The Implementation of Social Policy through the Nonprofit Sector: 
A Political Market Framework

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Abstract

The uneven geographic distribution of nonprofit organizations has been an issue of debate in the implementation of social policy since the 1980s. This paper proposes a political market framework to test an integrated explanation for the geographic distribution of nonprofits. Government failure theory attributes this variation to the distribution of social problems, so that nonprofit organizations are more prevalent in jurisdictions displaying larger and more diverse service needs that governments are not prepared or willing to tackle. In contrast, entrepreneurship theory argues that nonprofit organizations are created in jurisdictions with higher levels of prosperity and resources and a stronger tradition of generosity. This second explanation suggests that nonprofit organizations are established by entrepreneurs seeking to maximize non-monetary returns. Our framework argues that both demand-side and supply-side market forces help to explain the variation in the geographical distribution of nonprofit organizations.

The hypotheses are tested using data assembled from nonprofit organizations established at the local level in continental Portugal. The variation in nonprofit sector activities is measured by the number of users and by the number of nonprofit organizations operating by block groups responsible for the implementation of social policy in each local jurisdiction. These groups constitute our dependent variables and include nursing homes, day care centers, home care organizations, leisure centers, and homeless care organizations. The paper employs a series of economic, social and demographic features of the local jurisdictions as explanatory factors to test the propositions derived from the political market framework for the formation and size of nonprofit organizations. Our findings indicate that citizen donations, demand heterogeneity, income, and population size are relevant predictors of the dimension of the local nonprofit sector.
The Implementation of Social Policy through the Nonprofit Sector:
A Political Market Framework

The size and scope of the nonprofit sector is expanding as a result of the devolution of services from the national to the local level and from the public sector to the civil society. However, the reliance in nonprofit organizations to implement social policies is far from homogeneous across localities, regions, and countries. What factors explain the uneven distribution of nonprofit organizations across the territory? Why do some communities rely more in nonprofit service delivery organizations than others?

Prior work exploring demand and supply-side explanations for the size and scope of the nonprofit sector has failed to provide a consistent theory able to explain these variations. Research led by economists has been primarily centered on demand-side explanations (Weisbrod, 1975; 1977; Matsunaga and Yamauchi, 2004), largely ignoring empirical testing of supply-side arguments (Hansmann, 1987). More recent research has attempted to present a theoretical model to account for the variation in nonprofit density (Grønbjerg and Paarlberg, 2001), but the results are far from satisfactory. The authors find that nonprofit organizations are most prevalent in small communities with a higher proportion of college educated population and lower poverty rates (Grønbjerg and Paarlberg, 2001). This is a counterintuitive result that contradicts heterogeneity factors underlined by demand-side explanations of the formation and growth of these organizations. Other research focusing on supply-side explanations, particularly philanthropic culture theories, has failed to account for the growth of the nonprofit sector (Corbin, 1999).
This paper begins to fill this important lacuna by proposing a political market framework as an explanation for the uneven distribution of nonprofits across local jurisdictions. The framework argues that both demand-side and supply-side market forces help to explain the variation in the geographical distribution of nonprofit organizations. The goal is to reexamine prior findings in light of new theory and indicators, thus contributing to theory development and findings.

This article employs data from 278 Portuguese municipalities to test a set of hypotheses derived from the political market framework to explain the establishment and the number of users of nonprofit organizations. Following this introduction, the second segment describes the role of nonprofit sector organizations in the implementation of social policy. In the third section we develop a political market framework to explain the formation and use of nonprofit organizations in the provision of human and social services. In the fourth section we specify our methods and describe the variables employed in the empirical analysis. The fifth section presents our findings, followed by a short set of policy implications and directions for prospective research.

The Role of Nonprofit Organizations in Service Delivery

Formal nonprofit organizations are subject to a nondistribution clause “…that prohibits the distribution of residual earnings to individuals who exercise control over the firm, such as officers, directors, or members” (Hansmann, 1987: 28). Furthermore, other authors underline additional common features of nonprofits, including self-government, voluntary activities, and public benefit (Salamon, 1992; Ferris, 1998). Our work is primarily concerned with entrepreneurial nonprofits. According to the classification
proposed by Henry Hansmann (1987), these nonprofits are characterized by a permanent, non-elected board of directors and provide services to either donors or customers. Although some may work separately from or competing with government, most nonprofits are in close contact with local governments in the implementation of social policies, either as coordinated service partners or as subsidized service providers (Feiock and Andrew, 2006). This depiction is relevant to our analysis since in modern post-industrial states nonprofit organizations play a primary role as partners or complements to local governments in delivering human and social services.

