On the behavior of non-profit organizations: the case of the Uruguayan health sector.

Barrios, Juan José[i]
Universidad ORT Uruguay

Setiembre de 2007

Abstract

This essay addresses how non- profit organizations behave differently from for-profits and governments and particularly if nonprofit organizations behave differently from each other.
Using technical and financial data for the whole universe of private Uruguayan non-profit health organizations for a period of 9 years (1982-1990)3, it is examined how different types of non-profit organizations show different behavioral patterns, regardless of legal environment and constraints on profit distribution.

Keywords: non-profit organizations, health organizations, Uruguay

Documento de Trabajo, Nro.33, Setiembre de 2007. Universidad ORT Uruguay.
Facultad de Administración y Ciencias Sociales. ISSN 1510-7477

[i] Juan José Barrios – Ph.D. (c) en Economía, American University, Washington D.C. Profesor – Ivestigador, Facultad de Administración y Ciencias Sociales, Universidad ORT Uruguay.

On the behavior of Non profit Organizations
The Case of the Uruguayan Health Sector

1. Introduction

Estelle James (1997, pp. 1-2) has observed that: "[…]This work (on non-profit organizations) was heavily dominated by economists and by attention to the role of non-profits in providing services. It has had a strong theoretical focus. The authors asked three major inter-related questions: under what conditions do non-profits exist; from which resources do they get their resources and why; and how do they behave differently from for-profits and governments?"

This Essay addresses a variant of the third of these questions by adding a new relevant question: do nonprofit organizations behave differently from each other, that is, from other non-profit organizations? Almost all research on the behavior of non-profit organizations assumes that these are homogeneous entities, the behavior of which is determined mainly by the incentives faced by relevant agents with respect to owners of business organizations, and by restrictions on profit distribution[1]. One of the possible reasons for this treatment lies in the fact that almost all research on non-profits takes place in developed nations, where industries are characterized by the presence of both types of organizations: for profit (i.e. business) and non-profit organizations.

Market conditions in less developed countries are different. In Uruguay, public hospitals and private non-profit organizations cover more than 95% of the supply of health services, while business organizations supply only some specific health services such as emergency services[2].

Using technical and financial data for the whole universe of private Uruguayan non-profit health organizations for a period of 9 years (1982-1990)[3], I examine how different types of non-profit organizations show different behavioral patterns, regardless of legal environment and constraints on profit distribution. Given data constraints, I propose two measures of organizational behavior: a) remuneration of medical staff, and b) amount of outsourced services. Health organizations are divided in three categories: a) Mutualistas, where affiliates (members) exercise control on administrators, b) "Medical" cooperatives, where Doctors play the dual role of administrators and workers, and c) "Non-medical" cooperatives, where some doctors control the organization and hire other doctors and non-medical staff as dependent workers.

My investigation shows that these organizations behave differently regardless of size, location, age and sex of affiliates. Because affiliates can control administrators and doctors, Mutualistas are less profit oriented than cooperatives while non-medical cooperatives tend to outsource some of the services to doctors that presumably are linked to the organization, thus increasing doctor's profits. Medical cooperatives seem to suffer conflict of interests within the organization: on the one hand, higher profits may enhance the provision of higher quality services, but may decrease doctors' salaries.

My research contributes to the existing literature on non-profit organizations by providing evidence on different behavior within the non-profit world, irrespective of legal constraints. It may shed light to the efforts by Uruguayan

[1] Weisbrod (2004) is an exception, see below.
[2] Legal requirements impose the condition of non-profit organizations to institutions supplying comprehensive health services. Suppliers of specific health services, such as emergency services, are not restricted to non-profit organizations.
[3] The data base was borrowed from Gastón Labadie et.al (1994, 1997) who studied the determinants of the decision of Uruguayans citizens to join health care organizations.

Authorities in building a new regulatory environment ("Reforma del Sistema de Salud del Uruguay") to provide new incentives to improve the performance and service quality of Uruguayan health organizations. My work contributes to the theoretical and empirical understanding of the behavior of non-profit organizations in less developed countries by focusing on the Uruguayan health system. Finally, this Essay contributes to the existing theoretical and empirical literature on organizational behavior and links to the literature on workers cooperatives in other parts of the world, such as the countries of Eastern Europe.

Next section briefly reviews the relevant literature on the behavior of non-profit organizations. Next, I describe the characteristics of the Uruguayan Health Sector. Section 4 states the objectives and econometric methodology of this Essay. Section 5 shows the results of this study. Section 6 concludes and shows avenues for future research.

2. Literature Review

Theories dealing with the behavior of non-profit organizations stress the importance of social preferences of the relevant agents as a crucial determinant of their behavior (Susan Rose-Ackerman, 1996). Non-profit organizations would tend to behave according to the preferences of their managers, donors, workers and or customers, depending also on the structural characteristics of the market**.** These theories also investigate in what sense, if any, do non-profit firms behave differently than for-profits**.**

Some authors (Malani, Philipson and Davidl,2001)) state that there is no accepted theory of NFP behavior and little empirical work to compare the different prescriptions of theory. They analyze the behavior of a different set of factors relevant to both non-profit and for-profit firms in the health care sector of the United States. These factors are their supply curve, factor demand, product quality and average cost and the shocks that affect them were defined as: a) demand shocks, b) changes in fiscal policies and c) price discrimination. The basic question were: are there differences in behavior?, and is mixed production possible?

The authors recognize the limitations of the paper when they admit that their conclusions are based on the analysis mainly of one sector: the health care sector. On the other hand, they consider only a limited number of theories, ignoring those who focus on government failures and market failures which may lead to different prescriptions. Moreover, nothing in the paper makes reference to the situation in less developed countries, where government and market failures are pervasive, and where the role of donors, workers and managers is less understood. Also, with reference to less developed countries, many industries (health, education, arts, etc.) show little participation of for profit firms casting doubts of the usefulness of the prescriptions of the paper

The authors develop a general model of firm behavior that integrates the insights of three theories of non-profit firms: a) the altruism model, b) the physicians or worker cooperatives theory or model, and c) the non-contractible quality model.

The first theory, pioneered by Hansmann, (1970) and followed by Lakdawalla and Philpson (1998,2002) incorporates quantity and quality of output into the objective function of the firm. Firms maximize utility (but not profits) over quantity and quality. Non-profit firms are characterized by a preference over both quantity and quality. Firms' behavior (that is organizational form) depends then on owners´ preferences, and in equilibrium, non-profits will be biased to produce in high-quality markets. For profits are not altruistic and they maximize profits.

The theory of workers cooperatives is derived from the NFP hospital models of Pauly and Redish (1973). Doctors (workers) have superior medical (technical) knowledge thus having potential control of resource allocation. In FP, outside investors are residual claimants and tend to dispute power with workers (doctors). Since no residual claimants exist in NFPs, doctors (workers) make input and output decisions to maximize the joint income of the medical staff. That is, the firm in this case maximizes net revenue per doctor (worker). Workers are not concern so much about quality and quantity but for their income (wages). Since nonprofits maximize average net revenue, it will provide less employment and output than its FP counterparts.

The non-contractible quality model follows the work of Hansmann (1980,1996), Easley and O´Hara (1983) and Glaeser and Schleifer (2001). Based on the idea that consumers cannot contract on certain aspects of quality, NFPs enjoy a comparative advantage over FP because the formers are constrained to not distribute profits. This legal constraint act as a disincentive for cheating on the part of NFP firms and benefits consumers because NFP status serves as a signal of

non-contractible quality which varies with the capacity of governments to enforce the non-distribution constraint. Nonprofits may charge higher prices for their products.

As mentioned at the beginning, Malani et.al find no particular difference in the behavior (as defined above) of firms in neither the three theories of non-profit organizations. They also find that non-profits and for-profits coexist in the sector studied.
What do they show?
On the other hand some authors pay attention to the models the importance of **weak governance** (no incentive pay, presence of powerful shareholders, and threats of takeovers) on NFP behavior (Glaeser, 2002).

Based on different assumptions about the preferences of managers, donors, workers and customers, the model is capable of making some predictions:

The first prediction, which is in line with Malani´s et.al paper, is that NFP firms will tend to show a higher level of production due to their direct taste for production. However, under certain conditions, for profits may end up producing more of those goods that appeal more to customers.

Secondly, since donors and workers are assumed to have opposite preferences on the nature of the product, then, the one who has more influence on the manager will determine which the nature (quality) of the product and to who will be directed the behavior of the firm. Internal organization matters. The influence of (different type of) workers is mitigated by the preferences of donors and customers (competition). Glaeser discusses several scenarios where the influence of workers is limited by the preferences of donors and customers.

Thirdly, the characteristics of the manager may determine that the volatility in the methods and practices of non-profits may be higher than the volatility in for-profits because in the latter, decisions are made based on the preferences of customers and partly of workers.

Forth, the paper shows that income shocks have lasting effects on nonprofits and lead them to cater more to customer preferences in the case of negative shocks.

On the other hand, workers are prone to receive lower salaries provided they keep control of input and output decisions made by the manager. Since nonprofits are generally worker oriented, they are less flexible to changes in consumer demand than for profits. However, their behavior may show more volatility due to the dependence on manager's preferences.

A particular important feature of this paper is that it considers the preferences of the actors directly influencing the behavior of nonprofit organizations, a point that is generally absent in analysis of this type. The author focuses on specific sector of an advanced country, no references made to the less developed countries.

In sum, Glaeser builds a model of firm behavior considering the preferences of 4 important agents: managers, workers, donors, and customers. Nonprofit behavior depends crucially on who of those actors is more powerful to decide on input and output decisions. In other words, nonprofit behavior depends on the preferences of these agents. These agents are assumed to have different preferences on the nature of the firm's product.

Glaser's model considers a nonprofit organization that produces a product which is characterized by the quantiy and quality (attributes) of that product. For-profits firms maximize profits. In non-profits, it is assumed that the manager makes input and output decisions and decides on the attributes of the product, based on her preferences and considering the behavior of workers, donors and customers which is influenced by the nature of the product. In other

words, since preferences differ, the potential conflict of interest arises and influences managers' decisions on quantity and quality of product.

Finally Holtman´s (1983) paper builds a model derived from the literature on utility pricing, that allows for the existence of nonprofit, for profits and government firms in the same industry. His model's features are that demand for goods and services is stochastic and producers decide on the capacity (which is exogenously given at a macro level) to use and price to be charged before they know actual demand. The existence of nonprofit firms in some industries may be motivated efficiently by stochastic demands . However, if availability is important for consumers, for profit firms may enter the market and improve welfare.

