Primary Health Care Governance: Case Studies in Argentina and Brazil

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Abstract— Transaction Cost Economics is a recent perspective to organizations analysis, and it is still little applied in the public sector. The purpose of this paper is to assess the relative efficiency of two primary health care platforms, one in Argentina and the another one in Brazil. The transaction costs are categorized, counted and normalized into quartiles from direct observation, interviews and documental review. Besides, institutional arrangements are described. The discriminating hypothesis of association between organizational efficiency and the alignment of transaction characteristics with the governance mode is comparatively tested. The analysis showed that the Brazilian case presented lower frequency of transaction costs because its institutional arrangement contains more coordination and incentives with less strategic uncertainty. The evaluation method developed in this paper highlights the importance of studying the characteristics of organization for the generation of knowledge and production of managerial contributions over public health service's delivery.

Index Terms—Governance, Transaction Costs, Primary Health Care Services, Efficiency

I. INTRODUCTION

Talignment effects between the characteristics of the institutional arrangement, or governance structure, and characteristics of primary health care (PHC) services according to the concept of market transaction and also on the efficiency of these services in two areas, i.e., the municipality of Oberá, Argentina, and Palmeira da Missões in Brazil. Given the difficulty of measuring transaction costs [1], the study herein presented was limited to qualitative comparison of the characteristics of the governance structure and the primary health care transaction that prevails in these two territories with the characteristics and potential relationships between them that are unveiled by the theory of Transaction Cost Economics (TCE).

The impetus for this study proceeded from the fact that the availability of funding for public health systems in most economically developed nations neither guarantees the fairness nor solves the full access to health services. Such verification indicates that the solution to this problem is not

limited to the financial aspect, and the organizational issue explains in part the inefficiency of the health systems. On the other hand, the orientation of health services for primary care is a common place and the main goal of care in the poorest regions of the world. For these regions, the literature recommends institutional changes in order to induce performance of health promotion and prevention alongside traditional services that search for cure, which occur when the diseases have been already manifested.

Institutional changes in the PHC model with the goal of reducing inequality of access, guided by the concept of health promotion and services provided in a decentralized manner were designed and implemented in different Latin American countries from the end of the 1980s, as evidenced by Mesa-Lago [2]. In Brazil, in obedience to the provisions of the Federal Constitution of 1988, the Unified Health System (SUS) established this type of programs and turned the states and especially municipalities into the main institutional actors in the provision of such services. In the Argentinian case, the central government began to design health policies towards PHC since 2005, i.e. it assigned that role for the provinces, but in this country, the sub-national governments partially agreed with the proposed reforms leading to a lower effectiveness in comparison to Brazil. In addition, the comparative analysis between Brazil and Argentina has extra motivation as it will add knowledge of the implications of a possible competition of the inhabitants from the jurisdictional boundary for this type of services. The further integration in Mercosur to involve more immigration and more integrated provision of public services it should be taken into account that it is more difficult to form or anticipate governance arrangements between the two countries if the operating principles of the internal actors are radically different [3].

The paper is divided into six sections. The next section explores the analytical framework of TCE. The third section describes the testing method of the relationship between transaction characteristics and governance structure of the PHC used in the research. The three subsequent sections present and analyze the characteristics of the transaction and governance of PHC in the compared regions.

II. TRANSACTION COST ECONOMICS

A. Transaction concept

From the TCE perspective, a transaction is the analytical unit that contains the principles of conflict, mutuality and order; thereafter, governance would be the means of infusing

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order, mitigating conflicts and allowing mutual gains from voluntary exchange [4]. In the case of PHC services, the transaction requires the establishment of standards to avoid conflicts otherwise it would derail the service delivery.

B. Transaction characteristics

Some definitions are required to standardize the understanding of the efficiency analysis. For example, transactions are defined based on the exchange structure. This exchange is based on two analytically bilateral acts, i.e. the act of mutual consent, where the participation constraint of the agency model is satisfied and the material of exchanging itself, when the incentive compatibility constraint is also satisfied [5]. Thus, the contracts may be discrete when mutual consent is expressed in the act of exchange or relational when mutual consent is expressed separately from the subsequent acts of exchange [6]. In the first case, the mutual consent generates a transaction immediately and induces a mode of governance based on the direct purchase of goods or services in the market. In the second case, technological solutions appear, such as hierarchical relational structures for internal production of goods and services. Between these two extremes, hybrid governance arrangements can be developed. The PHC does not face an efficient market with a spontaneous offer of services because it is an essential service of universal provision. Thus, it demands understanding the elements that according to the TCE theory compose the transaction then to explain their adequacy with an existing technological platform or mode of governance and its related transaction costs generated.

