



Institutions and non profit organizations.

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Abstract

This essay incorporates the concept of economic institutions as a key factor in the determination of the size and scope of the nonprofit sector. The cross-country study is based on a sample of 67 countries circa year 2000.

Keywords: nonprofit sector

Institutions and Nonprofit Organizations

Introduction

Last decades have witnessed an increase in the number of non-profit organizations and a widening of the scope of economic activities they engage in. Non-profit organizations and business firms interact and compete for resources in relevant economic sectors, such as health care and education (Weibrod, 1997). Also, as conservative (in the American sense) ideas on the role of the State and of the private for-profit sector have come to be part of the mainstream, non-profit organizations have found a role as private substitutes in areas where Governments used to have a prominent role, such as social security.

The effects of this process are observable in the data. The number of non-profit organizations has increased substantially in the United States and other countries¹. Moreover, the National Council of Nonprofit Associations (NCNA), that features the most current information and statistics (2003) on America's charitable organizations,

¹ There are more than 1.4 million non-profit organizations in the United States. In France, there has been a significant growth in the rate of creation of new organizations, from 10,000 organizations per year in 1960 to 55,000 per year in the 1990s. Similar patterns can be observed in Italy and other European

reports that there were 837,027 charitable nonprofits in the United States, excluding foundations and religious congregations in 2003, representing an increase of 68 percent from 1993.

In some countries, nonprofit employment grew at an annual average of 4 percent between 1990 and 1995 (Salomon, et.al. 1999), doubling the rate of growth in overall employment during the same period.

Yet the role and behavior of non-profit organizations continues to be a subject of debate. Researchers continue to investigate on the factors that contribute to the existence of nonprofit organizations in modern societies. They have also investigated on the characteristics of these organizations that distinguish them from business firms and public companies.²

Why do nonprofit organizations exist? On pure economic terms, demand for and supply of nonprofit organizations determine their relative existence³. Demand for nonprofit organizations as suppliers of public goods arise when governments are unable to perfectly discriminate and to determine the exact amount of public goods to be supplied

countries. The rate of growth of non-profit organizations has also been high in Latin America, Asia and Africa.

² Non-profit organizations have long existed before business firms appeared as economic organizations. Several hundred years ago, non-profit organizations were the sole agents taking care of most of economic activities, It was not until recently (in historical time) than for profit organization came to dominate production of goods and services.

³ The size of the non-profit sector can be measured in different ways, all of them disputable. I briefly discuss the issue below.

to individuals, and how to tax those individuals for the public goods supplied(Weisbrod, 1975,1977).

Governments choose to supply public goods according to the preferences of the "median-voter", which creates unsatisfied consumers of public goods (over-satisfied and under-satisfied). On the other hand, business firms may not be willing to supply public goods due to free riding leaving scope for the creation of nonprofit organizations. Under-satisfied consumers may create nonprofit organizations to overcome this "public failure" situation.

Consequently, nonprofit organizations are more likely to exist (relative to business and public organizations) in more diverse societies, that is, in more heterogeneous societies (James, 1987, 1993). This approach regards nonprofit organizations as a complement to the State for the provision of public goods (Weisbrod, 1975).

Demand for nonprofit organizations relative to for profit firms as suppliers of goods and services also increases when asymmetries of information are pervasive (Hansmann, 1980). Asymmetries of information create "contract failures". Difficulties in assessing product quality by consumers, in creating incentive compatible mechanisms in labor and credit contracts, and monitoring conditions with respect to the final use of donations are examples of contract failures. For profit firms would be

tempted to charge higher prices for lower-quality products to increase profits.

In the presence of contract failures, the institutional factor that creates a competitive advantage for nonprofit organizations is the non-distribution constraint these organizations face (Hansmann, 1980). Because of this constraint, nonprofits may be considered more "trustworthy" than business firms. This is the origin of the so-called "trust hypothesis" for the existence of nonprofit organizations (Hansmann, 1980, 1987).

Also, it has been argued that wealthier and more educated people are in a better position to evaluate the characteristics of the products they purchase in the market (Ben-Ner and Van Hoomissen, 1991). *Ceteris paribus*, these factors should decrease the importance of the nonprofit sector because they reduce the likelihood of contract failures.