Firms are assumed to maximize expected consumer's willingness to pay minus total costs. Under the assumptions of the model nonprofit firms arise naturally as a means of efficiently rationing services when demand exceeds supply, but where the optimal price equals the variable costs associated with sales, and as such covers only operating costs, that is, nonprofits will have negative profits. Since rationing devices reflect different ethics, a variety of different nonprofit organizations are expected to arise in the market. Moreover, manager's motivations may be an important determinant of the final price and rationing procedures used. Since the model gives equal weight to producer's and consumer's benefits, the distribution of these benefits depends on the (optimal) choices of managers.

He concludes that the presence of uncertainty in demand, the importance of availability and the way managers ration the supply of goods and services complicate the welfare criteria by which to evaluate the performance of firms.

This partial equilibrium paper of Supply and Demand of Goods determines the existence of nonprofits firms and the general structure of the market (that is, the existence of nonprofits, private for profits and public firms) based on the excess demand of those goods and services and ignores any private or public failures that may induce entrepreneurs to choose a particular organizational form. In that sense, the welfare conclusions are limited by the very nature of the analysis. Also, since capacity is fixed at the level of society, the paper does not consider supply factors such as technological change and other institutional factors that may affect it. Lastly, the paper concentrates in some sectors of the United States, ignoring other countries.

The Case of Uruguay

Labadie and Labadie et.al (1994, 1997), Lazarov and Grau (1999) have performed studies on certain aspects of the Uruguayan Health Sector.

Gaston Labadie et.al (1997) attempted to analyze the determinants of the decision on whether to affiliate to a certain health institution. They perform an econometric study on those determinants, and, as a by product, suggested that non-profit health organizations behave differently in terms of certain key variables, including outsourced services, net profits relative to total incomes, investment rates, medical staff remunerations, production remunerations, total expenses per affiliate, and utilization levels. Organizations, albeit non-profits, seem to behave differently, they conclude, and hypothesize that property rights seem to determine a different set of incentives depending on who is the principal of the organization. Their study suggests similar set of conclusions arrived at by the authors reviewed above.

Labadie et.al, study, however, lacks a more rigorous approach to test their suggested behavior. Their tables suggest correlation between key variables and types of organizations, taking in consideration if the organization is located in Montevideo or in any other of the 18 remaining jurisdictions of the country. I extend their analysis by performing a series of regressions to test for the relevance of type of organization (property rights) on institutional behavior, controlling for other variables, such as size, location, market penetration and degree of competition.

The case of Uruguay is interesting in itself because almost 85% of health services are supplied by non-profit organizations (public and private) under the same regulatory framework. This seems to be an ideal framework to study the behavior of non-profits and test whether they behave as non-profits or as non-profits in disguise (Weisbrod)

3. The Uruguayan health sector

Uruguay's demographic and epidemiological evolution allows us to reach the following conclusions (Grau and Lazarov, 1999):

1. Extremely low rate of population growth (close to replacement rate)
2. Proportion of adults (over 65) has been increasing
3. Strong process of urbanizations and rural-urban migration
4. High literate rates (close to 99%)
5. Universal access to potable water
6. Good sanitary conditions
7. Decreasing infant mortality from 46.3/1000 in 1970-74 to 17.5/1000 in 1996
8. High life expectancy
9. Predominance of chronic non-transmissible (vis a vis infectious) diseases
10. Poverty levels declined from nearly 30% in 1985 to less than 22% in 1992

The Uruguayan Health Sector

The Supply of services within the Uruguayan Health sector is split between private and public suppliers (Labadie et.al, 1997; Grau and Lazarov 1999). Public providers include: a) Hospitals and other health institutions comprised in ASSE (Asistencia a la Salud y la Seguridad Social), a division of the Secretary of Public Health. These institutions cover the needs of around 30% of the Uruguayan population; b) Military and Police Hospitals to which some 15% of the population is affiliated; c) the University (Public) Hospital; d) the Hospital of the Banco de Seguros del Estado (State Insurance Company), which is targeted to specific health issues, such as individuals seriously burned and other accidents, and the Fondo Nacional de Recursos (National Resource Fund), a decentralized organizations that funds high-cost, complex medical treatments. Most of private providers: a) Instituciones de Asistencia Médica Colectiva (Institutions of Collective Medical Assistance, ICMA), b) institutions of partial coverage, and c) other private institutions, cover more than 52% of the Uruguayan population[4]. Broad Health coverage has been a key factor that characterizes ICMA and differentiates these institutions from other private organizations, although it is not required that they supply a mandatory set of services according to Secretary of Health guidelines. Specifically, ICMAs are not required to supply high-technology, high-cost services, except by explicit requirement of the Public Authority[5].

Public Sector and Regulation

[4] An ICMA can be conceptualized as a pre-paid health insurance which covers a broad array of medical services (hence the term "collective"), and that is managed (at least partially) by medical doctors. Medial Doctors can be partners or salaried workers of an ICMA. Since 1943, the participation of medical doctors is mandatory: every institution must hire a "Technical Director" who is responsible for the correct technical functioning of the organization.

[5] ICMAs are required to supply some of these high-cost services. In this case, these services are funded mainly with public funds, managed by the Fondo Nacional de Recursos (National Resource Fund), through direct subsidies.

The principal component of the Public Sector is the Secretary of Health, created by decree in 1934. Until 1987, both regulation and supply of heath services were concentrated and centralized within the Secretary. In 1987, the Administración de los Servicios de Salud del Estado (ASSE) was created as a decentralized public organizations in a effort to improve the efficiency of the supply of medical services. The Secretary of Health kept its normative and regulatory role: it defines Uruguay's Health Policy, supervises and controls private sector organizations, as well as the professionals within the health sector (medical doctors, dentists, etc.). There are, however, some other public offices that regulate specific issues of the Health Sector in Uruguay: for example, prices are regulated by the Secretary of Economy and Finance, and labor relations are regulated by the Secretary of Labor and Social Security.

ASSE is in charge of the public supply of health services through a network of more than 65 hospitals and dozens of other decentralized organizations. The Constitution mandates the State to secure the provision of health services to the entire population, including those who could not afford to pay private assistance. In consequence, the supply of public services is concentrated mainly within the poor and low-income population. On the other hand, ASSE can delegate the supply of services to other public and private institutions, such as local governments and ICMAs. The participation of the public sector in the supply of services has been decreasing over the last decades: the number of beds has decreased by 40% to the private sector (basically ICMAs). This trend has been particularly acute outside Montevideo, the country's capital, where the loss of beds has reached more than 50% since the 1970s. However, public institutions still have higher capacity in terms of number of beds per affiliate: 52 beds per 10,000 inhabitants compared to 26 beds every 10,000 inhabitants for the private sector

On the other hand, although the Constitution mandates the Public Sector to provide free health services to low income individuals and those in poverty, in practice, it also supplies free services to salaried middle class individuals. This constitutes an indirect subsidy to people not in poverty and arises because the State subsidizes the private sector through direct contributions of salaried workers (more below). In other words, although most salaried workers have access to private institutions that receive subsidies from the State, they (workers) choose to receive health services in the public sector increasing the latter's losses (because public institutions do not charge for those services).

Regulation

The State imposes a wide number of norms and regulations upon the public and private health sectors. The latter is heavily regulated in two principal areas: coverage and prices, number of affiliates, investment policy, medical practice, and human resources[6].

1. Coverage. We can visualize two ways of analyzing this area: first, from the point of view of the quantity of services supplied (vertical coverage), and second through the analysis of the population covered by the private sector (horizontal coverage)

a. Vertical coverage. ICMAs are required to supply a wide variety of health services ("integral" coverage) independently of the economic and financial status of the affiliate[7]. This coverage includes *basic, complete and egalitarian medical assistance* (in the areas of surgery, pediatrics, gynecology, and general medicine), *preventive actions,* and *other services such as emergency, disease treatment, etc.* ICMAs are not required to supply certain services such as therapy and diagnosis techniques and high-cost, state of the art (high technology) services. All these services are subject to inclusion or exclusion by the Secretary of Health.

b. *Horizontal coverage.* Workers can choose to affiliate to the ICMA they desire. The State, through the Banco de Previsión Social, collects a percentage of the retributions of workers and pays each ICMA a fixed amount for each worker who has chosen to join that private organization. Coverage is also extended to rural workers

[6] The regulatory framework also includes regulations on information systems, accounting, tax exemptions and other issues. The framework applies in general, that is, to organizations located in Montevideo and in the rest of the country.

[7] See Appendix 1 for a List of Services usually supplied by ICMAs

and other individuals who own small enterprises. ICMAs have certain rights to limit the access to health services, such as the case of individuals with poor health records. Finally, coverage is permitted only in the Province where the ICMA is located, except in the case of emergency and rural assistance.

2. Prices. Prices are regulated by the Secretary of Economics and Finance (SEF). The final price charged by an ICMA has several components: First, a fixed amount (cuota) is charged to every affiliate, except to those formal workers who contribute a percentage of their salaries. These workers and their employers contribute (some 6% of their salaries) to the Banco de Previsión Social (BPS) which transfers to each ICMA between 85% and 90% of the value of the cuota. If workers´ contributions are less than this latter percentage, BPS pays for the difference, in fact subsidizing health care to the less affluent. Cuotas were liberalized in 1984-1985 and 1990, in the latter case for just three months. From 1993 to the present, ICMAs can adjust the value of their cuotas according to the criteria set by SEF. The second components of the amount charged to affiliates are the so-called "tikets" and "rates", or, more generally, co-payments. These concepts include additional payments when buying medicines to the ICMA, setting appointments with doctors for in-patient assistance , etc. Co-payments were liberalized until 1993, when they were included in the same adjustment mechanism as "cuotas". In 1990, ICMAs were allowed to charge up to 7.5% of the average cuota as a contribution to projected investments in infrastructure. ICMAs should inform biannually to Secretary of Healt on the amounts collected and the amounts invested. The relative importance of the principal sources of income (1992) of ICMAs were as follows:

Uruguay: Institutions of Collective Medical Assistance, Sources of Income. 1992		
Sources of Income	**US Dollars**	**%**
Total	441,064	100.00
Cuotas	**339,086**	**76.90**
Through DISSE	159,715	36.20
Voluntary and Firms	179,370	40.70
Co-Payments-Assistance-	**13,636**	**3.10**
Co-payments-Tikets-	**32,492**	**7.40**
Other Sources	**55,849**	**12.70**
Source: ORT (2003)		

3. Number of Affiliates. In 1981, Law 15181 established a minimum number of affiliates as a requirement for all ICMAs. In 1983, this minimum was set in 20,000 affiliates for each ICMA located in Montevideo, Uruguay's capital. The early 80s brought the first international debt crisis and was in part responsible for a process of mergers of ICMAs, where the smallest were absorbed by the largest organizations. In 1988, the Government regulated the way affiliates are allocated among ICMAs to balance the number of clients of each organizations taking factors such as risk (population over 65 years) in consideration.