Overall, the transaction has three dimensions or characteristics: the specificity of the asset traded (financial, physical, human, intangible, etc.), the risk it is exposed (that potentially causes disturbance) and the frequency of occurrence [1].

The specificity of the PHC services cannot be neglected. In addition, PHC services would be more difficult to measure than the services of waste collection, for instance, due to the lack of waste collection is perceived from one day to another, while the lack of primary health care services cannot be felt immediately. This lack of measurability is identified as a factor inducing the opportunism, which increases the risk (exante) of disturbances [1] or expropriation (ex-post) inducing contractors to an adaptation depending on the contractual incompleteness and on the degree of bilateral dependence. The frequency of the characteristics of a transaction indicates a way to reduce costs and provides a signal about the organization's reputation legitimizing it [8]. Thus, the transaction cost for governance structures is a frequency function that depends on the specificities, risks of externalities and moral hazards.

C. PHC transaction

It is stated repeatedly that the regions with the primary health care (PHC) achieve better results, for example, in mortality rates in general, mortality due to heart disease and infant mortality, as well as detecting many types of cancer on earlier stage [9]. There are PHC initiatives in Argentina and Brazil, which for our purposes constitutes the adoption of aligned practices (transactions) and structures (governance) aimed at reducing transaction costs ex-post in the area of public health as a whole.

To characterize the PHC transaction it is useful to compare it with the model of traditional health provision. The conventional medical care (in contrast to the primary care approach) is not continuous and has a secondary instance (a doctor's appointment, for example) as the gateway in the system of health services. It is neither preventive nor promoter and, usually there is no prior knowledge between the health professional (doctor) and patient. Accordingly, Table I shows the regularities of the promotion model consisting of a multiorganizational strategy of comprehensive and continuous health care processes, provided by a multidisciplinary team, as well as with community participation in education and prevention activities. Thus, the idealized PHC model provides a reasonable degree of specificity and the government presents itself as the only political and economic organization able to establish, coordinate, maintain and expand its supply.

TABLE I MEDICAL CARE AND PHC CARE

	Traditional Medical Care	PHC Care
Focus	Disease Cure	Health Prevention, care and cure
Content	Treatment Care by episodes Specific problems	Health promotion Continuous care Comprehensive care
Organization	Experts Doctors Physician's office	GP Groups of other professionals Team
Responsibility	Only the health sector Professional domain Passive reception	Inter-sectoral collaboration Participatory community Auto-responsibility

Based on Starfield [18]

D. Transaction costs

Transaction costs represent an alternative response about the share of contribution of the institutional arrangement on the efficiency of organizations. For example, how the failure of working hours under scenarios of short supply of skilled labor interferes with the health services efficiency? Transaction costs are those involved in conducting an exchange with economic value, or simply the costs of participating in the market. These costs, however, are difficult to express in monetary terms [10]. Transaction costs can also be categorized into direct, i.e. those preventive to disturbances in the transaction (ex-ante) or friction, those arising from disturbances itself (ex-post). Transaction costs are generally identified in the organization as a whole in stages or parts of the productive process and people involved [11]. The transaction costs of each case will be described in section VI.

E. Discrete and expanded governance structures

To the extent that market failures are recognized a ranking or a mode of governance between the transacting parties becomes necessary assuming interdependence between them and determining the decision to produce internally or to purchase the goods or services transacted. This is therefore, a technological platform chosen that unfolds into three parts: (1) instruments, (2) performance attributes and (3) type of contract.