These core "demand-side" theories of nonprofit organizations focus their explanations for their existence on heterogeneity of preferences and on the fact that stakeholders should trust nonprofit organizations more than for profits because of the non-distribution constraint on profits that the former face. Their analysis ignores the relevance and implications of different economic institutional structures for the existence of nonprofits.

Questions arise. "How is Transparency (public and private) associated with the existence of nonprofit organizations?" or "¿How is a better Business Environment associated with nonprofits?" or "How does a better institutional framework that allows for an increased participation of people affect the existence of nonprofit organizations?" are absent in this literature.

One hypothesis may state that transparency and a better business environment are associated with better information and a higher level of trust in organizations. This in turn would represent a competitive disadvantage of nonprofit organizations vis a vis business and public firms. Societies showing better institutional structures should show a relatively smaller size of the nonprofit sector. However, an institutional environment that allows for more "voice" may, ceteris paribus, foster the creation of nonprofit organizations. More "voice" may be associated with more democratic states and foster the capacity of individuals to create institutions capable of representing the preferences of individuals (World Bank, Governance Matters).

Supply arguments for the existence of nonprofits include altruism and ideology as determinants of why people may wish to create ("offer") nonprofit organizations (Rose-Ackerman, 1996). Individuals, who do not pursue profits but wish to help other individuals, may do so through nonprofit organizations. The Church has created schools as nonprofit organizations to transmit Christian beliefs to those who attend its schools. Individuals who wish social recognition (but not profits) by helping others may become donors or founders of nonprofits in order to achieve their objectives (Ben-Ner and Van Hoomissen, 1991).

For different reasons, Governments are sometimes interested in nonprofits to achieve social goals (Weisbrod, 1975)⁴. Governments may grant tax privileges and even subsidize the creation of nonprofits to decentralize and even privatize some of their activities.

These supply-side arguments also leave the questions posited above unanswered. Institutional quality and business environment may affect the willingness of individuals and other organizations (such as the Catholic Church) to create nonprofit organizations in order to provide goods and services.

⁴ Private, nonprofit organizations are more flexible, stay closer to targeted stakeholders and may be more transparent than public offices to achieve certain social objects.

A third body of literature examines the relation between specific structures of governance and incentives for the growth of nonprofit organizations. According to these theories, the nonprofit sector would be larger in liberal and corporatist states than it would be in statist and social democratic forms of government, where government structure leaves fewer openings for nonprofit organizations (Salamon et al, 1995). A slightly different approach points out that governments can act as supporters of nonprofit organizations, in which case the relation between them may not be competitive but cooperative. That is, larger amounts of government expenditures may be associated with a larger size of the nonprofit sector (Salamon et.al, 1995, 2000). This line of research has come close to evaluating the relation between institutions and the nonprofit sector.

However, the concept of institutions used in this body of work is limited to political structures and does not include other sorts of economically relevant institutions examined in this Essay. On the other hand, I use a different indicator for democracy (my index of "voice and accountability") which should have the opposite effect on nonprofit organizations as that stated by Salamon et.al.

Empirical analyses to date have found that diversity has mixed effects on the size of nonprofit sector (Ben-Ner

and Van Hoomissen, 1991,1992; Marcuello, 1998). Some other studies have found a positive relation between government expenditures and the size of the nonprofit sector, while others have found a negative or insignificant relation (Marculello 1998; Salamon et.al 1996,2000). To my knowledge, only one study has evaluated the impact of a subjective measure of trust ("trust on others") and found a positive but not significant effect (Onder, 2006). Better education seems to have a negative effect on the size of the nonprofit sector (Ben-Ner and Van Hoomissen, 1991,1992; Marcuello, 1998). Salamon et.al find limited support for their hypotheses on the impact of governance type in a cross country study which includes less than 40 countries.⁵ Onder (2006) finds mixed evidence on the effect of institutions in his cross-country study where institutions mainly reflect sociological concepts such as cultural isomorphism, ideology and external legitimation. This Essay incorporates the concept of economic institutions as a key factor in the determination of the size and scope of the nonprofit sector. Within the neoclassical tradition, the relevance of economic institutions to economic growth has been established since the work of Douglass North (1980).