The following table shows the number of affiliates (in thousands) to ICMAs, differentiating by region (Capital Montevideo and Interior) and gender for the years 1983 to 1993. Since Montevideo and the rest of the country show different characteristics on the type of organization, market served, degree of competition and other factors (more below), it is of interest to differentiate between those regions from the start. The scale of operation has become a key factor which determines the viability of each organization. This issue becomes more relevant due to the social characteristics of Uruguayan health sector: reduced market, low relative incomes and almost 40% of the populaton concentrated in only one city, Montevideo. The importance of size, measured either as the number of affiliates and or the number of beds per hospital will be tested as a key explanatory variable of the behavior of Uruguayan health private non-profit organizations.

Total number of affiliates to Institutions of Collective Medical Assistance. By Region, Gender and Year												
Region	**Gender**	**Year**										
		1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Montevideo	Male	416	414	420	417	406	456	451	463	476	477	469
	Female	457	453	470	463	454	506	493	506	511	505	499
	Total	873	867	890	880	860	962	944	969	987	982	968
Interior	Male	160	162	176	215	236	256	277	279	289	284	286
	Female	135	138	145	158	175	194	218	232	240	239	235
	Total	295	300	321	373	411	450	495	511	529	523	521
Country	Male	576	576	596	632	642	712	728	742	765	761	755
	Female	592	591	615	621	629	700	711	738	751	744	734
	Total	1168	1167	1211	1253	1271	1412	1439	1480	1516	1505	1489
	W/D	96	86	29	27	10	1	32	34	21	15	11
	Total	1264	1253	1240	1280	1281	1413	1471	1514	1537	1520	1500

4. Other Regulations

a. Infrastructure, Technology and Equipment. The state regulates the type of investment ICMAs can project and implement. An additional charge to affiliates (up to 7.5%) of the cuota is permitted to fund the planned investments. However, according to Lazarov and Grau (1999), controls on investments are not enforced effectively and there exists a lot of discretion on the part of the authorities. On the other hand, due to the additional charge cited above, there is a tendency to incorporate technology as a means of competition with other institutions and not as a consequence of a rational, economic decision according to the needs of the population. Finally, high cost, high technology, complex activities are in general funded through Fondo Nacional de Recursos (National Resource Fund), a public organization. This situation implies a negative incentive to ICMAs to invest in technology and research, since it implies that ICMAs transfer many of these activities to the Fund and do not internalize them, as it should in many circumstances.

b. Human Resources. Regulations affect a variety of issues related to the conditions of the labor market in the Health sector. First, there are some activities where a minimum number of employees is required (such as intensive care units). Medical practice is heavily regulated and co-exists with a strong union. This has led to higher real wages and several jobs (three) per doctor as a means to avoid unemployment, especially in Montevideo. On the negative side, three jobs per doctor leads to a lower quality of services, since it is very difficult for the doctor to get to know the real situation of his/her patients. Moreover, three jobs imply more than 12 hours of work per day, including Saturdays and Sundays which makes almost impossible for a person to achieve a satisfactory performance in terms of job productivity.

The regulatory framework suffered changes since the 1960s until the 1990s. The following shows a summary of the most significant changes:

1968	❖ Prices are set by the State
1969	❖ Definition of "Non-profit": no retributions to Members of the Board of Directors
1975	❖ Workers of the private sector can choose to affiliate the ICMA of their choice without limitations
1983	❖ Partial liberalization of prices with upper bound ❖ Definition of "Integral Assistance" ❖ Minimum size (20,000 affiliates) required for authorization
1984	❖ Full liberalization of prices ❖ Upper bound for Co-payments
1985	❖ Regulation of prices ❖ Regulation of Co-payments
1986	❖ Seats on the Board may be "rented" ❖ Minimum size requirement abolished
1988	❖ Some limitations on affiliation acceptance based on age ❖ Some limitations on medicines supplied by ICMAs
1989	❖ Upper bound for Investment Cuota (which is charged to affiliates) ❖ Upper bound for co-payments
1990	❖ Partial liberalization of Prices: Upper bound for cuotas and co-payments
1992	❖ Full liberalization of co-payments and cuotas ❖ Regulation of nominal value of the "DISSE-cuota" ❖ ICMAs are allowed to supply partial services

Type of Organizations

ICMAs can be categorized according to how they define the property rights of their directors, staff, and affiliates[8]. First, Mutualistas, where the Board of Directors is elected by the affiliates to the Institution, resemble Consumer Cooperatives since "consumers" (i.e. affiliates) can be elected to the Board and exercise control over quantity and quality of services. Aside from this fact, most of the medical staff is hired and earn a salary. Second, Cooperativas Médicas (Medical or Doctor´s Cooperatives) resemble Producer´s Cooperatives. Doctors are both partners and suppliers of services. These Cooperatives can in turn be subdivided into: a) Doctor´s Coopertavies where the Institution is directed by a group of doctors who are members of the Cooperative and are elected to the Board by the other doctors. However, as cooperatives, these Doctors are both owners and "hired" workers; b) Cooperatives where Doctors, as owners and members of the Board, hire other Doctors as salaried workers. This last type of organization resembles a simple for-profit firm.

Mutualistas, because they are subject to the control of clients (consumers) should supply higher quality services than the other two types of health organizations (Hansmann, 1980): both types of cooperatives lack client control and may take advantages, arising from information asymmetries, supplying lower quality services at the same prices and obtaining higher rates of profits per affiliate. In consequence, one of the objectives of this essay is to analyze the factors that influence the rates of profits of the different types of non-profit organizations. Should cooperatives obtain higher rates of profits than Mutualistas, the former may be behaving as for- profit organizations "in disguise" (Weisbrod, 1975), channeling profits to doctors at the expense of consumers.

[8] A distinction introduced by Labadie et.al (1997)

4. Theoretical and Econometric Specifications

Theory

I have outlined the main motivations for studying the behaviour of non-profit organizations as suppliers of health services. Traditionally, efforts to understand the determinants of the behaviour of non-profit organizations have concentrated in the differences with business organizations. Non-profit organizations exist because of the altruistic preferences of their founders, because of market failures affecting how consumers regard the quality of the products delivered and by environmental constraints such as the impossibility of distributing profits.

The above research, in general, has treated non-profit organizations as homogeneous, their behaviour being explained by the factors outlined in the above paragraph. However, non-profit organizations are not all alike. Malani et.al above, and Weisbrod (2004) deal with behavioural differences among non-profit organizations. From a theoretical point of view, Malani et.al develop a model of organizational choice as follows:

Using a technology F, patrons/onwers are asssumed to maximize the following utility function:

(1) $U = U(z, y, x, q)$ where "z" represents consumption, "x" is a vector of inputs "y" is output and "q" observable quality

On the other hand, firms´ profits are given by:

(2) $$\pi^i(y,q) = p^i(y,q) * y - c^i(y,q) + A^i$$

where the first term on the right hand side is the inverse demand function, the second represents the cost function and the last term is a catch all for donations of any type. Superscript "i" represents the type of organization (for-profit or not-for profit)

NON-DISTRIBUTION CONSTRAINT

Owners/Patrons maximize (1) subject to the constraint that consumption "z" must be covered by income I. However, income means different things depending on the type of organizations. If for-profit, income is simply profits, and the owners/patrons budget constraint is

(3) $$z \leq I^f = \pi^f = p^f * y - wx + A^f$$

Where "w" is a vector of input prices.

If the firm is a non-profit organization, then owners/patrons cannot receive profits (cash income is zero), but can receive non-cash income in the form of perquisites. Formally, their budget constraint

(4) $z \leq I^n = d(\pi^n) = d(p^n * y - wx)$ where d(m) may be though as the income that would provide the same level of utility as "m"dollars. In this sense, it is assumed that d(m) $\leq$ m (the utility from cash is at least as high as the utility from perks)

OUTPUT RESTRICTIONS

Non-profit organizations may be subject to regulations requiring their products to satisfy fiduciary duties and or to serve certain purposes (educational, etc.). Formally, the model requires that non-profit output and observable quality belong to a set of outputs that meet the above criteria:

(5) $(y,q) \in N$

TAX BENEFITS AND PRICE DIFFERENTIALS

Non-profit status implies tax benefits with respect to for-profit firms, Ceteris paribus, this means that average costs are lower in non-profit firms. Moreover, under certain conditions, because consumers prefer products produced by non-profit organizations, these organizations may be in a position to charge higher prices for their products. Formally, these cost and price advantages :

(6) $c^n(y,q) \leq c^f(y,q), \quad c_y^n(y,q) \leq c_y^f(y,q), \quad c_q^n(y,q) \leq c_q^f(y,q)$

(7) $p^n(y,q) \geq p^f(y,q)$

INDUCED UTILIY AND CHOICE OF ORGANIZATIONAL FORM

In equilibrium (where consumption "z" equals Income "I") , the following induced utility functions for patrons/owners follow:

(8) $v\left[\pi^f(y,q), y, x, q\right] = u\left[\pi^f(y,q), y, x, q\right]$ f or a for profit firm, and

(9) $v\left[d(\pi^n(y,q)), y, x, q\right] = u\left[d(\pi^n(y,q)), y, x, q\right]$ for a non-profit organization

The choice of organizational form depends on whether (8) is lesser or greater than (9)

This model does no entirely fit into our research because, for example, tax incentives apply to all non-profits, so we can not expect differences in behavior arising from this type of incentives. However, the model does highlight the importance of product quality, the importance of donations and the fact that profits may represent a factor affecting behavior of non-profit organizations. More specifically, allocation of property rights may create incentives that affect the behavior of organizations: if affiliates to health institutions have a higher degree of control over management and medical staff, (that is, they have acquired property rights relative to doctors and management), this type of organization may perform more in the interests of those affiliates and supply, for example, better quality health services and pursue a lesser level of profits. On the other hand, if doctors have the upper hand and if controls to their work is less effective, health organizations may perform more in the interests of those professionals (for example, pay higher medical salaries or contract more outsource services) than other non-profit organizations.

As was mentioned above, market structure of the Uruguayan health sector is characterized by the existence of three main types of organizations: a) mutualistas, where affiliates can be elected to the Board of Directors and thus exert

control over management and medical staff, b) "medical" cooperatives where doctors are patrons and employees at the same type and where affiliates are treated as customers, and c) "non-medical" cooperatives, created and manged by doctors, who hire other doctors as employees and where affiliates are customers.