The development of the welfare state in Portugal is associated with the Democratic Revolution of 1974. The expansion of social security, the establishment of the National Health Care Service, and the significant growth of the education system resulted in strong pressures over national resources, at a time that most European states were already facing fiscal and financial pressures to scale back the welfare state. As a result, most responsibilities regarding welfare functions are now shared by the public, private, and nonprofit sectors. Moreover, nonprofit sector activities are “regulated, fiscally controlled and financially supported by the state” (Perista, 2001: 192). This context provides the backdrop for our study and justifies the interest in exploring the factors determining the growth and diversity of the local nonprofit sector.

**Theories of Nonprofit Sector Size and Scope**

Several theories have been developed to explain the formation, expansion, and size of the nonprofit sector. Demand-side explanations are rooted on government failure theory that attributes this variation to the heterogeneity of community problems and
preferences (Weisbrod, 1975; 1977; Kingma, 1997). This account argues that nonprofit organizations are more prevalent in jurisdictions displaying larger and more diverse service needs that governments are not prepared or willing to tackle. Due to electoral constraints, government officials prefer to target the preferences of the median voter, leaving non-median preferences unattended and opening the market for nonprofit agents.

Other developments from the demand-side perspective point to the transaction costs associated with contracting for services that entail information asymmetries between donors or customers and service providers. These contractual failures can be overcome by resorting to nonprofit organizations that are characterized by a non-distributional constraint that removes profit maximization from the contractual agreement (Hansmann, 1980; 1987; Easley and O’Hara, 1983).

Supply-side explanations are partly based upon entrepreneurship theory and argue that nonprofit organizations are created in jurisdictions with higher levels of entrepreneurship resources and a stronger tradition of generosity (Badelt, 1997). According to this justification nonprofit organizations are established by entrepreneurs seeking to maximize non-monetary returns. This section provides an overview of prior work accounting for the size and scope of the nonprofit sector.

*Government Failure Theory*

The root of government failure theory as an explanation for the expansion of the number of nonprofit organizations lies in the work of Burton Weisbrod (1975; 1977). The main argument is that government provides public goods service levels based on the preferences of the median voter due to electoral constraints imposed on elected officials.
Individuals and groups in society expressing higher demand levels for public goods turn to nonprofit organizations as a way to fulfill their preferences. A demand heterogeneity hypothesis is derived from government failure theory: more heterogeneous communities have more nonprofit organizations producing public goods, since citizen preferences are diverse from those of the median voter.

Since its inception, government failure theory has been tested and extended to account for different assumptions of altruism, multiple outputs of nonprofit organizations, and the degree of collectiveness of public goods (Kingma, 1997). Several indicators have been employed to account for demand heterogeneity. Ben-Ner and Van Hoomissen (1992) use educational attainment as a measure of heterogeneity and find support for a positive association between demand heterogeneity and the number of social service, education, and day care nonprofit organizations. James (1997) and Corbin (1999) find that religious diversity is positively associated with the size of the nonprofit sector. Matsunaga and Yamauchi (2004) conclude that age and unemployment measures of diversity behave according to theoretical expectations, but their racial diversity indicator fails to provide support for the theory.

In spite of its wide diffusion, empirical tests of government failure theory have failed to produce consistent results. A recent survey of the literature shows that, more often than not, empirical results either fail to support the hypotheses suggested by the theory or are in outright contradiction with those hypotheses (Matsunaga and Yamauchi, 2004).

Other developments of government failure theory suggest that the level of government spending on public goods affects the size of the nonprofit sector in two ways.
First, increased direct spending by the public sector in human and social services reduces the size of the nonprofit sector since more citizen preferences are being accommodated. Second, the size and scope of the nonprofit sector is likely to increase if governments delegate responsibilities for service production to the nonprofit sector using public subsidies. Evidence supporting this hypothesis is mixed at best. Ben-Ner and Van Hoomissen (1992) find that the size of local government employment is negatively associated with the size of the nonprofit health care service sector, but state and federal government employment is positively related with social service nonprofits. Other work reports an absence of relationship between federal funding or local funding and the formation of nonprofit organizations (Grønbjerg and Paarlberg, 2001; Twombly, 2003).