⁵ Their study only shows correlations of a few variables with the size of the nonprofit sector, but does not perform a rigorous

Political Economists have long considered the importance of different economic institutions for economic welfare (Hahnel and Albert, 1991) and their relations to markets (see for example, Bowles et.al (eds) 1993). Most of the analyses, however, deal with the interaction of governments and private, for profit, firms and ignore the increasing importance of nonprofit organizations.

Next section sets the model and the econometric specification of the relation between institutions and nonprofits. Next, I describe the empirical methodology and show preliminary results. Last section concludes.

Conceptual Framework

In this section I develop the theory in which the size of the nonprofit sector depends not only on stakeholder's characteristics, market failures and government policies, but also on the nature of the economic institutions of a country.

At the macroeconomic level, demand for nonprofit organizations depends on the followig:

$$(1) D = f(\text{Het}, \text{Market}, \text{Inst})$$

econometric analysis.

Demand for nonprofit organizations depends on the characteristics of the population (Het). First, the more heterogeneous a society, the more differentiated the demand for public goods. Based on the preferences of the median voter, Government supply of public goods will create a host of unsatisfied consumers who will turn to private nonprofit organizations to obtain the desired amounts of the goods in question (Weisbrod, 1975). Indicators for heterogeneity include inequality of income and wealth, religious and ethnic heterogeneity and differences in education.

Since preferences are not likely to be homothetic, income and wealth inequality creates heterogeneity of demand for public and private goods creating the need for nonprofit organizations, as explained above. Religious and ethnic fractionalization also implies diversity of preferences, given income levels. Tastes of Catholic, Jewish and Muslims adherents differ sometimes to a great extent, as tastes of people with different levels of education. The diversity of preferences implied by these differences makes the occurrence of public failures more likely, thus the necessity for nonprofit organizations.

Market (Market) refers to the concept of market or contract failure, that is, the problem of asymmetric

information. With a larger market, there are more chances for the existence of asymmetric information among consumers and producers. Consumers and donors may trust nonprofit organizations more than business firms to obtain the products they wish to buy and donate. In this model, market size represents an indicator of the "trust hypothesis" advanced by Hansmann (1980).

However, problems of asymmetric information can also be minimized if people are better educated or if they are richer. Better educated and wealthier people have more opportunities to evaluate the quality of the products they buy and to monitor the correct use of the money they donate.

In sum, although education and wealth may increase the demand for non profit organizations through the "public failure argument", both may also reduce the demand for nonprofit organizations by reducing the problem of asymmetric information, the "contract failure argument".

Institutions (Inst) summarize the intuition about the independent impact of institutional quality on demand for nonprofit organizations: better quality of market institutions should have a negative impact on the size and scope on nonprofit organizations. Economic institutions constitute a measure of the efficiency of market institutions. Since Oliver North developed the notion of

institutional quality as an important economic concept, economists have incorporated it to analyze its impact on welfare, economic development, and international economics, to name some areas of economic research. The basic intuition implies that better economic institutions create positive incentives to the functioning of markets, which in my framework refer to private, for profit firms. Many organizations have constructed different measures of economic institutions to analyze the functioning of markets. For example, the World Bank has developed the concept of "Governance Matters" (Kaufmann, et.al, 2006) which is a set of indicators on Governance: a) Voice and Accountability intends to measure people's possibility to be heard by and the accountability of public institutions; b) Political stability; c) Government effectiveness; d) Regulatory quality; e) Rule of Law; and f) Control of Corruption.

I consider all of the above measures (except the indicator for Voice and Accountability) as supporting market, business transactions which imply that the better these indicators, more informed are the citizens of a country, which in turn reduce the relevance of asymmetric information problems and as a consequence, the need for nonprofit organizations.

As mentioned above, I consider the Index of "Voice and Accountability" as reflecting the possibility of citizens to express their opinions and preferences, which I associate positively with the existence of nonprofit organizations. This index is taken as a measure of participation and democracy and it is used to test the hypothesis developed by Salamon et.al above.

Other organizations have developed other measures of institutional quality which basically serve the same function of the World Bank's indicators of Governance. One of these indicators, the "Transparency Index" (Transparency International, 2005) measures a perception of corruption for different countries for different years. This indicator should be positively associated with a more transparent business environment and its impact on nonprofit organizations should be negative.