These type of organizations create a different set of incentives that stem from differences in the allocation of property rights within the organization, irrespective of the legal environment and other factors. In particular, I have developed the following testable hypotheses:

Theoretical Hypotheses

Hansmann (1980) stresses the importance of asymmetric information for the existence of non-profit organizations. On the other hand, Weisbrod (1975) points that non-profit organization may behave like for-profits in disguise: Principals may exploit the idea that non-profits are regarded as trustworthy since the profit motive is not their main concern. As a consequence, they attract consumers and deviate profits in the form of higher salaries and perquisites.

The case of Uruguay is interesting in itself since the vast majority of health services are supplied by non-profit organizations, either public or private. Since for-profits are marginal, differences in behavior may reflect the possibility that the non-distribution constraint should not be regarded as a signal of better quality of service.

One may be tempted to think that Medical Cooperatives behave more like a "pure" non-profit organization, meaning that cooperatives (doctors) are more likely to behave like altruists (Preston, 1996), donating part of their time in the form of reduced salaries with respect to the other type of cooperatives. I will argue, however, that since medical cooperatives lack "consumer" control (Hansmann, 1980), they will tend to have higher costs in the form of salaries to technical personnel (i.e. medical staff) than mutualistas. These higher salaries may hide profit distribution since doctors are the principal labor suppliers in medical cooperatives. Thus:

H1: Medical Cooperatives spend relatively more in medical staff remunerations than non-medical cooperatives and mutualistas.

I will also argue however, that non-medical cooperatives should show the lowest share of costs allocated to assistance remunerations. The reason is that doctors act as entrepreneurs ("capitalists"), investing their time as Directors and hiring other doctors and staff as salaried workers. Basic efficiency (for profit) reasons indicate that production costs must be minimized according to marginal rules Later, I will argue that non-medical cooperatives channel profits in the form of other costs. Thus

H2: Non medical Cooperatives spend less in medical staff remunerations than medical cooperatives and mutualistas.

One of the basic fact of the Uruguayan Health sector is that many of health services are outsourced. Since health organizations are managed, in one way or the other, by doctors, outsourcing without any economic justification becomes a real possibility as another way to channel profits to doctors. I postulate that non-medical cooperatives may channel otherwise profits through a higher degree of outsourcing with respect to medical cooperatives and mutualistas. On the other hand, since consumers have the possibility of controlling the management, mutualistas should show the lowest degree of outsourcing. In consequence:

H3: Non-medical Cooperatives spend more on outsourcing than medical cooperatives and mutualistas

H4: Mutualistas spend the least in outsourced services

Econometrics

The Model

Information consists of a panel data of the financial results and utilization levels of each of the 70 non-profit organizations supplying comprehensive health services to the Uruguayan population for a period of 9 years (1982-1990), for a total of 630 potential observations.

The econometric model takes the following generic form:

$$y_{it} = \alpha x_{it} + \beta z_{it} + \varepsilon \quad (1)$$

As suggested above, regressions will be performed considering two different dependent variables as representing the behavior or Uruguayan non-profit health organizations: a) the amount paid to medical staff by each type of organization as a percent of total operating costs, and b) the amount of services outsourced by each type of organization as a percent of total operating costs

Since organizations are restricted to the same legal environment, incentives for differences in behavior should stem from a different set of factors. Following the lines outlined above, I chose the type of organization as the key explanatory variable explaining differences in behavior as defined above. In this sense, I considered three types of organizations: a) Mutualistas, b) Medical Cooperatives (the omitted variable), and c) Non-medical cooperatives. I have excluded one medical cooperative from the sample. This organization is the largest health organization in the country and one of the oldest. Its behavior shows intrinsic features that fall outside normal patterns for the industry and create econometric distortions. Thus the universe of observations falls to 621. Net of missing values, total number of observations reaches 321 observations for the whole period.

As mentioned above, the Uruguayan health market shows different competitive structures in the capital (Montevideo) and the rest of the country (Interior). Montevideo concentrates 40 of the country's population and the majority of health organizations. Competition is Accordingly, behavior may be affected by the location of a specific organization. I control for location creating a binary variable for the organizations located in Montevideo (the variable takes the value 1) and for the Interior (value 0).

Next, differences in behavior may appear because of differences in size. Larger organizations may spend different amounts of medical salaries per unit of operating costs than smaller organizations. On the other hand, larger organizations may have more adequate infrastructure to supply a larger set of health services than smaller organizations. Size is measured by the number of affiliates of each type of organization each year (CTOTMEM).

Number of beds (BEDS) is an important factor to consider, especially when considering the amount of outsourced services. Some organizations may accept a large number of affiliates even when they lack the adequate number of beds. These organizations hire hospital services to other organizations. So I need to control for the number of beds as a factor that may signal a different behavior on the part of health organizations.

Finally, different patterns of behavior may arise due to differences in age and sex of the affiliates. It is well know that old males need more medical care than old females. Differente age and sex structures may thus create incentives for

different behavior regardless of organizational type. I gathered data on age and sex of affiliates for each organization and for each year between 1982 and 1990.

For both dependent variables, I follow the following sequential strategy: I first regress both dependent variables on the type of organization. Then I add each of the control variables one at a time. Results are shown in Tables 1 and 2 for each dependent variable.

Results

Remmuneartions of Medical Staff

Hypothesis 1 states that medical cooperatives spend more on medical staff than the other two types of institutions (i.e. non medical cooperatives and mutualistas). The intuition behind this hypothesis relies on two basic assumptions regarding property rights. First, affiliates of mutualistas exert direct control over management and expenses; second, in the case of non-medical cooperatives, there are doctors who act as "owners" and doctors who are employees and do not have a direct saying over management. As a consequence, since these restrictions do not apply to medical cooperatives (where affiliates do not have direct control over managment and where doctors are at the same time "owners" and "employees"), I would expect higher salaries in the latter organization.

My hypothesis 2 states than "non-medical" cooperatives behave more like for profit organizations in the sense that they will try to maximize profits (although they may or may not distribute those profits directly). Doctors who hire other doctors as employees manage these organizations. As a consequence, Mutualistas and medical cooperatives, facing restrictions on management and showing a potential greater concern over quality of services will tend to spend more on salaries of medical staff.

Table 1 outlines the results of the regressions for remunerations of medical staff and corresponds to the first two theoretical hypotheses above.

A confirmation of Hypothesis 1 requires than the coefficient of medical cooperatives be the largest relative to the coefficient of mutualistas (organization type 1) and positive (since organization type 2, non-medical cooperatives, is the ommited variable). Both requirements are met: results confirm the first intuition about medical cooperatives and salaries of medical staff. On the other hand, since organization type 2 is the omitted variable, a confirmation on Hypothesis 2 requires positive coefficients for mutualistas and medical cooperatives. Results also confirm the theoretical intuition.

Furthermore, when other variables such as location, size, age and sex of affiliates are included as explanatory variables, mutualistas and medical cooperatives spend significantly more on medical staff than non-medical cooperatives. Although the importance of the effect is not relevant, and it is often not statistically significant, the number of affiliates (size) negatively affects medical expenses as a share of total operating costs. This latter result suggests that Uruguayan health organizations may be exploiting economies of scale, at least in the 1980s. The number of beds is significantly and positively related to expenses in medical staff. As I mentioned above, some organizations may advertise the offering of heath services (in-hospital) but end up outsourcing them as they lack the adequate number of rooms and beds to cope with peaks in demand. The correlation between beds per affiliate and the number of affiliates is less than 0.50, which in part is a consequence of the strategy of some health organizations. So it is necessary to include the number of beds of each organization to control for this factor and obtain a more reliable effect of the type of organization.

Finally, old (over 65) males (measured as the percentage of men over 65 on total affiliates) appear to affect negatively what health organizations spend on medical staff. This is somewhat counterintuitive, since older persons require more medical care. More old females, on the contrary seem to represent more medical expenses in terms of remuneration of medical staff. Note that if we consider just old persons without discriminating by gender, the effect becomes almost irrelevant and insignificant. Since I measure old males and females as a percent of total affiliates, the effect need not cancel should we gather old persons under the same variable. This situation may indicate that age is not a relevant factor on medical expenses, which is counterintuitive and needs more investigation. If this is true, then current plans of Uruguayan authorities to subsidize the attention of the old with larger amounts of money than the attention of the young maybe misplaced, on average.

TABLE 1

Dependent Variable : Remunerations of Medical Staff

	Regression 1	**Regression 2**	**Regression 3**	**Regression 4**	**Regression 5**
Orgtyp1	0.0427453*	0.022027 *	0.0210326**	0.0218763 **	0.0286138 *
Orgtyp4	0.1430825*	0.1432535*	0.1422617 *	0.1217871 *	0.1191479 *
Beds		0.0004669*	0.0007288 *	0.0007065 *	0.0006435 *
Size			-8.28e-07 **	-6.50e-07 ***	-4.96e-07
Location				-0.0265454 **	-0.0370478 **
Oldmale					-0.2615105 **
Oldfemale					0.2613303 **
Constant	0.2826176 *	0.2702158 *	0.2783657 *	0.2964068 *	0.2898085 *
# observations	350	350	350	350	350
F	126.17	110.30	85.89	69.24	5136
Prob F	0.0000	0.0000	0.0000	0.0000	0.0000
R2	0.4210	0.4888	0.4966	0.5020	0.5125
Adj R2	0.4177	0.4844	0.4908	0.4947	0.5025
Root MSE	0.07503	0.0706	0.07017	0.06989	0.06935

* Significant at 1% ; ** Significant at 5%; *** Significant at 10%

Amount of Outsourced Services

The intuition behind hypothesis 3 (Non-medical Cooperatives spend more on outsourcing than medical cooperatives and mutualistas) relies on similar considerations. Cooperatives where doctors are in charge on management but cannot distribute profits due to legal constraints decide to outsource many services to deviate funds that would otherwise have been invested, thus not distributed as profits. Since neither affiliates nor hired doctors directly control management in non-medical cooperatives, services hired outside may gain in importance and act as a "profit deviation" activity.

The same intuition lies behind Hypothesis 4 (Mutualistas spend the least in outsourced services) since affiliates have direct control on management and would not so easily tolerate the outsourcing of services that may be efficiently supplied by the organization itself.

Results show confirmation for Hypothesis 3. Since Mutualistas is the omitted variable, This hypothesis requires the coefficient of Non-medical cooperatives (Orgtyp2) to be positive. The coefficient of medical cooperatives indicates that they spend less on outsourced services than mutualistas. As a consequence, non-medical cooperatives constitute the organization that shows the highest percent of operating expenses in the form of outsourced services.

Data tends to not confirm hypothesis 4. The intuition of a higher degree of control of management on the part of affiliates seems to be not enough to ensure that medical cooperatives spend more on outsourced services. This may not

be inconsistent with reality, since medical cooperatives may nevertheless use the fact doctors earn money based on "payment by medical act" to provide more "in-house" services and still deviate profits. In other words, it maybe true that doctors of medical cooperatives may be indifferent about outsourcing services, since they may be still earning money as they are paid more the more they supply services.