*Contract Failure Theory*

Contract failure theory as an account for the formation and expansion of third sector organizations was first developed by Henry Hansmann (1980). The author argues that private organizations supplying public services pose information asymmetry problems to its consumers. When profit is the major incentive, users cannot trust producers to provide adequate service quantity and quality due to information asymmetries plaguing transactions. In contrast, organizations bearing the nonprofit label overcome the information asymmetry and offer the guarantees required by service users to engage in the transaction (Ortmann and Schlesinger, 2003).

Unlike most work on government failure theory, contract failure theory recognizes the influence of service characteristics in the choice between the private and nonprofit sectors in the provision of public goods. The quality of services provided by
day care centers, nursing homes and health care organizations can be difficult to monitor and evaluate. Partly, information asymmetries result from the imperfect link between those paying for the service (donors) and service recipients. Some recipients may be unable to express opinions or judge service quality as occurs in the case of children, mentally ill, or elderly persons. Contract failure theory has also been called trust theory because in nonprofit organizations information asymmetries between producers and service payers are minimized by removing the profit motive to signal trust (Hansmann, 1987, 2003; Ortmann and Schlesinger, 2003; Anheier, 2005).

Prior work addressing contract failure theory argues that information asymmetries can be overcome when the consumers are rich, because wealth allows customers to choose private for-profit organizations based on higher price/quality packages (Easley and O’Hara, 1983; Hansmann, 1987; Ben-Ner and Van Hoomissen, 1992). Empirical findings suggest that this hypothesis is most likely true for commercial nonprofits providing human and social services (Grønbjerg and Paarlberg, 2001). In contrast, the sociological literature argues that educational and cultural nonprofits are historically associated with wealthy sponsors that promote artistic and cultural endeavors to the enjoyment of the elites (DiMaggio, 1987).

One criticism to contract failure theory states that information asymmetries may be insufficient to explain reliance in the nonprofit sector, particularly because the public sector can be as effective in overcoming those asymmetries. The underlying assumption here is that the public and the nonprofit sector are competitive alternatives to the private sector. However, in many instances, public and nonprofit organizations act as supplements or complements not adversaries in service delivery (Salamon, 1995; Young,
In fact, recent work shows nonprofit firms frequently act as service allies, partners or contracted agents in delivering human and social services, particularly at the local level (Feiock and Andrew, 2006; Feiock and Jang, 2009).

*Entrepreneurship Theory*

In contrast with government failure and contract failure theories, entrepreneurship theory is a supply-side explanation for the size and growth of the nonprofit sector. Entrepreneurship theory is founded on the concept of entrepreneur, defined by Schumpeter as an individual willing and able to carry out new combinations of resources in the production process or a new organization of any industry (Schumpeter, 1934). His definition underlines the role of the entrepreneur in fostering innovation and stresses aspects such as creative energy, ingenuity, and leadership guidance in accomplishing progress. In this sense, nonprofit organizations can be described as innovative, both in terms of the services they supply (homes for battered women, counseling centers for sexually abused children, social work for refugees and immigrants) and the factors they employ (donatives, volunteer labor, and ‘atypical’ employment) (Badelt, 1997).

The fiscal and financial pressures derived from the growth of the welfare state led to an expansion in the number and scope of nonprofit organizations capable of providing services under contract or in partnership with the local, state, and federal governments. This increase in demand was matched by supply-side factors that favored the formation of nonprofit organizations. Because nonprofit entrepreneurs are primarily motivated by nonmonetary goals, the creation and expansion of nonprofit organizations is mission-driven and can be attributed to religious, ideological, or philanthropic values (Badelt,
As these factors vary between communities and countries, one can expect the supply of nonprofit organizations to vary between jurisdictions as well.

Nevertheless, other factors operate against the growth of the nonprofit sector. The supply of capital is restricted for nonprofit organizations since they “cannot raise capital by issuing equity shares; they must then rely on debt, donations, and retained earnings for this purpose, sources that even in combination, offer a less responsive supply of capital than does the equity market.” (Auteri, 2003: 178). Furthermore, nonprofits are frequently limited by permanent endowments that add rigidity to the use of financial resources (Auteri, 2003).

