increase of grants (0.10%) for small community foundations, and a significant increase of 0.58% and 0.38% for – respectively - medium and large size community foundations. We may conclude that, while community foundations directly transfer their donations to beneficiaries increasing the level of their grants, independent foundation accumulate those donations for future grants, increasing the size of their endowments.

No significant difference emerges between large independent foundations and community foundations when the different classes of income are considered, with the exception of dividends and interests for large community foundations, whose elasticity appears to be slightly higher for large community foundations than for large independent foundations. This is quite interesting as large community foundations emerge as well equipped institutions, able to transfer donations into grants and – at the same time – to devote a larger part of the income coming from their endowments to deserving beneficiaries.

It is also worth noting that small independent foundations come out to be more similar to community foundations than to large independent foundations. In fact, when compared to large independent foundations, their grants appear to be less reactive to variations in the size of endowment (0.53%) and more reactive to variations in the size of donations received (0.06%). At the same time, also other "wind-fall gains" in income (such as capital gains and other incomes) show a positive marginal impact on the amount of grants paid by small independent foundations.

[12] When considering a different definition of large and small foundations (including only the top and bottom 10%) results are very similar (available upon request).

[13] DCF-SMALL=1 if the institution is a small size community foundation
DCF-MEDIUM=1 if the institution is a medium size community foundation
DCF-LARGE=1 if the institution is a large size community foundation
DPF-SMALL=1 if the institution is a small size independent foundation
DPF-MEDIUM=1 if the institution is a medium size independent foundation.