Controlling for other variables such as number of beds, size, location and gender does not change the above conclusion: type of organization matters to determine behavior of Uruguayan non-profit health institutions.

There are differences in behavior, however. The more beds a hospital has, the less services are hired outside which seems intuitively reasonable since more beds represent more capacity to provide in-house services to affiliates. Likewise, the more affiliates an organization has, the more it tends to outsource its services to other organizations, which would mean that capacity is constrained to a certain number of patients. Montevideo seems to increase the incentives to hire independent contractors and the services of other hospitals although the relevance of the effect is small. Finally, and contrary to what it happened to the salaries paid to medical staff, more older males are positively related to the hiring of outside services, while older females are negatively related. Similar comments apply to the latter situation, especially to the fact that males and females tend to create incentives in opposite directions.

TABLE 2

Dependent Variable: Amount of Outsourced Services

	Regression 1	**Regression 2**	**Regression 3**	**Regression 4**	**Regression 5**
Orgtyp2	0.0609342 *	0.0199368 ***	0.0170787	0.0177872	0.0241538 **
Orgtyp4	-0.0321229 **	-0.0732348 *	-0.0732667 *	-0.0580844 *	-0.0470793 *
Beds		-0.000919 *	-0.0017175 *	-0.001701 *	-0.0016235 *
Size			2.52e-06 *	2.39e-06 *	2.20e-06 *
Location (Montevideo)				0.0189232	0.0320618 **
Oldmale					.3124404 *
Oldfemale					-.3125294 *
Constant	0.1877149 *	0.252898 *	.2311334 *	.217719 *	.2191289 *
No of observations	351	351	351	351	351
F	30.29	71.83	70.16	56.53	41.84
Prob F	0.0000	0.0000	0.000	0.0000	0.0000
R2	0.1483	0.3831	0.4479	0.4503	0.4606
Adj R2	0.1434	0.3778	0.4415	0.4424	0.4496
Root MSE	0.09614	0.08194	0.07763	0.07757	0.07707

* Significant at 1%

** Significant at 5%

*** Significant at 10%

Conclusions.

Using panel data for 70 Uruguayan health organizations for the period 1982-1990, I show that the non-profit organizations may behave differently regardless of legal environment and restrictions such as the non-distribution constraint (on profits). Behavior of non-profit organizations is affected by the allocation of property rights to the inside of the organization, by which agents have the upper hand with respect to strategic and management decisions. My work supports Weisbrod´s assertion that non-profit organizations may behave like for "profits in disguise" in the sense that they are created to make a profit through higher salaries and/or the outsourcing of services, and other strategies. My work contributes to the literature on behavior of non-profit organizations in less developed countries, where research on the topic is scarce. My work focus only on comparing the behavior of non-profit organizations, not with respect to business firms but with respect to other non-profits, which constitutes another innovation for the research performed in less developed countries. Another contribution of my work relates to the efforts of current public officials to reform the Uruguayan health system. My study provides evidence of the way different organizational structures provide incentives that may affect the efficiency in the production of health services, irrespective of the legal nature (not-for profit, for-profit) of the organization involved and regardless of location, size, and demographic characteristics.

Data Sources

Data based on information collected by Labadie et.al (1997) from the Secretary of Health. **Appendix 2** explains the characteristics of these data and lists the codes and names of the variables of the whole database. This data contained in the database exceeds the purpose of this Essay and was used to study the determinants of affiliation and exit to and from ICMAs. Additional data contained in the database can be used if needed.

Preliminary Dependent Variables

1. Medical Staff Remuneration: total remuneration of medical staff as a percentage of operating expenses
2. Outsourcing: Health Services supplied by independent contractors and other health organizations

Explanatory variables

1. Type of Organization: Orgtyp1: Mutualistas, Orgytyp2: Non-medical Cooperatives, Orgtype4: Medical Cooperatives. Orgtype 3 is omitted from the database: it is the largest medical cooperative and has idiosyncratic characteristics and creates theoretical and econometric problems.

Controls:

1. Size: number of affiliates per year
2. State (Montevideo, Interior)
3. Number of beds per organization per year
2. Age of affiliates
3. Gender

REFERENCES

1. **Helmut Anheier:** "Dimensions of the Third Sector: Comparative Perspectives on Structure and Change", Centre for Civil Society, London School of Economics, Central Policy Unit Seminar**,** "The Third Sector: Beyond Government and Market", Hong Kong, 25 July 2000.

2. **Helmut K. Anheier and Jeremy Kendall:** "Trust and voluntary organizations: Three theoretical approaches", Civil Society Working Paper 5 February 2000.

3. **Avner Ben-Ner and Benedetto Gui**: "The Theory of Nonprofit Organizations Revisited: University of Minnesota, and University of Padova, Italy, May, 2000.

4. **Ben-Ner and Van Hoomissen:** "Non Profit Organizations in the mixed economy: A demand and Supply Analisys", 2001.

5. **Gordon Cleveland, and Michael Krashinsky:** "THE NONPROFIT ADVANTAGE: PRODUCING QUALITY": in "Thick and thin child care markets"**,** July 25, 2005

6. **Brian Dollery and Joe Wallis: "**Economic Theories of the Voluntary Sector: a survey of Government Failure and Market Failure Approaches", University of Otago Economics Discussion Papers , No. 0208 May 2002.

7. **Richard C. Feiock & Hee-Soun Jang, Askew: "**The Role of Nonprofits in the Delivery of Local Services School of Public Administration and Policy", Florida State University
Tallahassee FL 3230; October 9-10, 2003.

8. **Edward L. Glaeser:** "The Governance of Not-for-Profit Firms", Harvard Institute of Economic Research Discussion Paper Number 1954, April 2002.

9. **Edward L. Glaeser and Adrei Shleifer: "**Not-For-Profit Entrepreneurs", NBER WP 6810, 1998.

10. **Carlos Grau Pérez, Ec. Luis Lazarov; "**Sistemas de salud, y prevision social en Uruguay. equipo de representación de trabajadores – Banco de Previsión Social, 1999.

11. **Henry Hansmann: "**Ownership of the Firm" Yale University, 1988.

12. **Bengt Holsmtrom and Paul Milgrom*: "***The Firm as an incentive system", AER, Volume 84, 1994.

13. **Gastón Labadie, Alejandro Ramos y Delia Sánchez:** "Instituciones de Asistencia Médica Colectiva: Regulación y Desempeño", Comisión Económica para América Latina (CEPAL, ONU), 1994.

14. **Gaston Labadie y otros**: "La Organización hace la diferencia", Banco Interamericano de Desarrollo, 1997.

15. **Darius Lakdawalla, and Tomas Philipson**: "The Nonprofit Sector and Industry Performance" RAND Corporation and NBER † University of Chicago and NBER November 3, 2000.

16. **Anup Malani and Albert Choi:** "Are Non-Profit Firms Simply For-Profits in Disguise? Evidence from Executive Compensation in the Nursing Home Industry", September 26, 2004.

17. **Anup Malani and Guy David: "**Forget quality: do non-profits even signal their status?" February 8, 2006

18. **Anup Malani, Tomas Philipson, and Guy David:** "Theories of Firm Behavior in the Non-profit Sector: A Synthesis and Empirical Evaluation", 2001.

19. **Lester M. Salamon, and Helmut K. Anheier**: "The nonprofit sector: A new global force", Working Paper of the The Johns Hopkins Comparative Nonprofit Sector Project, The Johns Hopkins University Institute for Policy Studies, 1996.

20. **Joe Wallis, and Brian Doller:** "Leadership and Economic Theories of Non-profit Organizations", University of Otago, Economics Discussion Papers, No. 0202, March 2002..

21. **Burton A. Weisbrod:** "Why Private Firms, Governmental Agencies, and Nonprofit, Organizations Behave Both Alike and Differently: Application to the Hospital Industry"**,** Faculty Fellow, Institute for Policy Research, John Evans Professor of Economics, Northwestern University, May 2004.

22. **Burton A. Weisbrod, Kanika Kapur, , and John Evans:** "The Roles of Government and Nonprofit Suppliers in Mixed Industries"**,** The Rand Corporation, Institute for Policy Research, 1999.

23. **ORGANIZACIÓN PANAMERICANA DE LA SALUD:** "Perfil del sistema de servicios de salud de Uruguay", Programa de organización y gestión de sistemas y servicios de salud, División de desarrollo de sistemas y servicios de salud**,** 2002.

APPENDIX 1

General List of Services supplied by Institutions of Collective Medical Assistance **Uruguay**
Out-patient medical assistance, which includes Medical, Surgical, Gynecological, Pediatrics assistance
Urgent Visits to Hospital, medical, pediatrics, surgery, etc.
Hospital assistance including surgery, medical assistance, infectious diseases
Diagnosis: Radiology, Laboratory Analysis
Intensive Care
Supply of Medicines

APPENDIX 2

The database collects information on the variables shown below. The data is gathered on a monthly, quarterly and annual basis. The information is arranged according to the following categories:

Year	Years 1982 through 1990
Numinst	Number of Institution
Naminst	Name of Institution
State	Variable that identifies the 19 jurisdictions of Uruguay (numbers from 1 to 19 corresponding to each of the jusrisdictions)
Orgtyp	Variable that takes the value of 1 (Mutualistas), 2(Non medical Cooperatives), 3 (the largest medical cooperative), and 4 (medical cooperatives, mainly outside the Capital, Montevideo)
ACTIV	Indicates if the institutions was active that year/month/quarter
Size	0= no members, new 1= (0;10,000) 2= (10,000;20000) 3= (20,000;50,000) 4= (50,000;240,000) 5= over 240,000 members

LIST OF VARIABLES

Variable	Variable Name	Variable Description
CENSUS		
1		Census Male 0-9 years old
2		Census Male 10-14 years old
3		Census Male 15-44 years old
4		Census Male 45-64 years old
5		Census Male Over 65 years old
6		Census Male w/o discrim.
7		Census Male Total
8		Census Female 0-9 years old
9		Census Female 10-14 years old
10		Census Female 15-44 years old
11		Census Female 45-64 years old
12		Census Female Over 65 years old
13		Census Female w/o discrim.
14		Census Female Total
15		Census sex w/o discrim. 0-9 years old
16		Census sex w/o discrim. 10-14 years old
17		Census sex w/o discrim. 15-44 years old
18		Census sex w/o discrim. 45-64 years old
19		Census sex w/o discrim. Over 65 years old
20		Census sex w/o discrim. w/o discrim.
21		Census sex w/o discrim. Total
SURVEY		
Non-Financial Data		
Variable Code	Variable Name	Variable Description
22	IM09	Increase in No. of male members 0-9 years old
23	IM1014	Inc. in No. of male members 10-14 years old
24	IM1544	Inc. in No. of male members 15-44 years old
25	IM4564	Inc. in No. of male members 45-64 years old
26	IMO65	Inc. in No. of male members Over 65 years old
27	IMAWD	Inc. in No. of male members age w/o discrim.
28	IMTOT	Inc. in No. of male members Total