The instruments are subdivided into two. The first one is the incentives to alignment, which are mobilized in pursuit of appropriate governance mode for a given transaction. These incentives describe the degree that a contractual party appropriates the gains (or losses) relating to its efforts and decisions [12]. In this sense, the idea of incentives, originating from the agency theory, equals the public sector to the firm [13]. The second type of instrument is represented by administrative controls, which are defined as instruments of monitoring and accountability [12]. On the other hand, the performance attribute depends on the adaptation of the parties to the contract, whether it is autonomous or coordinated. An autonomous adaptation occurs in markets with a large number of sellers and buyers, which is not the case of PHC. In imperfect markets, there are safeguards coordinating preventive contractual risks (moral hazards and externalities). Finally, the contract itself is typified by Williamson [10] in: 'classic', where the price mechanism adjusts the relationships between contractors, so the incentive instruments and controls are unnecessary; 'neoclassical' where the incentive instruments and control are necessary to combat potential failures of the transaction, and 'relational', where there is bilateral dependence, forcing the internalization of production through an own set of rules and regulations with a particular and specific pattern [14].

From the characteristics listed, discrete governance structures are located at two extreme and opposite poles, on the one side the market (or privatization) and on the other one the firm (or hierarchy). However, the entire continuum between these two poles characterizes the hybrid governance mode.

In the public sector, new institutional arrangements alternative to a purely hierarchical or vertical structure were prescribed since the late 1970s. It led to the involvement of more actors in sharing the responsibility for a service provision. Networks of unique but interdependent social actors have been the target of coordinated policy actions (ex-ante), in order to reduce ex-post transaction costs that tend to materialize in persistent problems. This change opens the possibility for the public service to be provided, at least in part, by cooperation among different jurisdictions, which characterizes intergovernmental alignment or even with the help of the private sector representing then a network.

According to Goldsmith and Eggers [15], governing by network represents the synthesis of some trends: high level of public-private collaboration that is characteristic of a government that subcontracts or assigns the supply of services; robust capabilities for managing an aligned

government (in this case, the Union / Nation, states / provinces and municipalities) and technological readiness to group the network. In the case of federations, the network necessarily depends on the construction of a prior intergovernmental alignment also called co-governance or co-management. On the one hand, the network governance is based on exchange relationships, based on trust, solidarity, reciprocity and consensus, in order to forge the collective action [19],[20]. Moreover, the expanded governance being intergovernmental alignment or network demand coordination, which is a characteristic attribute of the hierarchy. Thus, these hybrid forms represent an attempt to combine the characteristics of full privatization (market) with a public agency (hierarchy / relational), where a government oversees the provision of public goods and services by another public or private agent in the beneficiary population.

III. METHODOLOGY

This is a qualitative and quantitative study of exploratory analysis performed on data extracted from two case studies on the PHC provided in Oberá (Argentina) and Palmeira das Missões (Brazil), which seeks to test the hypothesis of discriminant association of efficiency with institutional alignment between the basic characteristics and governance structure of the PHC transaction, following the methodology of comparative analysis. The test of the discriminant alignment hypothesis according to the TCE theory guided the data survey that was performed from governmental databases, interviews and from direct observation between the years 2009 and 2010. Figure 1 illustrates the proposed comparative study:

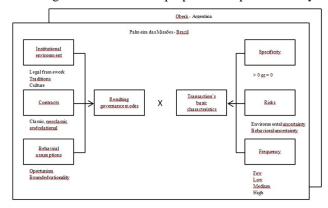


Fig. 1. Research design

Under a reduced form, the research variables interact according to:

Institutional efficiency = f [governance structure; transaction characteristics] (1)

The independent variable is a construct of two components, namely the PHC transaction and its governance structure. Given the attributes of its components, this dichotomous qualitative variable can assume values 'alignment' or 'misalignment'.

The description of a PHC ideal transaction and its risks of failure and disturbances originated from the book on primary

health care of Starfield [18], whose issues raised were interpreted and classified as identifiers of transaction costs regarding to organizational, procedural and personnel management aspects. In turn, the observed frequencies of risks (direct costs) or disturbances (friction costs) available for this ideal model were counted and distinguished as arising from specificities, environmental externalities and moral hazards and distributed into quartiles. The governance structure for its part is influenced by the institutional environment, which should be described as determinant (legal framework, structure of state and government, among others). Instruments alignment incentives (control, monitoring, accountability and bureaucracy), performance attributes (adaptation mechanisms) and type of contract (relational, neoclassical and classical) serve to describe and characterize the governance structure (left side of Figure 1).