The supply of nonprofit organizations can be represented as follows:

$$(2) \quad S = g(Tx, Subs, Alt, Inst).$$

Governments may create positive incentives for the formation of nonprofit organizations either by granting tax

privileges (Tx) of by giving direct subsidies to them (Subs). Nonprofit organizations may be more efficient than governments in pursuing social goals such as poverty reduction because they are closer to targeted individuals and because they have more flexibility than public organizations. Within this context, governments may regard nonprofit organizations as a valid strategy to pursue its social goals while avoiding the inefficient bureaucracy of the State.

An individual who care about the welfare of other individuals may wish to contribute to the latter's wellbeing by creating nonprofit organizations to pursue their social goals. Those individuals are guided by altruistic purposes (Alt) or by desires of social recognition. In general, altruism is more pervasive in wealthier societies so one can use income per capita as a proxi for altruism.

On the supply side, Institutional quality has a role to play too. Nonprofit organizations are created (supplied) either by wealthy individuals or by governments because of the presence of private and public failures within market economies or because of altruistic sentiments or because governments wish to achieve better social efficiency in supplying social services. These failures tend to be more relevant when the institutional context is weak.

If transparency in public and private transactions is satisfactory and if economic freedom allow for consistent check and balances between consumers and suppliers (as implied by traditional neoclassical theory), ¿why would individuals and governments wish to create nonprofit organizations? In sum, the intuition here is that the better the quality of market institutions, the less the need for individuals and governments to create nonprofit organizations. This supply effect reinforces the demand effect mentioned above.

Econometric Specification

My empirical approximation to the determinants of the size of the nonprofit sector consists on performing a cross-country study. In this Section I outline the hypotheses to be tested, define the variables to be used in the regression and cite the sources of data. My cross-country study will be based on a sample of 67 countries circa year 2000.

Based on the literature review, the empirical model to analyze the cross-country determinants of non-profit organizations is shown below.

$$\ln npo = \alpha_0 + \alpha_1 pop_i + \alpha_2 diversity + \alpha_3 income + \alpha_4 formation + \alpha_5 gini + \alpha_6^{gov} exp + \alpha_7 religion + \alpha_8 cohesion + \alpha_9 trust + \alpha_{10} instquality + \alpha_{11} system + u_i$$

Expected signs are:

Explanatory variable	Expected effect on number of NPOs (size of NPO sector)	Theory/Intuition
Population	Indeterminate	Weisbrod, Ben-Ner & VH
Diversity	Positive	Ben-Ner & VH
Income	Indeterminate	Hansmann
Formation	Indeterminate	Hansmann
Inequality (Social Distress)	Positive	Mine (Social distress)
Government expenditures	Indeterminate	Salamon et.al
Religion	Positive	Ben-Ner & VH
Social Cohesion	Positive	Ben-Ner & VH
Trust	Negative	Onder (2006)
Institutional Quality	Negative	Mine
Voice and Accountability	Positive	Mine
System (Democracy)	Negative	Salamon et.al

Key Variables in the Equation

Dependent Variable: Size of the nonprofit sector

The size of the nonprofit sector has proved to be difficult to measure. Salamon and Anheier (1996, 1999, 2003.)

consider the amount of nonprofit employment relative to total employment for 35 countries for which they found data.

Based on the results of the World Values Surveys (2000), Onder (2006) estimates the size of the nonprofit sector as the percentage of individuals who answered that they belonged to some voluntary organization. He again, considers a sample of 35 countries.

I will follow Onder (2006) on the source of information (World Value Surveys) but I will consider a larger sample of countries, 85 in total, by merging the waves of 2000 and 2004. This will allow me to improve the performance of the empirical model by solving the problem of a non-representative sample.