29	IF09	Inc. in No. of female memb. 0-9 years old
30	IF1014	Inc. in No. of female memb. 10-14 years old
31	IF1544	Inc. in No. of female memb. 15-44 years old
32	IF4564	Inc. in No. of female memb. 45-64 years old
33	IFO65	Inc. in No. of female memb. Over 65 years old
34	IFAWD	Inc. in No. of female memb. age w/o discrim.
35	IFTOT	Inc. in No. of female memb. Total
36	ISWD09	Inc. in No. of memb. sex w/o discrim. 0-9 years old
37	ISWD1014	Inc. in No. of memb. sex w/o discrim. 10-14 years old
38	ISWD1544	Inc. in No. of memb. sex w/o discrim. 15-44 years old
39	ISWD4564	Inc. in No. of memb. sex w/o discrim. 45-64 years old
40	ISWDO65	Inc. in No. of memb. sex w/o discrim. Over 65 years old
41	ISWDAWD	Inc. in No. of memb. sex and age w/o discrim.
42	ISWDTOT	Inc. in No. of memb. sex w/o discrim. Total
43	DM09	Decrease in No. of male members 0-9 years old
44	DM1014	Dec. in No. of male members 10-14 years old
45	DM1544	Dec. in No. of male members 15-44 years old
46	DM4564	Dec. in No. of male members 45-64 years old
47	DMO65	Dec. in No. of male members Over 65 years old
48	DMAWD	Dec. in No. of male members age w/o discrim.
49	DMTOT	Dec. in No. of male members Total
50	DF09	Dec. in No. of female memb. 0-9 years old
51	DF1014	Dec. in No. of female memb. 10-14 years old
52	DF1544	Dec. in No. of female memb. 15-44 years old
53	DF4564	Dec. in No. of female memb. 45-64 years old
54	DFO65	Dec. in No. of female memb. Over 65 years old
55	DFAWD	Dec. in No. of female memb. age w/o discrim.
56	DFTOT	Dec. in No. of female memb. Total
57	DSWD09	Dec. in No. of memb. sex w/o discrim. 0-9 years old
58	DSWD1014	Dec. in No. of memb. sex w/o discrim. 10-14 years old
59	DSWD1544	Dec. in No. of memb. sex w/o discrim. 15-44 years old
60	DSWD4564	Dec. in No. of memb. sex w/o discrim. 45-64 years old
61	DSWDO65	Dec. in No. of memb. sex w/o discrim. Over 65 years old
62	DSWDAWD	Dec. in No. of memb. sex and age w/o discrim.
63	DSWDTOT	Dec. in No. of memb. sex w/o discrim. Total
64	UOPVM	Urgent out-patient visits Medical
65	UOPVS	Urgent out-patient visits Surgical
66	UOPVG	Urgent out-patient visits Gynecological
67	UOPVP	Urgent out-patient visits Pediatrics
68	UOPVWD	Urgent out-patient visits w/o discrim.
69	UOPVTOT	Urgent out-patient visits Total
70	UVHM	Urgent Visits at Home Medical
71	UVHS	Urgent Visits at Home Surgical
72	UVHG	Urgent Visits at Home Gyencological
73	UVHP	Urgent Visits at Home Pediatrics
74	UVHWD	Urgent Visits at Home w/o discrim.
75	UVHTOT	Urgent Visits at Home Total
76	UVWDM	Doctor's Urgent Visits w/o discrim. Medical

77	UVWDS	Doctor's Urgent visits w/o discrim.	Surgical
78	UVWDG	Doctor's Urgent Visits w/o discrim.	Gynecological
79	UVWDP	Doctor's Urgent visits w/o discrim.	Pediatrics
80	UVWDWD	Doctor's Urgent Visits w/o discrim.	w/o discrim.
81	UVWDTOT	Doctor's Urgent visits w/o discrim.	Total
82	NUOPVM	Non Urg. Out-patient visits	Medical
83	NUOPVS	Non Urg. Out-patient visits	Surgical
84	NUOPVG	Non Urg. Out-patient visits	Gynecological
85	NUOPVP	Non Urg. Out-patient visits	Pediatrics.
86	NUOPVWD	Non Urg. Out-patient visits	w/o discrim.
87	NUOPVTOT	Non Urg. Out-patient visits	Total
88	NUVHM	Doctor's House Non Urg. Visits	Medical
89	NUVHS	Doctor's House Non Urg. visits	Surgical
90	NUVHG	Doctor's House Non Urg. visits	Gynecological
91	NUVHP	Doctor's House Non Urg. visits	Pediatrics
92	NUVHWD	Doctor's House Non Urg. visits	w/o discrim.
93	NUVHTOT	Doctor's House Non Urg. visits	Total
94	NUVWDM	Non Urg. visits w/o specification	Medical
95	NUVWDS	Non Urg. visits w/o specification	Surgical
96	NUVWDG	Non Urg. visits w/o specification	Gynecological
97	NUVWDP	Non Urg. visits w/o specification	Pediatrics
98	NUVWDWD	Non Urg. visits w/o specification	w/o discrim.
99	NUVWDTOT	Non Urg. visits w/o specification	Total
100	VWDM	Doctor's Visits w/o specification	Medical
101	VWDS	Doctor's visits w/o specification	Surgical
102	VWDG	Doctor's visits w/o specification	Gynecological
103	VWDP	Doctor's visits w/o specification	Pediatrics
104	VWDWD	Doctor's visits w/o specification	w/o discrim.
105	VWDTOT	Doctor's visits w/o specification	Total
106	PRESM	No. of Prescriptions	Medical
107	PRESS	No. of Prescriptions	Surgical
108	PRESG	No. of Prescriptions	Gynecological
109	PRESP	No. of Prescriptions	Pediatrics
110	PRESWD	No. of Prescriptions	w/o discrim.
111	PRESTOT	No. of Prescriptions	Total
112	DEACM	Drug expenditures in Ambulatory Care	Medical
113	DEACS	Drug expenditures in Ambulatory Care	Surgical
114	DEACG	Drug expenditures in Ambulatory Care	Gynecological
115	DEACP	Drug expenditures in Ambulatory Care	Pediatrics
116	DEACWD	Drug expenditures in Ambulatory Care	w/o discrim.
117	DEACTOT	Drug expenditures in Ambulatory Care	Total
118	SHDM	Simple Hospit. discharges	Medical
119	SHDS	Simple Hospit. discharges	Surgical
120	SHDG	Simple Hospit. discharges	Gynecological
121	SHDP	Simple Hospit. discharges	Pediatrics
122	SHDWD	Simple Hospit. discharges	w/o discrim.
123	SHDTOT	Simple Hospit. discharges	Total
	SHDTOT1	Simple Hospit. discharges w/o Gynecologic	Total

124	SHDAYSM	Simple Hospit. Days	Medical
125	SHDAYSS	Simple Hospit. Days	Surgical
126	SHDAYSG	Simple Hospit. Days	Gynecological
127	SHDAYSP	Simple Hospit. Days	Pediatrics
128	SHDAYSWD	Simple Hospit. Days	w/o discrim.
129	SHDAYSTO	Simple Hospit. Days	Total
	SHDAYST1	Simple Hospit. Days without Gynecologic	Total
130	CXSS	Complex Surgery	Surgical
131	CXSG	Complex Surgery	Gynecological
132	CXSP	Complex Surgery	Pediatrics
133	CXSWD	Complex Surgery	w/o discrim.
134	CXSTOT	Complex Surgery	Total
135	MSS	Major Surgery	Surgical
136	MSG	Major Surgery	Gynecological
137	MSP	Major Surgery	Pediatrics
138	MSWD	Major Surgery	w/o discrim.
139	MSTOT	Major Surgery	Total
140	CNSS	Common Surgery	Surgical
141	CNSG	Common Surgery	Gynecological
142	CNSP	Common Surgery	Pediatrics
143	CNSWD	Common Surgery	w/o discrim.
144	CNSTOT	Common Surgery	Total
145	SWDS	Surgery w/o discrimination	Surgical
146	SWDG	Surgery w/o discrimination	Gynecological
147	SWDP	Surgery w/o discrimination	Pediatrics
148	SWDWD	Surgery w/o discrimination	w/o discrim.
149	SWDTOT	Surgery w/o discrimination	Total
150	DWCO	Deliveries w/ cesarean operations	
151	DWOCO	Deliveries w/o cesarean operations	
152	ICDC	No. of Intensive Care discharges	Children
153	ICDA	No. of Int. Care discharges	Adults
154	ICDTOT	No. of Int. Care discharges	Total
155	HDICC	Hospit. days in Int. Care	Children
156	HDICA	Hospit. days in Int. Care	Adults
157	HDICTOT	Hospit. days in Int. Care	Total
158	IMCDC	Intermediate Care discharges	Children
159	IMCDA	No. of Interm. Care discharges	Adults
160	IMCDTOT	No. of Interm. Care discharges	Total
161	HDIMCC	Hospit. days in Interm. Care	Children
162	HDIMCA	Hospit. days in Interm. Care	Adults
163	HDIMCTOT	Hospit. days in Interm. Care	Total
164	LTOPVM	No. of Lab tests in out-patient visits	Medical
165	LTOPVS	No. of Lab tests per visit	Surgical
166	LTOPVG	No. of Lab tests per visit	Gynecological
167	LTOPVP	No. of Lab tests per visit	Pediatrics
168	LTOPVWD	No. of Lab tests per visit	w/o discrim.
169	LTOPVTOT	No. of Lab tests per visit	Total
170	ULTOPVM	UVR Lab tests in out-patient visits	Medical