According to Stake [19], the dependent variables should preferably be defined experimentally than operationally. However, the TCE theory defines these variables so as conceptual. In the context of this study, the dependent variables are the performance and efficiency of PHC in Oberá and Palmeira das Missões. The PHC efficiency is usually presented by the evolution of indirect indicators such as infant mortality, maternal mortality, hospitalization for sequelae of stroke, limb amputation due to complications of diabetes mellitus, and vaccination coverage [20]. The alignment is then verified by the correspondence (or not) between the categories of governance structure (market, organizational hierarchy and hybrid) and the categories of transaction (discrete, relational or hybrid contract) for at least two characteristics analysis, and it is confirmed vis-à-vis the dependent variable performance. For example, the transaction may have a degree of specificity for certain resources resulting in greater bilateral dependence. Thus, if there are few pediatricians in the context analyzed this situation indicates high specificity and requires, according to the TCE theory, a structure with characteristics of hierarchy. Therefore, if the specificity is similar in both contexts, and if a feature of analysis is less aligned with the hierarchy relative to the other, it is expected that its performance is worse.

IV. HEALTH SYSTEM PLATFORMS

The primary care is part of the health system and constitutes a universal right recognized in Misiones, Argentina, by its Provincial Constitution and in Brazil by its Constitution. However, in practice, the provision of services is fragmented. The public sector, in both countries, is addressed to the poor. In 1940, the 'Obras Sociais' were instituted in Argentina, which are medical and care plans run by professional categories unions [21]. In Brazil, workers can rely either on private plans paid partly by the employer, or they depend on the Unified Health System [22]. Health care in Argentina was traditionally drawn from hospitals, regardless of the degree of complexity of care. However, since 1996, a slow shift of care towards units of lesser complexity and under the jurisdiction of provincial or municipal tiers of government has been introduced. In Brazil, health is a municipal service according

to the Federal Constitution in 1988. Slowly, there was a pyramidal construction of the care model from lowest to highest complexity, from smaller and simpler referral centers to regional health centers. However, one of the problems in the organizational Brazilian model is the lack of counterreferencing, which does not provide comprehensive care to patients. In Argentina, each province organizes its health services with a high degree of autonomy. The National Health Ministry created a national forum in 1981 for the coordination of provincial ministries of health, the 'Consejo Federal de Salud' (COFESA), but until 2011, provincial policies were heterogeneous. Brazil, in turn, established, throughout the history of the Unified Health System, a series of mediating instances of dialogue (CONASS, CONASEMS, CMS, CIT, CIB, etc.) which ensure greater coordination. Still in Brazil, regulation is more uniform due to the Unified Health System laws and ordinances of the Health Ministry reach all tiers of government.

TABLE II
SIMILARITIES AND DIFFERENCES BETWEEN HEALTH CARE PLATFORMS

	Argentina	Brazil
Access	Fragmented. Theoretically universal from the public sector. Some private prepaid medical care plans and the employees' 'Obras Sociais'.	Fragmented. Theoretically universal from the public sector. The Unified System (SUS) is nationally organized and operated in co-management by the federal government, states and municipalities. The private sector serves upon direct payment or through health insurance
Care mode	Primary, secondary and tertiary care. traditionally focused on self- management Hospitals	Primary, secondary and tertiary care. Ascending pyramidal patient's referencing with little descending counter-referencing.
Regulation	Less regulated. Each province organizes its own public system. Companies of prepaid medical care plans and the 'Obras Sociais' are articulated with the Public Sector buying and selling services to each other.	Regulated in the Constitution, laws and ordinances and covenants issued by the Ministry of Health A public sector organization is more homogeneous at the local level. Emphasis on co-management of the public health sector.
Funding	The Public Sector is financed by provincial and national contributions. The earmarking depends on the Province. 'Obras Sociais' are financed by contributions from their members	Federal, state and municipal earmarked contributions. The private sector health plans organize their funding with oversight of a regulatory agency.

An important distinction in the Brazilian case refers to the strategy of the federal and / or state government of using incentives to achieve agreement of all agents in the system. The height of the pact occurred in 2006, when municipalities and states agreed to performance targets with the Union,

allowing it to assume definitely the general coordination and implementation of the decentralized health services. Table II summarizes the main differences between the platforms of perceived health in both countries.

V. COMPARED PRIMARY HEALTH CARE PLATFORMS

The federative health situation appears different in the two cases. Oberá features more autonomy in policy formulation on the PHC because the municipality is not responsible for health. This role is played by provinces.