Empirical tests of the hypotheses suggested by entrepreneurship theory have been scarce. The limitations in the access to capital can explain, at least in part, the differences between for profit and nonprofit firms in response to increases in the demand for nursing care hospital care, and primary and secondary education (Hansmann, 1987a). Recent work by Eric Twombly (2003) indicates that mission is, in fact, an important determinant for the formation of nonprofit organizations in metropolitan areas. Urban areas with moralistic and traditionalistic cultures rely more heavily on charities to supply social services. This work also shows that the conditions of supply are extremely relevant to predict the formation of nonprofits, as metropolitan areas characterized by higher organizational density in the social service sector are less likely to witness the formation of nonprofit organizations to supply these services.
The Political Market for Nonprofit Organizations

The nonprofit sector has assumed a major role in the implementation of social policy in close proximity with the end-users of services. The devolution of services to the local government level coupled with the growing fiscal stress experienced by municipalities in coping with increased pressures for performance has generated a significant reliance on nonprofit organizations to carry out the delivery of human and social services (Feiock and Andrew, 2006).

Prior empirical analyses have failed to simultaneously address demand-side and supply-side factors explaining the size of the nonprofit sector. Our work begins to fill this important lacuna by proposing and testing an equilibrium model of supply and demand of nonprofit organizations (see Keohane, Revesz, and Stavins, 1998 for a political market model of regulatory instrument choice). This section presents the theory and summarizes the hypotheses, whereas the next describes the data and methods employed.

Market equilibrium results from the aggregate decision of individual entrepreneurs to provide nonprofit services and the aggregate demand of community groups to consume those services. The supply of specific services by nonprofit firms reflects the decision to address demand heterogeneity among local groups. Different groups and areas in a community have preferences regarding the level of social services that do not coincide with the median voter and in many situations these diverse preferences may have highly political and redistributive impacts. Preference diversity is likely to cause two effects. First, local officials committed to reelection will decline to support services that have redistributive consequences among citizens. Second, for services facing government failure there are two alternatives. For commercial services
such as day care centers or nursing homes, both for profit and nonprofit firms will
compete for users. For noncommercial services involving donations, nonprofit firms are a
viable alternative to attend preferences in service areas that do not receive enough
coverage by the local government. This supplements government action to groups and
activities that are not be attended through majoritarian decisions (Ferris, 1998).

Supply-Side Hypotheses

One of the major contributions of this work is to provide an empirical test of
supply-side hypotheses, something the literature has failed to do in systematic fashion.
Entrepreneurship theory argues that the supply of entrepreneurs is the decisive factor to
explain the formation of nonprofit organizations because profit maximization is not part
of the entrepreneurial set of goals (Young, 1987). In fact, the original work by
Schumpeter emphasized the entrepreneur as an individual willing and able to carry out
new combinations of resources in the production process or a new organization of any
industry. This does not include profit making as a decisive feature of the entrepreneur.

However, nonprofit entrepreneurs have been characterized by complex
motivations that include “income, personal autonomy, satisfaction from the creative
process, strong social beliefs, professional rewards, search for personal fulfillment, and
personal recognition.” (Auteri, 2003: 181). In addition, these entrepreneurs are also
subject to a set of intricate external constraints, namely complex funding, government
regulation, donor preferences, and atypical staff (Auteri, 2003). This depiction of
nonprofit entrepreneurs in the literature seems to suggest that this specific category of
entrepreneurs is motivated by a different set of incentives that is fundamentally different
from for-profit entrepreneurs. If this is the case, the supply of both kinds of firms would be determined by the competition between both types of entrepreneurs, assuming that the number of entrepreneurs (of all types) in a community is limited. In face of contradictory arguments, we propose two competing hypothesis:

H1 (The Schumpeterian hypothesis): The greater the supply of nonprofit entrepreneurs, the larger the local nonprofit sector

H1a (The competition hypothesis): The greater the supply of for-profit entrepreneurs, the smaller the local nonprofit sector