[14] Where the suffixes of the interacted variables have the following meanings: CFSM = small community foundation; CFME = medium community foundation; CFLA = large community foundation; PFSM = small independent foundation; PFME = medium independent foundation.

```
 Number of obs =   44046                  (Std. Err. adjusted for 10086 clusters)
 F( 60, 10085) = 1123.33                                 Prob > F      =  0.0000
 R-squared     =  0.7365                                 Root MSE      =  .92937
------------------------------------------------------------------------------
        GRANTS |    Coef.   Rob. Std. Err.   t    P>|t|     [95% Conf. Interval]
---------------+--------------------------------------------------------------
     ENDOWMENT |   .7502711   .0223463    33.57   0.000     .7064678    .7940743
 ENDOWMENT-CFSM|  -.4132148   .3959119    -1.04   0.297    -1.189281    .3628515
 ENDOWMENT-CFME|  -.4776259   .2318141    -2.06   0.039    -.9320277   -.0232242
 ENDOWMENT-CFLA|  -.4420046   .1346533    -3.28   0.001    -.7059519   -.1780573
 ENDOWMENT-PFSM|  -.2222952   .0311932    -7.13   0.000    -.2834401   -.1611503
 ENDOWMENT-PFME|   .0361892   .0299497     1.21   0.227    -.0225182    .0948966
     DONATIONS |   .0431043   .0045204     9.54   0.000     .0342433    .0519652
 DONATIONS-CFSM|   .0531544   .0278594     1.91   0.056    -.0014555    .1077643
 DONATIONS-CFME|   .5369089   .2952708     1.82   0.069    -.0418806    1.115698
 DONATIONS-CFLA|   .3356716   .0491749     6.83   0.000     .2392791    .4320641
 DONATIONS-PFSM|    .016811   .0017461     9.63   0.000     .0133884    .0202336
 DONATIONS-PFME|   .0014993   .0011056     1.36   0.175    -.0006679    .0036666
     INTERESTS |   .1519399   .0135764    11.19   0.000     .1253274    .1785524
 INTERESTS-CFSM|   -.003979    .014356    -0.28   0.782    -.0321196    .0241615
 INTERESTS-CFME|   .1331493   .1473178     0.90   0.366    -.1556229    .4219215
 INTERESTS-CFLA|    .209631   .1070578     1.96   0.050    -.0002237    .4194857
 INTERESTS-PFSM|  -.0140242   .0133116    -1.05   0.292    -.0401176    .0120692
 INTERESTS-PFME|  -.0171199   .0148915    -1.15   0.250    -.0463103    .0120705
          RENTS |   .0188483   .0085628     2.20   0.028     .0020636    .0356331
      RENTS-CFSM|  -.0735209   .0659891    -1.11   0.265    -.2028726    .0558308
      RENTS-CFME|   .0125603   .0084803     1.48   0.139    -.0040627    .0291833
      RENTS-CFLA|   .0020606   .0037303     0.55   0.581    -.0052516    .0093728
      RENTS-PFSM|    .000334   .0046729     0.07   0.943    -.0088258    .0094938
      RENTS-PFME|  -.0015712   .0020372    -0.77   0.441    -.0055646    .0024221
        CAPGAIN |   .0625625   .0041702    15.00   0.000     .0543881    .0707369
    CAPGAIN-CFSM|  -.0151505   .0243917    -0.62   0.535    -.0629632    .0326621
    CAPGAIN-CFME|   .0160006   .0103473     1.55   0.122    -.0042821    .0362833
    CAPGAIN-CFLA|  -.0035318   .0023388    -1.51   0.131    -.0081163    .0010527
    CAPGAIN-PFSM|    .010175   .0016076     6.33   0.000     .0070238    .0133262
    CAPGAIN-PFME|    .003753   .0010902     3.44   0.001     .0016159    .0058901
           OTHER |   .0133786    .003581     3.74   0.000     .0063591    .0203981
       OTHER-CFSM|    .038335    .021245     1.80   0.071    -.0033094    .0799794
       OTHER-CFME|   .0207231   .0185062     1.12   0.263    -.0155527     .056999
       OTHER-CFLA|   .0000471   .0036788     0.01   0.990     -.007164    .0072582
       OTHER-PFSM|   .0066364   .0020276     3.27   0.001      .002662    .0106109
       OTHER-PFME|   .0028481   .0011936     2.39   0.017     .0005084    .0051879
     MINUSOTHER |   .0046835   .0081912     0.57   0.567     -.011373    .0207399
 MINUSOTHER-CFSM|   .0661026   .0289158     2.29   0.022     .0094219    .1227833
 MINUSOTHER-CFME|  -.0425915   .0636309    -0.67   0.503    -.1673208    .0821377
 MINUSOTHER-CFLA|   .0005164    .006611     0.08   0.938    -.0124424    .0134753
 MINUSOTHER-PFSM|   .0034281   .0034958     0.98   0.327    -.0034243    .0102805
 MINUSOTHER-PFME|   .0011947   .0018971     0.63   0.529     -.002524    .0049133
   NO-DONATIONS |   1.142454   .1172771     9.74   0.000     .9125676     1.37234
   NO-INTERESTS |   3.532935   .3613366     9.78   0.000     2.824643    4.241226
        NO-RENTS |   .6084949   .2147932     2.83   0.005     .1874574    1.029532
      NO-CAPGAIN |   1.758238    .119834    14.67   0.000      1.52334    1.993137
        NO-OTHER |   .3629375   .0845408     4.29   0.000     .1972206    .5286543
  NO-MINUSOTHER |   .1241031   .2034462     0.61   0.542     -.274692    .5228981
      DCF-SMALL |   5.560793   5.342648     1.04   0.298    -4.911861    16.03345
     DCF-MEDIUM |  -2.392699   3.142041    -0.76   0.446    -8.551726    3.766328
      DCF-LARGE |  -.2630818   1.349528    -0.19   0.845    -2.908426    2.382263
      DPF-SMALL |   3.246892   .4110898     7.90   0.000     2.441074     4.05271
     DPF-MEDIUM |  -.8847989   .4456986    -1.99   0.047    -1.758457   -.0111409
           d2001 |   .1394345   .0153838     9.06   0.000     .1092793    .1695898
           d2002 |   .1617886    .018528     8.73   0.000       .12547    .1981072
           d2003 |   .0301657   .0158807     1.90   0.058    -.0009637    .0612951
           d2004 |   .0037102   .0150714     0.25   0.806    -.0258327    .0332531
           d2005 |   .0050934   .0148545     0.34   0.732    -.0240244    .0342113
           d2006 |  -.0614075   .0152734    -4.02   0.000    -.0913464   -.0314687
       CONSTANT |  -2.552057   .2708901    -9.42   0.000    -3.083055   -2.021058
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Table 6: MODEL 3

5. Conclusion

To be written

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