On the other hand, the provincial health jurisdictions are subdivided into areas equivalent to the municipalities. In Brazil, the 'sale' of municipal autonomy in formulating health strategies is offset by the possibility of influence in the arenas of the political pact.

TABLE III
COMPARED HEALTH CARE GOVERNANCE STRUCTURES

COMPARED HEALTH CARE GOVERNANCE STRUCTURES							
Institutional arrangements	Oberá	Palmeira das Missões					
PHC Platform	Provincial Public Subsector.	Unified Health System					
PHC Policy formulation	National and Province Government	Federal					
Mediation and dialogue on policy	Little institutionalized	Well institutionalized					
Predominance in the formulation	Provincial	Federal covenanted					
Budgetary earmarking	Province rules	Federal rules for the three tiers of government					
Execution	Province	Municipality					
Gateway	In transition from the Hospital to PHC units and from traditional PHC units to National Family Health Program	In transition from traditional health centers to Family Health Units					
Referencing	In the same jurisdiction	To other jurisdiction					
Coordination	Strategic uncertainty, overlapping roles	Defined roles					
Input supply	Province	Municipality					
Incentives	Fragmented into programs	Mainly by population coverage					
Control	Occasional in programs	Monthly updated information on internet					
Rules	Provincial for some programs National to others	Federal					

system for the Argentinian case, mainly due to historical development, its federal arrangement and the lack of human resources. This context favors the possibility that PHC coordination being the target of political disputes, what is bad for the needed articulation to a service with a considerable degree of specificity; ii) moral hazard in Brazil in the operationalization of incentives as encouragement given in terms of population coverage without description of measurement units of services; iii) Palmeira das Missões has a complex platform, with more alignment among government actors compared to Oberá. It generates evidence of lower risk of externality resulting from strategic bad adaptation (ex-post costs) in the Brazilian context, in contrast to the Argentinian one.

VI. CONSTRUCT AND RESULTS ANALYSIS

The alignment between the independent variables determines the PHC efficiency. The PHC transaction is assumed as a form of care with minimum and universal components to be observed. Therefore, what remains is to describe and position the governance structures of PHC and its transaction costs to come to some conclusion on the adequacy of the technological contexts analyzed.

A. Governance attributes

Governance structures of Oberá and Palmeira das Missões were categorized and framed from direct observation on the spot interviews and secondary data analysis. The following summarized information culminated in attributes conferred on each platform according to Table IV.

TABLE IV

PHC GOVERNANCE STRUCTURES						
Institutional arrangements	Privatization / Market	Palmeira das Missões	Oberá	Agency/ Hierarchy		
Instruments						
Incentives Intensity	++	++	+	0		
bureaucratization	0	+	++	++		
Performance attributes Adaptative autonomy (no safeguards)	++	+	+	0		
Adaptative integrity (safeguards)	0	+	+	++		
Contractual 'law' Labor relations						
Executive autonomy	++	+	+	0		
Staff security	0	+	+	++		
Legalistic dispute settlement	++	0	0	0		

Source: Based on Williamson [4]. ++ = strong; += semi strong; 0=weak

Table III shows a set of distinctions between the two countries: i) greater challenge to change the gateway of the

The organization of primary care services in Oberá is prevalent in the public sector, on a platform aimed at hierarchy

and it is the result of the influence of the central government over the provinces and municipalities and of the province over the municipality. The adherence to the National Family Health Program (PSF) in the Province of Misiones (where Oberá is located) in 2009 represented an initial effort of intergovernmental alignment towards unified PHC policy.

The province joined the national PSF and partially introduced this differentiated PHC model in five out of thirteen peripheral units of structures that provide primary care services in the municipality. In return, it received some financial incentives. The strongest incentive instrument of governance structure in Oberá is the deployment of medicines by the central government to the local units of PHC through the program called 'Remediar'. However, this program has been constructed according to the concept of disease, and this incentive is not perceived as valid by the researchers for conducting a proper PHC transaction. The apparent absence of safeguards guaranteeing an explicit roll of services for the PHC indicates no integrity in contractual relationships organized by the province because the provincial health system does not provide coverage targets and topical productivity in health. The exception is in the safeguards imposed in a program called 'Plan Nacer', such as the suspension of financial incentives subject to non-compliance with its rules. Work teams of PHC, based on provincial units are not quantitatively and qualitatively defined, as prescribed by the model promoted by the national government (PSF). Such additional evidence gives an idea of the magnitude of the uncertainty that is present in the institutional structure of governance in Oberá. Finally, the PHC human resources are hired either by as employees or by outsourcing contracts. This combination of features makes the PHC governance mode of Oberá be situated in an intermediate position, i.e. in a more pronounced tendency to the hierarchy pole, or more reticent to an intergovernmental hybrid mode than the Palmeira das Missões structure.