The ‘geography of generosity’ has been under discussion since the 1980s, not only as a result of the efforts of geographers (Wolpert and Reiner, 1985; Wolpert, 1988; Wilson, 1989), but also public policy scholars (Salamon and Anheier, 1998; Wolch, 2001). This literature argues that the aggregate supply of generosity varies among jurisdictions, partly due to differences in personal and corporate income, partly due to social cohesion and cultural and religious values. The welfare services provided by nonprofit organizations depend, at least in part, upon donatives. Donors rely on nonprofit firms to deliver services to beneficiaries and usually do not have any contact with the intended recipients (Hansmann, 1987). In the case of noncommercial services such as homeless care, donations are decisive to achieve better coverage of target populations. Hence, we hypothesize that:

H2: More generous communities are more likely to have large local nonprofit sectors
In most industrial societies, organized religion is associated with service provision in the education, health care, and welfare sectors. Several scholars have suggested that the growth of religious nonprofit activity is directly associated with the level of religious competition in an effort to attract adherents (James, 1987; Salamon and Anheier 1998). This theoretical argument is certainly valid for religiously diverse societies such as the United States, but it is far less defensible in more homogenous societies. In countries where citizens are overwhelmingly Catholic, such as Italy or Portugal for example, it may be more informative to talk about degrees of religiousness. This is particularly true in the case of Portugal, where the misericórdias, in existence since the XV century, were initially created and supported by the Catholic Church to provide health assistance and support for children, elderly and disabled persons (Perista, 2001). Therefore, we argue that:

\textit{H3: The greater the proportion of Catholics, the larger the local nonprofit sector}

An extension of government failure theory suggests that nonprofits are present in jurisdictions where government is unable to satisfy the demand for specific types of services. This idea is frequently presented as a demand-side argument, but it can be recast as a supply-side hypothesis. The size of the nonprofit sector increases when the fiscal capacity of local governments is diminished, because this prevents local officials from attending increasing demands for public goods. Here, the nonprofit sector fulfills demands left unattended by the local government.
However, it is also argued in the literature that local government frequently subsidizes service provision through direct grants, subsidies and tax exemptions to the nonprofit sector. In this case, the nonprofit sector is a partner rather than a competitor of the public sector, and fiscal health can actually contribute to a large local nonprofit sector. Hence, we present two competing hypotheses:

**H4 (The partnership hypothesis):** Communities experiencing better fiscal health are more likely to have larger nonprofit sectors

**H4a (The competition hypothesis):** Communities experiencing better fiscal health are less likely to have larger nonprofit sectors.

Even though entrepreneurship theory suggests that the formation and expansion of the nonprofit sector is largely the product of individual entrepreneurs, our explanation also accommodates the idea that religious and ideological organizations (James, 1990), as well as government (in)capacity to deliver services demanded by citizens also contribute to the growth of the third sector.

**Demand-Side Hypotheses**

According to government failure theory, nonprofit firms provide services to fulfill the demand of citizens with preferences for public goods greater than the median voter (Weisbrod, 1975). These firms are financed by donors that prefer to sponsor specific services provided to particular groups rather than general financial aid for the poor (Rose-Ackerman, 1996).
Unlike local government officials, nonprofit entrepreneurs are not subject to the constraints imposed by median voter preferences, so they are able to supply services to citizens not covered by the public sector. In turn, non-median voters search for nonprofit firms that can satisfy their unmet demands (Matsunaga and Yamauchi, 2004). A few examples should help to illustrate this point, particularly because most populations served by nonprofits providing welfare services are either not voters at all or represent a very small segment of the voting population.

Communities where children are a large proportion of the general population are expected to have more nonprofit day care centers to address this specific demand. Hence, birth rates should be positively associated with this type of service. In contrast, all else being equal, communities that have a large proportion of elderly population are likely to have more nonprofit nursing homes and nonprofit home care organizations. The proportion of school aged population in a community should also be positively associated with the number of nonprofit leisure centers.

An even more extreme example is homelessness. Homeless persons live on the margins of society. They are unemployed, rely on charity for survival, and do not have a stable home address; they fit perfectly the description of non-median voters, essentially because they do not vote at all. Homeless care organizations are supported by donors that expect nonprofits to deliver adequate services to these transient populations. Jurisdictions with high unemployment rates and a large proportion of welfare recipients are likely to have a larger share of homeless care nonprofit organizations.