171	ULTOPVS	UVR Lab tests in out-patient visits Surgical
172	ULTOPVG	UVR Lab tests in out-patient visits Gynecological
173	ULTOPVP	UVR Lab tests in out-patient visits Pediatrics
174	ULTOPVWD	UVR Lab tests in out-patient visits w/o discrim.
175	ULTOPVTO	UVR Lab tests in out-patient visits Total
176	LTHCM	No.of Lab tests in Hospital care Medical
177	LTHCS	No. of Lab tests Hospit. care Surgical
178	LTHCG	No. of Lab tests Hospit. care Gynecological
179	LTHCP	No. of Lab tests Hospit. care Pediatrics
180	LTHCWD	No. of Lab tests Hospit. care w/o discrim.
181	LTHCTOT	No. of Lab tests Hospit. care Total
182	ULTHCM	UVR Lab tests in Hospit. care Medical
183	ULTHCS	UVR Lab tests in Hospit. care Surgical
184	ULTHCG	UVR Lab tests in Hospit. care Gynecological
185	ULTHCP	UVR Lab tests in Hospit. care Pediatrics
186	ULTHCWD	UVR Lab tests in Hospit. care w/o discrim
187	ULTHCTOT	UVR Lab tests in Hospit. care Total
188	LTWDM	No. of Lab tests w/o specification Medical
189	LTWDS	No. of Lab tests w/o specification Surgical
190	LTWDG	No. of Lab tests w/o specification Gynecological
191	LTWDP	No. of Lab tests w/o specification Pediatrics
192	LTWDWD	No. of Lab tests w/o specification w/o discrim.
193	LTWDTOT	No. of Lab tests w/o specification Total
194	ULTWDM	UVR Lab tests w/o specification Medical
195	ULTWDS	UVR Lab tests w/o specification Surgical
196	ULTWDG	UVR Lab tests w/o specification Gynecological
197	ULTWDP	UVR Lab tests w/o specification Pediatrics
198	ULTWDWD	UVR Lab tests w/o specification w/o discrim.
199	ULTWDTOT	UVR Lab tests w/o specification Total
200	RTOPVM	No. of Radiology tests (ambulatory care) Medical
201	RTOPVS	No. of Radiology tests (ambulatory care) Surgical
202	RTOPVG	No. of Radiology tests (ambulatory care) Gynecological
203	RTOPVP	No. of Radiology tests (ambulatory care) Pediatrics
204	RTOPVWD	No. of Radiology tests (ambulatory care) w/o discrim.
205	RTOPVTOT	No. of Radiology tests (ambulatory care) Total
206	URTOPVM	UVR Radiology tests (ambulatory care) Medical
207	URTOPVS	UVR Radiology tests (ambulatory care) Surgical
208	URTOPVG	UVR Radiology tests (ambulatory care) Gynecological
209	URTOPVP	UVR Radiology tests (ambulatory care) Pediatrics
210	URTOPVWD	UVR Radiology tests (ambulatory care) w/o discrim.
211	URTOPVTO	UVR Radiology tests (ambulatory care) Total
212	RTHCM	No. of Radiology tests Hospit. Medical
213	RRLTHCS	No. of Radiology tests Hospit. Surgical
214	RTHCG	No. of Radiology tests Hospit. Gynecological
215	RTHCP	No. of Radiology tests Hospit. Pediatrics
216	RTHCWD	No. of Radiology tests Hospit. w/o discrim.
217	RTHCTOT	No. of Radiology tests Hospit. Total
218	URTHCM	UVR Radiology tests Hospital. Medical

219	URTHCS	UVR Radiology tests Hospital. Surgical	
220	URTHCG	UVR Radiology tests Hospital. Gynecological	
221	URTHCP	UVR Radiology tests Hospital. Pediatrics	
222	URTHCWD	UVR Radiology tests Hospital. w/o discrim.	
223	URTHCTOT	UVR Radiology tests Hospital. Total	
224	RTWDM	No. of Radiology tests w/o specification Medical	
225	RTWDS	No. of Radiology tests w/o specification Surgical	
226	RTWDG	No. of Radiology tests w/o specification Gynecological	
227	RTWDP	No. of Radiology tests w/o specification Pediatrics	
228	RTWDWD	No. of Radiology tests w/o specification w/o discrim.	
229	RTWDTOT	No. of Radiology tests w/o specification Total	
230	URTWDM	UVR Radiology tests w/o specification Medical	
231	URTWDS	UVR Radiology tests w/o specification Surgical	
232	URTWDG	UVR Radiology tests w/o specification Gynecological	
233	URTWDP	UVR Radiology tests w/o specification Pediatrics	
234	URTWDWD	UVR Radiology tests w/o specification w/o discrim.	
235	URTWDTOT	UVR Radiology tests w/o specification Total	
236	ITOT	Increase in number of members	Total
237	DTOT	Decrease in number of members	Total
238	MEMBTOTM	Number of members	Total

SURVEY

Financial Data

-	-	-
Variable Code	Variable Name	Variable Description
-	-	-
239	FEES	Members' fees
240	COPAYPH	Co-payments - (Physician visits)
241	COPAYM	Co-payments - (Medicines)
242	OPSSTOT	Total Sales on Out-patient services
243	OPSSMWR	Sales on Out-patient services for members w/o rights
244	OPSSTP	Sales on Out-patient services to third parties (IAMC)
245	HSSTOT	Sales on Hospitalization Services
246	HSSMWR	Sales on hospitalization services for members w/o rights
247	HSSTP	Sales on Hospitalization Services to third parties
248	OHSINC	Income on Other health Services
249	OTHERINC	Other income
250	OPINTOT	Total Operational Income
251	NOPINTOT	Total Non Operational Income
252	INCTOT	Total Income
253	NETRDEF	Net monthly Result - Deficit
254	GTOT1	Grand Total
255	PERWAGE	Personnel Wages

256	PWMED	Personnel Wages - Medical Care Personnel
257	PWPROD	Personnel Wages - Production Center Pers.
258	PWADM	Personnel Wages - Administ. Pers.
259	SSTAXTOT	Social Security taxes (Total)
260	SSTAXMED	Social Security Taxes - Medical Care Personnel
261	SSTAXPRO	Social Security Taxes - Production Center Pers.
262	SSTAXADM	Social Security Taxes - Administr. Pers.
263	OSSTAX	Other Social Security Taxes
264	GOODEXP	Expenditure on goods
265	MEDEXP	Medicines expenses
266	MEDSUPEX	Medical supplies expenses
267	FOODEXP	Food expenses
268	CLTHEXP	Clothing expenses
269	OTHEREXP	Other goods
270	OWNCONS	Own consumption
271	CLIS	Clinical Lab - Internal Services
272	RDIS	Radiology - Internal Serv.
273	RTIS	Radiotherapy - Internal Serv.
274	OXIS	Oxigentherapy - Internal Serv.
275	LAUNDRY	Laundry
276	OTHERSER	Other services
277	SVHIRED	Services hired from third parties
278	HSVHIRED	Hospit. serv. hired from third parties
279	AICHIRED	Adult I.C.U. (Intensive Care Units) hired from third parties
280	CICHIRED	Children I.C.U. hired from third parties
281	CLHIRED	Clinical Lab hired from third parties
282	RDHIRED	Radiology hired from third parties
283	RTHIRED	Radiotherapy hired from third parties
284	OXHIRED	Oxigentherapy hired from third parties
285	DTHIRED	Diagnostic Technics hired from third parties
286	PROFEEM	Professional fees for medical visits
287	AUXSVHIR	Other auxiliary services hired from third parties
288	MAINTEXP	Expenses on maintenance and repair
289	OPEREXP	Operating Expenses
290	WATEREXP	Water Expenses
291	ENERGYEXP	Energy Expenses
292	ELECEXP	Electric Power
293	PHONE	Telephone
294	INSUR	Insurance
295	FUEL	Fuel
296	OTHOPEXP	Other operating expenses
297	DEPREC	Depreciation
298	TRANSFER	Transferences
299	OPEXPTOT	Total operating expenditures
300	FINANEXP	Financial Expenses
301	ISSDEBT	Interest paid on Social Security debt
302	ICBANK	Commercial Bank Interest
303	IDISSE	DISSE Interest

304	OTHERINT	Interest Various
305	EXRDIF	Exchange rate differences
306	ONOPEXP	Other non-operating Expenses
307	EXTREXP	Extraordinary Expenses
308	NOPEXTOT	Total Non operative expenditures
309	EXPTOT	Total expenditures
310	NETRSUR	Net Monthly results - Surplus
311	GTOT2	Grand Total

DESCRIPTIVE VARIABLES' CODES

Size = Number of members

Montevideo

0 = no members, new

1 = (0,10000]

2 = (10000,20000]

3 = (20000,50000]

4 = (50000,240000]

5 = over 240000

6 = no members, broke

9 = no data

Other Status

0 = no members, new

1 = (0,10000]

2 = (10000,20000]

3 = over 20000

6 = no members, broke

9 = no data

Orgtyp = Institutional organisation type

1 = mutual

2 = non-medical cooperative

3 = CASMU (medical coop. outlier)

4 = FEMI (medical cooperative), Interior of Uruguay

Activ = Activity during the period

0 = active during the whole period

2 = merged
2 = merger, active now
3 = merger, broke afterwards
4 = broke
5 = new

Iact = Activity index for the year

0 = not active
1 = active

Irisk = Members over 65 years old/total members

0 = new
1 = [0,5%]
2 = (5%,10%]
3 = (10%,20%]
4 = over 20%
6 = broke
9 = no data

Iexp = Wage bill/"operative" expenditures

0 = new
1 = [0,40%]
2 = (40%,50%]
3 = (50%,60%]
4 = over 60%
6 = broke
9 = no data

State

01 = Montevideo
02 = Artigas
03 = Canelones
04 = Cerro Largo
05 = Colonia
06 = Durazno
07 = Flores

08 = Florida

09 = Lavalleja

10 = Maldonado

11 = Paysandù

12 = Rìo Negro

13 = Rivera

14 = Rocha

15 = Salto

16 = San Josè

17 = Soriano

18 = Tacuarembò

19 = Treinta y Tres

Super = Index on benefits

0 = surplus (Resulej>0)

1 = deficit (Resulej<0)

2 = not active (Resulej=0)

9 = no data

Psuper = Index on past benefits

0 = past surplus (Ejerant>0)

1 = past deficit (Ejerant<0)

2 = not active (Ejerant=0)

9 = no data

Ibeds = index for number of beds per 1000 members.