In Palmeira das Missões, the PHC structure is in the initial phase of transformation from the traditional model of primary health care units to the model advocated by the National Family Health Strategy. The adherence to the new strategy is two out of fifteen existing units. This shift began in 2006 encouraged by a funding floor for the PHC. Besides, a former traditional unit is being remodeled to house two more family health teams in downtown and other traditional unit will be converted into Family Health Unit, bringing the total of units aligned to the new strategy to five out of fifteen. The Federal Government got the compliance of Palmeira das Missões with agreed health targets through the Statement of Management Commitment with the State and Municipalities Inter-managers Commission (CIB). The municipality could formulate its own policy of PHC through the Municipal Health Plan, provided that it was aligned with state and national guidelines. However, such a plan has not been completed. Despite this, there is the possibility of taking advantage of incentives offered by the federal government since the municipality is increasingly aligned with the national PHC policy, because both the increase in coverage and the implementation of differentiated tasks increases the PHC amount funding floor. Hence the classification of the incentives was ranked as 'high impacts'. The municipal bureaucracy as adaptive integrity is considered intermediate or semi-strong, due to two antagonistic reasons: first because, internally, the municipality cannot avoid the administrative burdens and in its exogenous environment, there are safeguards imposed by the Statement of Management Commitment, which forces it to feed epidemiological information systems, for example. Second, the lack of internal controls, operational audits and other instruments of accountability join the under use of some procompetitive practices of management, such as procurement by electronic auction. It added to this strategic uncertainty the quantitative and qualitative definition of work teams in relation to population coverage without the determination of who should do what, with which resources and how often. To illustrate, the frequency of home visits and practice of clinical procedures among units of analysis demonstrate differences. Finally, although the health services are municipalized, from the standpoint of labor relations, there are employees who are civil servants and employees outsourced.

The governance structure of the PHC in Palmeira das Missões can be interpreted by its composition, with more conviction than that of Oberá as a model in transition from the hierarchy mode to a hybrid one of central regulation.

B. Transaction costs

The main direct transaction costs observed in Oberá and Palmeira das Missões are related to the specificities: health budget earmarking in the province (Argentina) and in the municipality (Brazil) and the universality of these services in both contexts. Direct costs observed simply in Oberá are the existence of a regional health care law, the obligation of the province government in the PHC provision, the high diffusion or institutionalization of a model; state production of medicines, provincial bureaucratization, territorial categorization of executing units as differential complexity, and the reduction in size of the health promotion territory in rural areas. The existence of a local administrative structure, in turn, is a direct cost observed only in Palmeira das Missões.

The friction costs related to the specificities identified in Palmeira das Missões are the low per-capita health budget, lack of medicines and deficit in management practices, involving the procurement of inadequate inputs. With regard to Oberá, it appears the nasty investment in equipment due to the high number of users who depend on public services and the lack of clinical analysis, as well as the low wages. The scarcity of health workers is a cost friction that appears in both cases.

There are direct costs common to both cases in the environmental dimension, like the existence of a national guideline for policy and implementation and the decentralization of services towards municipalities. In Palmeira das Missões the federal guidelines' policy and the registry of patients in the health care units are followed. The comprehensive distribution of medicines in the PHC units is

seen only in Oberá. The environmental friction costs observed both in Palmeira das Missões and in Oberá were the no integrated clinical records, the slow process of transformation to a PHC health promoting and the heterogeneous PHC policies within health jurisdictions. The emphasis on curative medicine and the lack of information on non-communicable and chronic diseases are friction costs exclusive of Oberá.