Population size can also be employed as a proxy for preference heterogeneity (Rodrigues, Tavares and Araújo, 2011). Larger cities have more socially and culturally
diverse populations and nonprofit organizations cater to these preferences. A similar argument can be developed regarding the proportion of foreign residents in a community. In fact, recent work by Cordero-Guzmán and colleagues find empirical support for the connection between immigrant populations and nonprofit activity in the cities of New York and Chicago (Cordero-Guzmán et al., 2008).

*H5: Communities experiencing demand heterogeneity are more likely to have larger nonprofit sectors*

*H5.1. The type of demand affects the number and size of nonprofit firms by service activity area*

*H5.2. The size of the local nonprofit sector varies positively with population size*

*H5.3. The size of the local nonprofit sector varies positively with the proportion of foreign residents*

Contract failure theory argues that information asymmetries between producers and consumers can be minimized when consumers are able to choose between for-profit and nonprofit organizations providing excludable public goods (Ben-Ner and Gui, 2003). Nonprofit organizations are preferred by consumers unable to monitor and judge the quality of performance at low cost because the non-distribution constraint minimizes information asymmetries (Matsunaga and Yamauchi, 2004). On the aggregate, wealthier communities are likely to attract private firms providing top quality services in the fields of health and education, leaving less market share for the action of nonprofit organizations (Bielefeld and Murdoch, 2004).
In the case of nonprofits providing welfare services, the information asymmetry problem is compounded by the fact that donors are not the direct consumers of services and may be unable to evaluate the quantity and quality of services rendered to end-users. Again, in communities experiencing economic decline, nonprofit firms are likely to be preferred over their for-profit counterparts because they are deemed more trustworthy and less likely to take advantage of information asymmetries. As a result, we expect that:

\[ H6: \text{The lower the level of per capita personal income, the larger the local nonprofit sector} \]

This section extended prior work to propose an equilibrium approach to explain the size of the nonprofit sector. The hypotheses suggested here are very general and require the appropriate indicators to allow a test of our theoretical arguments. Now we turn to the data and methods employed in the analysis.

**Data and Methods**

When presenting our hypotheses, we discussed several determinants of the uneven distribution of nonprofit organizations across jurisdictions. The variables included in the analysis reflect both demand-side and supply-side arguments included in a political market framework for nonprofit organizations. Variable choice is based upon three criteria: 1) the nature of the services provided by nonprofit firms (our dependent variables); 2) the context of our study (Portugal); and 3) limitations on data availability.
The study analyzes nonprofit sector size across the 278 municipalities in Continental Portugal. The size of the nonprofit sector in each locality is measured in two ways. First, we use the number of nonprofit firms in each jurisdiction registered in 2010 with the Social Security Financial Management Office of the Ministry of Labor and Social Security. Data validity is assured, since this registration is mandatory for the formation of each new nonprofit organization. Most empirical work has employed the number of nonprofit firms in each jurisdiction as a proxy for the size of the local nonprofit sector (Marcuello, 1998; Corbin, 1999; Grønbjerg and Paarlberg, 2001). However, more recent work criticizes the reliance on this measure, arguing that it treats firms with very dissimilar budgets as analogous organizations (Matsunaga and Yamauchi, 2004). In order to overcome this criticism, we also employ the number of service users to gauge nonprofit sector size and capacity to tackle local demands for public goods. In both cases, the dependent variables are divided into five categories covering different human and social services provided by the nonprofit sector: day care facilities, nursing homes, homecare organizations, leisure facilities, and homeless care organizations.

The model specifications include four supply-side variables. The supply of entrepreneurs is measured by the establishment of new for-profit firms in each jurisdiction in the year 2009 as gathered by the National Bureau of Statistics (INE, 2009). The most appropriate measure for nonprofit entrepreneurship is the number of nonprofits created in a given year in each jurisdiction, but since this information is unavailable, we use the number of new for-profit firms as a proxy for the supply of entrepreneurs in a given jurisdiction to test the first hypothesis.
The level of community generosity is gauged by citizen donations recorded in the 2009 income tax returns. This information is provided by the Portuguese Internal Revenue Service (Direcção Geral de Impostos) of the Ministry of Finance.

Portugal is characterized by significant differences in religious practices across the territory. The north is far more involved in religious activities than the south. Indicators such as church attendance, Sunday school attendance or the number of baptisms confirm these geographic differences. Unfortunately, these indicators are only available for religious jurisdictions, which do not coincide with local government jurisdictions. The only indicator available by municipality from the National Bureau of Statistics is the proportion of Catholic weddings, which we employ as a measure of religious practice.