The basic question asked in the World Value Surveys is as follows: "Please look carefully at the following list of voluntary organizations and activities and say, which, if any, do you belong to ("yes" answers =1, "not mentioned/do not belong" = 2):

V39	Social Welfare Services for elderly, Belong handicapped or deprived people	Not mentioned /do not belong
V40	Religious or church organizations	
V41	Education, arts, music or cultural activities	
V42	Labor Unions	
V43	Political Parties or groups	
V44	Local community action on issues like poverty, employment, housing or racial inequality	
V45	Third world development on human rights	
V46	Conservation, environment, animal rights groups	
V47	Professional Associations	
V48	Youth work	
V49	Sports or recreation	
V50	Women's group	
V51	Peace movement	
V52	Voluntary organizations concerned with health	
V53	Other groups	

Table 1 below shows the countries included in the sample.

Independent Variables

1. Measures of Population (market size)

I consider the number of inhabitants per country, data collected from the International DataBase, U.S. Census Bureau, for various years.

2. Measures of heterogeneity (diversity)

Heterogeneity is measured in many different dimensions: people differ in income levels, age, gender, literacy, etc. My study includes two measures of heterogeneity that I consider relevant for the demand and supply of nonprofit organizations. Alesina et.al (2003) construct three measures of diversity for 161 countries: a) ethnic diversity, b) language diversity, and c) diversity in religion.

Each index is computed as 1 minus the Hershfindal index applied to each category or source of data:

$$1 - \sum_{i=1}^N s_{ij}^2 \quad \text{where } s_{ij} \text{ is the share of group "i"}$$

($i=1\dots N$) in country "j".

Alesina et al measure linguistic fractionalization based on data supplied by Encyclopedia Britannica (2001) which reports the shares of languages spoken as mother tongues. The data includes 1055 mayor linguistic groups for 201 countries.

Data for religious fractionalization also comes from Encyclopedia Britannica (2001) and covers 295 different religions in 215 countries or dependencies.

Finally, ethnic fractionalization involves multiple sources of data. Main problem is most available indices are in fact measures of ethnolinguistic fractionalization, thus considering not only ethnic differences but also language differences all together.

Alesina et.al attempts to segregate the ethnic component from the language component by reviewing several sources of data. They come up with an index of ethnic fractionalization that covers 650 ethnic groups in 190 countries and dependencies.

3. Measures of Income

I consider measures of Gross National Income per capita, 1999 PPP, from the World Development Indicators, year 2000

4. Formation (Education)

I consider enrollment Ratios: Secondary Education. Data is taken from the World Development Indicators, 2001.

5. Inequality (Social Distress)

As a measure of inequality I consider the Gini (income) Index, World Development Indicators, 2001.

6. Social Welfare Expenditures

I take the indicators of Government expenditures from the World Development Indicators, 2001

7. Religion

The World Value Surveys (2001) ask the following question:

"Independently on whether you go to church or not, would you say you are:

1. A religious person
2. Not a religious person
3. A convinced atheist
4. Other answer

8. Social Cohesion Indicators

The main source for these indicators is the World Value Surveys unless specified. Social Cohesion indicators include:

1. Life satisfaction and feeling of happiness measured by the proportions of respondents with happiness "very happy" or "quite happy".
2. Social Isolation: proportion of respondents who rarely or never spend time with friends, with colleagues or with others in social groups
3. Group membership or density of asociational activity: Mean number of groups to which respondents belong
4. Teenage births in percent
5. Drug use and related deaths: Abuse of drug consumption as percentage of the population aged 15 and above perSource: World Drug Report (<http://www.unodc.org/unodc/en/data-and-analysis/index.html>)
6. Suicide Rates: Suicides per 100,000 persons.
Source: World Health Organization:

http://www.who.int/mental_health/prevention/suicide_rates/en/

9. Trust.

Levels of Trust come from the World Value Surveys. The question asked is:

"Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people"?

10. **Institutional Quality.** Data on Institutional Quality is gathered by different institutions. Here I cite three of the most relevant for the present study.

First, the World Bank offers Governance indicators that are widely used in cross-country studies:

<http://web.worldbank.org/WBSITE/EXTERNAL/WBI/EXTWBIGOVANTCOR/0,,contentMDK:20771032~menuPK:1976990~pagePK:64168445~piPK:64168309~theSitePK:1740530,00.html>

Of these indicators, I will consider the "Voice and Accountability" rankings for different countries. As stated above, Voice and Accountability is used as a proxy for

democracy and it is assumed to have a positive relation with the non profit sector.