1 = [0, 0.7]

2 = (0.7, 2]

3 = over 2

9 = no data

These Accounts correspond to the Financial Statements of each organization

NOMBRE VARIABLE	DESCRIPCION
DISP	Disponibilidades
INVT	Inversiones Temporarias
DXCUOTAS	Deudores por Cuotas
DXSEGCOL	Deudores por Seguros Colectivos
DXSERVS	Deudores por Servicios Asistenciales
DMOROSOS	Deudores Morosos
CREDITOS	Creditos Totales
BDECAMB	Bienes de Cambio
OTROSACT	Otros Activos
ACTCORR	Total Activo Corriente
CREDLP	Creditos a Largo Plazo
BUSO	Bienes de Uso
ACTINTAN	Activo Intangible
ACTNOMIN	Activo Nominal
ACTNOCOR	Total Activo No Corriente
TOTACT	Total Activo
CTAOC1	Cuentas de Orden y Contingencias (Activo)
LABMED	Laboratorio de Medicamentos
LABANCL	Laboratorio de Analisis Clínicos
LABRADI	Laboratorios Radiológicos
FARMXTRN	Farmacias e Externas
SANAXTRN	Sanatorios Externos
OTRPROV	Otros Proveedores
DPROVEE	Deudas con Proveedores (Total)
FINANC	Financieras
DGSSDIP1	DGSS - Dipaico
IMAE1	IMAE
DEJOPS	Deudas del Ejercicio con Organismos de Prevision Social (total)
DGSSDIP2	DGSS - DIPAICO (convenio corto plazo)
DGSSDAFA	DGSS - DAFA
IMAE2	IMAE (convenio corto plazo)
DANTOPS	Deudas de Ejercicios Anteriores con Organismos de Prevision Social (total)
SUELYJOR	Sueldos y Jornales a Pagar
PROVAGUI	Provisiones Aguinaldos , Sal.Vac., Etc.
DDIVERS	Deudas Diversas (Total)
PREVCORR	Previsiones Corrientes
PASIVCORR	Total Pasivo Corriente
DEULP	Deudas a Largo Plazo
CONSDOPS	Consolidación Deudas con O.P.S.
PRENOCOR	Previsiones No Corrientes

PASNOCOR	Total Pasivo No Corriente
CAPITSOC	Capital Social
AJUSTPATR	Ajustes al Patrimonio
RESOBLI	Reservas Obligatorias
FACULT	Facultativas
EJERANT	Resultados Ejercicios Anteriores
RESULEJ	Resultados del ejercicio
RESUACUM	Resultados Acumulados (Total)
TOTPATR	Total Patrimonio
PASYPAT	Total Pasivo y Patrimonio
CTAOC2	Cuentas de Orden y Contingencias (Pasivo)
PERSASIS	Remunaraciones - Personal de Asistencia
PERSPROD	Remunaraciones - Personal de Centros de Producción
PERSADM	Remunaraciones - Personal de Administración
REMUNPER	Remuneraciones Personales (Total)
APSSAS	Aportes Patronales S.Salud P.Asistencia
APSSPROD	Aportes Patronales S.Salud P.C.Producción
APSSADM	Aportes Patronales S.Salud P.Administración
OTROSAP	Otros Aportes Patronales
CARGSOC	Cargas Sociales (Total)
BSCONS	Bienes Consumidos
PROPIOS	Servicios Consumidos Propios
SVSCONTR	Servicios Contratados a Terceros
SVSCONS	Servicios Consumidos (Total)
GTOMANT	Gastos de Mantenimiento
GTOFUNC	Gastos de Funcionamiento
AMORTIZ	Amortizaciones
TRANSFER	Transferencias
EGROPER	Total Egresos Operativos
GTOFIN	Gastos Financieros
GTOEXTR	Gastos Extraordinarios
EGNOOPER	Total Egresos No Opreativos
EGRESOS	Total Egresos
RESULEJ1	Resultado del Ejercicio (Estado de Resultados)
TOTGRAL	Total General
CUOTAS	Ingresos por Cuotas Abonados
TMORD	Tasas Moderadoras - Ordenes
TMTIQ	Tasas Moderadoras - Tiques
AFSDER1	Vtas de Servicios de Asistencia-Ambulatorio a Afiliados sin Derecho
TERCERO1	Vtas de Servicios de Asistencia-Ambulatorio a Terceros
VTAAMB	Vtas de Servicios de Asistencia-Ambulatorio (Total)
AFSDER2	Vtas de Servicios de Internación a Afiliados sin Derecho
TERCERO2	Vtas de Servicios de Internación a Terceros
VTASERIN	Vtas de Servicios de Internación (Total)
OTRPRASI	Otras Prestaciones Asistenciales
OTRING	Otros Ingresos
INGOPER	Total Ingresos Operativos
VARIOS	Ingresos Varios

INGNOOPER	Total Ingresos No Operativos
TOTINGR	Total Ingresos

NAMES OF INSTITUTIONS

NUMINST	NAMINST	NAME	STATE	ORGTYP	ACTIV	DESDE	H
1	12	A.E.C.N.	1	1	0	01-abr-83	0
2	62	Asociación Española 1a. Soc. Mutuos	1	1	2	01-abr-83	0
6	264	Asociación Evangelista	1	1	0	01-abr-83	0
8	567	Casa de Galicia	1	1	0	01-abr-83	0
9	618	Central Médica Gremial	1	2	2	01-abr-83	0
11	769	C. A. S. M. U.	1	3	0	01-abr-83	0
12	810	C. I. M. A.	1	2	2	01-abr-83	0
13	860	CE. ME. CO.	1	2	0	01-abr-83	0
15	1062	C. C. O. Montevideo	1	1	0	01-abr-83	0
17	1163	C. U. D. A. M.	1	2	2	01-abr-83	0
20	2315	GRE. M. C. A.	1	2	2	01-abr-83	0
23	2719	I. M. P. A. S. A.	1	2	0	01-abr-83	0
24	3567	M. U. C. A. M.	1	2	0	01-abr-83	0
25	3668	M. I. D. U.	1	1	0	01-abr-83	0
26	3719	Mutualista Pasteur	1	1	4	01-abr-83	0
27	4012	O. C. A.	1	2	0	01-abr-83	0
29	4315	S. M. I.	1	2	0	01-abr-83	0
32	4810	Universal Soc. Prod. Sanit.	1	2	0	01-abr-83	0
33	4860	Uruguay - España	1	1	0	01-abr-83	0
34	5012	GRE.ME.D.A.	2	4	0	01-abr-83	0
35	5163	C. A. A. ME. PA.	3	4	0	01-abr-83	0
37	5264	C. A. M. I.	3	2	0	01-abr-83	0
38	5315	C. R. A. M. I.	3	4	2	01-abr-83	0
39	5517	CO. ME. CA.	3	4	2	01-abr-83	0
40	5567	C. I. P. S.	3	2	0	01-abr-83	0
43	5810	C. A. A. M. CE. L.	4	4	0	01-abr-83	0
44	5935	CO. ME. CE. L.	4	2	5	01-ene-88	0
45	5961	OR. A. ME. CO.	5	4	0	01-abr-83	0
46	6012	C. A. A. M. E. C.	5	4	0	01-abr-83	0
47	6062	C. A. A. M. O. C.	5	4	0	01-abr-83	0
48	6214	Soc. Mut. Obr. Juan Lacaze	5	1	0	01-abr-83	0
49	6416	C. A. ME. DUR.	6	4	0	01-abr-83	0
50	6422	C. O. M. I.	6	2	5	01-ene-89	0
51	6517	Asoc. Med. Deptal. Flores	7	4	0	01-abr-83	0
52	6618	CO. ME. F.	8	4	2	01-abr-83	0
54	6769	C. A. M. De L.	9	4	0	01-abr-83	0
55	6771	Mutualista Minas	9	1	5	01-ene-89	0
56	6860	Asist. Med. Deptal. Maldonado	10	4	0	01-abr-83	0
57	6985	C. R. A. M. E.	10	2	5	01-ene-87	0
58	7062	CO. ME. PA.	11	4	0	01-abr-83	0
59	7214	A. ME. D. RI. N.	12	4	0	01-abr-83	0
60	7218	C. A. DE. MI.	12	2	5	01-ene-89	0
61	7264	C. A. M. Y.	12	4	5	01-jul-89	0
62	7466	Asist. Med. Deptal. Rivera	13	4	0	01-abr-83	0

63	7553	CO. ME. RI.	13	2	5	01-ene-89	0
64	7618	Asociaci¢n M,dica de Rocha	14	4	0	01-abr-83	0
65	7719	Soc. Medico-Quir£rg. Salto	15	4	0	01-abr-83	0
66	7810	Asoc. Med. San Jos,	16	4	0	01-abr-83	0
67	8012	Asociaci¢n M,dica Soriano	17	4	0	01-abr-83	0
68	8062	UMERCO	17	2	0	01-abr-83	0
69	8163	CO. M. TA.	18	4	0	01-abr-83	0
70	8264	Inst. Asist. Colect. T. y Tres	19	4	0	01-abr-83	0
3	113	Asoc. Fraternidad de Asist. y Prev.	1	1	3	01-abr-83	0
4	163	Asoc. Mutualista Batlle	1	1	4	01-abr-83	0
5	214	Asoc. Mut. Partido Nacional	1	1	4	01-abr-83	0
7	517	Caja de Aux. O. y O. Frig. Nac.	1	1	1	01-abr-83	0
10	668	C. A. Q.	1	2	1	01-abr-83	0
14	1012	C. Napolitano - U. Fraternal	1	1	1	01-abr-83	0
16	1113	C. C. O. Paso Molino	1	1	1	01-abr-83	0
18	1214	C. A. M.	1	2	1	01-abr-83	0
19	2012	Espa¤a Mutualista	1	1	1	01-abr-83	0
21	2618	I. M. C. U.	1	2	1	01-abr-83	0
22	2668	Instituto M,dico Col¢n	1	2	1	01-abr-83	0
28	4062	O. M. A.	1	2	3	01-abr-83	0
30	4365	Social M,dica Mutualista	1	1	1	01-abr-83	0
31	4567	Soc. Italiana di M. Socorsso	1	1	3	01-abr-83	0
36	5214	Cto. Asit. Grem. Med. Sta. Lucia	3	2	1	01-abr-83	0
41	5593	I. A. M. Q. 'Sauce'	3	2	1	01-abr-83	0
42	5618	Inst. Med. Mut. Sta. Lucia	3	1	4	01-abr-83	0
53	6668	Soc. Italiana de S. M. de Florida	8	1	1	01-abr-83	0
	970	Centro Mutual	1	1			
	7825	COMESA	16	2			
	8220	COMETT	19	2			

Summary Statistics- Selective Variables

Statistics below contain values where there are no observations. Names correspond to the following:

svscegop: total amount of outsourced services as a share of operating expenses
orgtyp1: dichotomous variable indicating if the organization is a Mutualista
orgtyp2: dichotomous variable indicating if the organization is a Non-medical cooperative
orgtyp3: dichotomous variable indicating if the organization is CASMU, the largest medical cooperative
orgtyp4: dichotomous variable indicating if the organization is a medical cooperative ouside Montevideo
Location: takes the value 1 for Montevideo (the capital), 0 otherwise (interior)
ctotmem: number of affiliates
beds: number of beds
perasisegop: medical staff remunerations as a share of operative expenses
oldmale: males over 65
oldfemal: females over 65