The indicator to gauge the financial status of the municipality is extracted from the Financial Yearbook of Portuguese Local Governments edited by Carvalho, Fernandes, Jorge, and Camões (2006) and published by the Center for Research in Public Policy and Administration. Fiscal health is a budget measure of local government capacity to either produce public services directly or subsidize production through the delegation of these tasks to nonprofit organizations.

Local demand for human and social services is assessed by a set of demand-side variables that are included in our models according to the type of service provided by nonprofit firms. Birth rate by jurisdiction is measured as the number of births per 100 individuals and included in the day care center models. The elderly dependency rate is obtained by dividing the population over 65 years by the active population (aged 14-65 years-old) and multiplying by 100. The schooling rate is the population enrolled in high
school education divided by resident population with ages between 15 and 17 years-old. The unemployment rate is the proportion of individuals registered at employment centers on the total of the active population. The number of welfare recipients is simply the number of individuals that benefit from the national program of minimum income subsidy (*Rendimento Social de Inserção*). All these variables are collected from the National Bureau of Statistics (INE, 2009). All models include the log of foreign population living in the jurisdiction as a general measure of demand heterogeneity. Foreign population was retrieved from the National Bureau of Immigration Services (*Serviço de Estrangeiros e Fronteiras*). All demand-side measures should be positively associated with the number of nonprofit firms and nonprofit sector size.

Information asymmetries between for-profit producers and consumers can be minimized at a cost. Per capita personal income by jurisdiction should be negatively associated with the nonprofit sector size. We also included the size of the jurisdiction measured by population, the number of parishes\(^1\) and a dummy variable for district capitals as additional demand-side variables. Income and population data were collected from the National Bureau of Statistics (INE, 2009). All variables and indicators are summarized in table 1 with their descriptive statistics.

[Table 1 here]

Ordinary least squares (OLS) regression is employed to estimate the models using the number of users as the dependent variable. Results of OLS regressions are presented

\(^1\) Portuguese local governments are divided in parishes (*freguesias*), the smallest unit of self-government, with a low number of competences and heavily financially dependent on the municipal government. The boundaries of parishes are contained inside each municipality and one parish cannot belong to more than one municipality. The number of parishes in each municipality can vary significantly, from one, when the boundary of the parish coincides with the boundary of the municipality, up to 89, where each parish is equivalent to a neighbourhood (Silva, 2004).
on table 2. The number of nonprofit organizations in each jurisdiction is a count variable, which requires the use of negative binomial regression. This is the appropriate estimation technique to treat event counts, when the assumption that the conditional mean of the distribution equals the conditional variance (equidispersion) does not hold. We tested our models for overdispersion and the goodness-of-fit $\chi^2$ test allows us to reject the null hypothesis that the data are Poisson distributed, so negative binomial regression models are used in the estimation. The negative binomial regression results are presented in Table 3. Coefficients are reported as incidence-rate ratios that represent an advantage in interpretation over standard negative binomial coefficients, since they do not depend on the level of the variable of interest or all other variables included in the model. A unit change in a given independent variable $X_k$ changes the output count by a factor of $\exp(\beta_k)$ (Long, 1997: 225).

[Table 2 here]

**Empirical Findings**

The overall results confirm the existence of both demand-side and supply-side effects to explain the uneven distribution of nonprofit organizations across local jurisdictions in Portugal. Supply-side explanations regarding citizen donations and entrepreneurship receive strong support, but the degree of religiousness and local government fiscal health miss statistical significance and do not contribute as explanations to our supply-side arguments.

The first set of models, using the number of service users as the dependent variable, confirms the arguments concerning the geography of generosity. Jurisdictions where citizen donations are higher also display a larger number of all types of service
users. This effect is particularly strong for day care centers: on average, a 1,000 dollar increase in citizen donations increases the number of service users by 8. Citizen donations have a weaker impact upon leisure center service users, perhaps because donations are less relevant for the provision of this kind of service. In the case of nonprofit establishments, the results regarding citizen donations are consistent, albeit missing statistical significance in three services. In the aggregate, our results confirm the hypothesis that the level of altruism is a strong predictor of reliance in nonprofit sector organizations for delivering human and social services.