Second, Traspparency International builds an index of Corruption in different areas of the economy (public and private). I consider the Traspparency International Global Corruption Barometer Report.

Third, the Fraser Institute gives information on economic freedom through an index that attempts to measure more or less favorable environments to pursue business activities. The institute builds the "Economic Freedom" Index both worldwide and for each state of the United States. Statistics can be found at

<http://www.freetheworld.com/index.html>

11. Regime type. Polity IV.

CIDCM addresses timely and central questions about key topics in international conflict and development. Polity IV contains coded annual information on regime and authority characteristics for all independent states (with greater than 500,000 total population) in the global state system and covers the years 1800-2004. I will use this index to control for type of regime.

Table 1

List of Countries in Sample

Albania	El Salvador	Kyrgyzstan	Saudi Arabia
Algeria	Estonia	Lithuania	Singapore
Argentina	Finland	Luxembourg	Serbia Montenegro
Armenia	France	Latvia	Slovakia
Australia	Georgia	Morocco	Slovenia
Austria	Germany	Moldova	South Africa
Azerbaijan	Ghana	Mexico	Spain
Bangladesh	Greece	Macedonia	Sweden
Belarus	Croatia	Malta	Switzerland
Belgium	Hungary	Nigeria	Taiwan
Bosnia	Indonesia	Netherlands	Tanzania
Brazil	India	Norway	Turkey
Bulgaria	Ireland	New Zealand	Uganda
Canada	Irak	Pakistan	U.K.
Chile	Iran	Peru	Ukraine
China	Iceland	Philippines	Uruguay
Colombia	Israel	Poland	United States
Czech Republic	Italy	Portugal	Venezuela
Denmark	Jordan	Puerto Rico	Vietnam
Dominican Republic	Japan	Romania	Zimbabwe
Egypt	Korea	Russia	

Empirical Results

I have run OLS estimations, which give the results shown in Table 2 below. I only show those variables that have a significant effect on the size of the nonprofit sector.

Table 2. Preliminary Results on the Cross-Country Study

Independent Variable: Size of the nonprofit sector
Institutional measure: transparency_international
Institutional measure: voice_and_accountability
Diversity (Government Failure): religion
Social distress: income distribution: gini
Development: income_per_capita_1999
Market Failure: trust
Market Failure: education_index,

Source	SS	.df	MS		# of obs=67
					F(7,59)=8.62
Model	224190.387	7	32027.1982		Prob>F=0.0000
Residual	219182.154	59	3714.95176		R-squared=0.5056
					Adj R ² =0.4470
Total	443372.541	66	6717.76577		Root MSE=60.95
Size of Nonprofit	Coefficient	Std. Err.	t	p> t 	Beta
Transparency International	-16.87291	6.797622	-2.48	0.016	-.5222167
Voice and Accountability	41.76946	.1499071	2.79	0.007	.468842
Religion	.1197668	.0349126	3.43	0.001	.3249725
Income distribution (Gini)	2.515624	.8812427	2.85	0.006	.297121
1999 PPP income	.0046435	.0020571	2.26	0.028	.5137109
Trust in Others	.167267	.0490253	3.41	0.001	.3956965
Education	-357.8908	79.62623	-4.49	0.000	-.5543958
Constant	248.1295	75.91107	3.27	0.002	

As can be observed, except for the trust variable (more below) the results confirm my hypothesis. In particular, more transparent societies (less corrupt) tend to have smaller nonprofit sectors while societies with a higher degree of voice and accountability (more "democratic") seem to give more opportunities for people to create nonprofit organizations in order to express their opinions and possibly affect public officials (lobby).

The "trust" variable deserves a comment. The subjective measure used at this stage represent an index of "trust on others" taken from the World Value Surveys. My hypothesis states that if people trust other people, the lesser the need for organizations that may correct for private and public failures, that is, the lesser the need for non profit organizations. A more reliable measure should consider "Trust on organizations" rather than trust on others.

Besides considering a more reliable measure of trust, more work is needed regarding model specification, looking for correct variables and missing data. Preliminary results also show the presence of heteroscedasticity and probably omitted variables. At a first glance, some sensitivity analysis will at least be needed to check for the accuracy of the included variables

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