Finally, the moral hazards direct costs identified in Oberá were the presences of PHC guidelines focusing on maternal and child health, the 'Plan Mamá' program with quantitative targets, the 'Plan Nacer' program also with quantitative targets, and the existence of PHC units working off-business hours on call. The existence of a defined time care in units is a direct cost common to both cases. However, the existence of specific information systems for primary care is a direct cost only of Palmeira das Missões. The moral hazard friction cost observed exclusively in Palmeira das Missões was the lack of a Local Health Plan. The non-compliance with working hours and the existence of heterogeneous work teams are friction costs common to both cases. Finally, the emphasis on maternal and child health at the expense of other fields of care, the centrality of the providing care in the unit (instead of home care) and the operational and political misalignment (among tiers of government) are friction costs of Oberá.

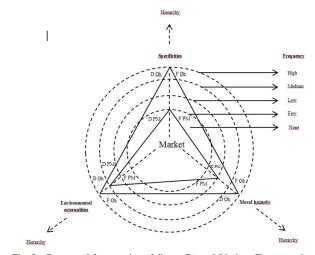


Fig. 2. Compared frequencies of direct (D) and friction (F) transaction costs observed in Palmeira das Missões (PM) and in Oberá (Ob). The figure is based on the Genugten's work [12].

The field survey arrives at the situation depicted in Figure 2, whose the larger triangle area is the transaction costs of Oberá, while the smaller one represents Palmeira das Missões. In both contexts analyzed, some factors contribute to the existence of specificity, as the essentiality of the services, the distance from referral centers for work, the education, the levels of poverty, the low volume of resources available for health financing and particularly for the PHC. If the degree of PHC specificity is not null, the analysis turns to the other properties, i.e. the risks of environmental externalities and moral hazards. If it is not prevented the risks of environmental externalities become costs of bad adaptation because bad adaptation arises from insufficient investments in communication, negotiation, design and safeguards primarily coordinated by those responsible for the PHC management.

The data collected indicated that more safeguards emerged in Oberá coping externalities risk than in Palmeira das Missões. Thus, one would expect a lower frequency of bad adaptation transaction costs in the Argentinian case when compared to the Brazilian one, but Palmeira das Missões showed lower frequency of externalities friction costs even with fewer direct costs invested. The explanation lies in the uncertainty about the best way to solve problems related to services' provision or about which tier of government should formulate health policies and leads those involved to a poorer adaptation behavior in the Argentinian case.

The central government 'buys' more successfully the autonomy from local governments in Brazil through the formulation and communication of primary care services. It is established thereby, a structure of co-governance; strategic and institutional uncertainties are faced with lower frequency of direct costs, instituting and ensuring intergovernmental alignment. Any saving effort is relevant in scenarios of proven specificity of resources. The mode of co-governance is a hybrid structure nearest the hierarchical / bureaucratic pole than the market one. The tier that 'sells' its autonomy relieves its platform of governance from adaptive integrity or owns greater coordination and seeks a type of adaptive autonomy, which means aligning itself with an exogenous policy. The 'buyer' entity, usually in a higher tier gives incentives to the platform of governance of the 'seller' entity in a lower tier and coordinates itself the PHC system. Thus, the Brazilian governance mode seeks to establish a possibility of sharing decisions by 'buying' autonomy from local governments by the central government more firmly. Nevertheless, the safeguards are not as well established to prevent disturbances that occur due to moral hazard, such as avoidance of the local planning tasks and operational control of the services. That's the case of lack of a Municipal Health Plan.

In the Argentinian case, the central government takes also efforts in order to 'buy' sub national autonomy for the formulation and communication of PHC policies. However, these efforts of implementation of a regulatory and hybrid platform contain inconsistencies in their orientation. The scope of national regulation of the provincial PHC is limited to the maternal and child health care. Due to the strategic and institutional uncertainties verified, externalities and their risks are greater for Argentina than for Brazil.

Moral hazard, in turn, results from the difficulty of measuring services. The lack of actual knowledge on the part performed of the tasks contracted is an opportunity for expropriation by the contracted. Direct costs would then be due to the stipulation of quantitative and qualitative standards of service, while the friction would result in bad performance of the contracted. The Argentinian case revealed direct costs of preventing the moral hazards slightly more frequent than the Brazilian one.

Evidence suggests, in short, lower incidence of transaction costs in Palmeira das Missões than in Oberá because its institutional arrangement has greater coordination and incentives with less strategic uncertainty.

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