The entrepreneurship variable is negatively associated with nonprofit sector size. This indicates strong support for the competition hypothesis in detriment of the Schumpeterian hypothesis. In general, an increase in the number of newly created private companies is associated with smaller numbers of nonprofit firms and service users. If entrepreneurs are primarily interested in forming for-profit companies, less entrepreneurship is available for the nonprofit sector. The only exception to this finding is the positive relationship between new private companies and the number of users of day care facilities. In the case of day care centers, it is possible that the choice for using these services also depends on the level of income. In other words, the effect of the number of births on nonprofit day care users may be mediated by different levels of income, which will require testing of an interaction hypothesis.

Demand side hypotheses receive a strong level of support. Jurisdictions where particular groups are prevalent display a larger degree of reliance in nonprofit sector organizations to supplement government action (Weisbrod, 1977). The evidence also
indicates that the nonprofit market is responsive to citizen preferences for all kinds of human and social services.

[Table 3 here]

The findings concerning demand heterogeneity are consistent with the general predictions of government failure theory. Low levels of income and higher levels of population (national and foreign) generate complex situations with a great diversity of needs that local officials are unable or unwilling to satisfy. This unattended demand compels the creation and expansion of nonprofit organizations.

Looking at the specific results for each nonprofit category, evidence confirms the majority of our demand-side hypotheses. Elderly dependency rate is an important demand-side factor of the creation and size of nonprofit nursing homes and home care organizations. Similarly, the schooling rate variable is an important predictor of both nonprofit organizations and service users on the leisure sector. We also find that the unemployment rate is positively associated with the number of users of homeless care organizations.

The coefficient for population size is always positively associated with the number of nonprofits and service users. This concurs with prior findings concerning the connection between population size and nonprofit contracting by local governments for elder service production (Feiock and Jang, 2006). Population size is usually a good proxy for preference diversity, as more populated and urban areas tend to display a larger demand for services provided by local governments. District capitals are a strong predictor of nonprofit localization for similar reasons. Historically, district capitals have been more populated, socially dynamic, and true engines of regional economic
development. Currently, this is still the case in the overwhelming majority of the 18 districts. The results also confirm the number of parishes as an important demand-side predictor as parishes are associated with preference diversity regarding service provision, raising the level of internal competition for resources and services within the municipality.

Conclusions and Policy Implications

Research on the uneven distribution of nonprofits has been primarily focused on testing demand-side hypotheses. Government failure theory and contract failure theory are the main accounts for the variation of nonprofit firm activity across local jurisdictions. Authors focusing on the demand-side of the market argue that local government officials tend to promote policies targeted to the median voter, ignoring citizens with above average preferences for human and social services. As a result, specific groups in the local population seek nonprofit organizations to fulfill their unattended demands. However, demand-side explanations have ignored the ‘geography of generosity’ as a supply-side justification for different degrees of nonprofit concentration and service across jurisdictions.

The main argument developed in this manuscript is that both sides of the political market are equally important in explaining the formation, development, and size of the local nonprofit market. The demand-side variables behave according to predictions, as demands from specific groups are satisfied through the nonprofit market. More diverse communities with less affluent populations are also more likely to rely on nonprofit
organizations to act as substitutes for government services in the human and social sectors.

However, the geographic dispersion of nonprofits cannot be explained in full just by looking at demand. In fact, our findings also confirm that community capacity to respond based on philanthropic values and generosity is the most decisive factor on the supply-side of the market. Citizen donations determine the size of the local nonprofit sector, therefore contributing for a better response to citizen preferences. This finding constitutes the major contribution of our analysis and underscores the role of supply mechanisms in attending specific social policy demands.

References


Table 1. Descriptive Statistics

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<th>Variable</th>
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*p<.10; **p<.05; ***p<.01; two-tailed tests. Robust standard errors.
Table 3. Negative Binomial Regression Analysis (dependent variable: number of establishments)

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<tr>
<th>Independent variables</th>
<th>Daycare (RRR, RSE)</th>
<th>Nursing Homes (RRR, RSE)</th>
<th>Home Care (RRR, RSE)</th>
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*p<.10; **p<.05; ***p<.01; two-tailed tests. Robust standard errors in parentheses.