Plural Forms in Brazil's Automobile Fuel Distribution Sector: Evaluation of the profile and stability of plural governance in São Paulo state

ABSTRACT: This paper is dedicated to the study of governances adopted by fuel distributors in their transactions with gas station retailers in the state of São Paulo. With the deregulation of the market, plural forms were allowed and have been a recurring presence. This paper argues that the plural forms found are transitory, not as a result of increased efficiency and reduced transaction costs, but because plural forms have become a key strategic step in securing business partners and promoting greater growth of the firm. Moreover, it is argued that the institutional environment has a significant influence on the coordination of plural forms, directly interfering with their stability.

Keywords: plural forms, institutional economics, institutional environment, fuel distribution.

1. Introduction

Until the early nineties, the distribution of fuel in Brazil was heavily managed by the government. Only a few distribution companies were authorized to operate in the market, and the state maintained a monopoly in fuel production and distribution through Petróleo Brasileiro S.A. (Petrobras), a semi-public Brazilian multinational energy corporation headquartered in Rio de Janeiro. Moreover, the government kept fixed prices in all links of the chain. Since 1997, the industry has been deregulated, with the main objective of promoting increased competitiveness. The state monopoly and price-fixing policy ended, thereby allowing the entry of new firms into the domestic market as well as the importation of fuels.

One of the most important changes in the operations of this market concerns the fuel retail model. Until 1997, service stations were necessarily tied to distributors and carried their brands, acting in the market as franchise units. Thus, transactions between distributors and service stations occurred through loyalty contracts and negotiation exclusivity.

Since deregulation, a new mode has allowed the establishment of stations without supply contracts with a distributor. These are dubbed "unbranded" or "white flag" service stations, insofar as they are not franchises of any distributors. As expected, the resale profile showed a significant increase in the number of white flag stations, currently reaching more than 40% of resale units (ANP, 2012).

The insertion of this new retail modality opened market space for a plurality of transactions for distributors, since they can now market their production in two ways:

1) A contractual model similar to that of a franchise, in which the service stations have exclusive contracts. This transaction requires investments in specific assets of layout and standardization of the retail outlet and activity, just as in a franchise, where there is a "modus operandi" to be followed. These costs are generally the responsibility of the distributor.

2) Sporadic sales to stations with which they do not have an exclusive supply contract. In these transactions, there is no investment in specific assets to the business, and they will be treated here with some semantic liberality only as “Market”.

From an academic perspective, it is interesting to assess how the distributor market has adjusted to the change in legislation that allowed plural governances. The aim of this study is thus to highlight some key issues: Have all distributors begun to operate as plural forms now that legislation allows? If not, what kind of distributors use plural forms? What justifies the adoption of this form of governance? Is the maintenance of the plural form in the market stable or transient? What is the impact of the institutional environment on defining arrangements to sell distribution firms’ production?

In summary, this study seeks to understand the behavior of plural forms in this market, by evaluating the stability of these arrangements over the last fifteen years. At the theoretical level, the analysis is supported by recent work discussing motivations for the use of alternative forms of governance, emphasizing that in some markets where there is a high degree of uncertainty due to the difficulty of measuring quality, the trend will be the disappearance of “market” relations, leading to adoption of plural forms. The various explanations for the appearance of these plural forms also offer alternative predictions for their long-term stability. (Arthur, 1989, 1994; Lafontaine & Shaw, 2005; Azevedo & Silva, 2012; Bradach & Eccles, 1989; Carlton, 1979; Michael, 2000; Heide, 2003; Schnaider, 2011; Mols, Hansen, & Villadsen, 2012).

In this sense, the main argument presented here is that one reason for the adoption of plural forms is the possibility that such forms represent a strategic movement that will allow the firm’s growth in the long run. Although the argument has transitory characteristics, it is believed that transitory movement can persist over a long time, maintaining the stability of the adoption of plural forms, although not with the same agents. An empirical study was designed to add objective results to this area, within the studies of institutional economics.

The research method used was face-to-face interviews, using a structured questionnaire, with 25 distributors operating in the state of São Paulo, which together account for 80% of domestic sales of gasoline and ethanol. The information covered in this study is part of a broader database from a previous research project (Soares, 2012). The focus on the state of São Paulo is justified due it being the largest Brazilian market for automotive fuel, with 25% of the country’s service stations, and over 30% of automotive gasoline sales and 60% of ethanol sales nationally (ANP, 2009).

The article has four sections following this Introduction. Section 2 reviews the literature on plural forms and discusses whether they are stable or nor, privileging the Institutional Economics approach. Section 3 presents a brief history of the studied sector, focusing on recent changes after deregulation. Section 4 describes the empirical evidence of plural forms in fuel distribution and the impact of the institutional environment on these arrangements. Finally, Section 5 offers some final remarks on the topic.

2. Theoretical Approach

The simultaneous use of more than one governance structure to govern the relationship between firms and their partners, whether for the supply, marketing, or sale of products, is considered plural. Different terminologies are used in the literature to discuss this plurality, such as “contractual mix” (Bai & Tao, 2000a; Azevedo & Silva, 2012a), “Plural forms” (Bradach & Eccles, 1989; Bradach, 1997; Coughlan et el., 2002), “Dual Distribution” (Bai & Tao, 2000), “Concomitant supply” (Parmigiani, 2007; Mols, 2010), and “tapered integration.” All these approaches consider a company to be plural when it uses more than one governance structure fgor its transactions with similar characteristics. Discussion about what motivates such a decision has been recurrent in the literature.

In attempting to explain the drivers of such choices, different theoretical approaches relate the maintenance of plural forms to a number of variables connected with efficiency, the need to monitor and control partners in the value chain, and the capacity to innovate and gain knowledge in the franchise environment.

The classical Transaction Cost Economics approach acknowledges that plural forms are transient. Based on the transaction attributes (uncertainty, frequency, and asset specificity), there would be an optimum and unique alignment of these with an efficient governance structure, thereby minimizing transaction costs. The transience of the plural form would be inevitable in that, over time, agents would tend to establish the optimal governance structure to gradually replace less efficient arrangements previously used (Arthur, 1989, 1994).

Indeed, observation of the functioning of various markets has shown the recurrent use of plural arrangements. Empirical studies on this type of governance often use simple dependent variables to test the correlation between independent variables and the use of the plural form or not. They thus establish an understanding about the characteristics of firms that decide whether to be plural or not (for example Parmigiani, 2007; Heide, 2003). In the same line of analysis, some studies on franchises employ this same approach, characterizing differences between firms that adopt a plurality of governances or not.

Other multisectoral studies (Mènard et al) have advanced in their efforts to explain the motivations for plurality. In part, their findings show some correlation with the motivations raised by Menard, although they consider that an exhaustive typology of possible motivations for adoption of plural forms has not yet been consolidated.

The main argument presented here is that one of the reasons for the adoption of plural forms is the possibility that it represents a strategic move that will allow the firm's growth in the long run. Although this argument has transitory characteristics, it is believed that transitory movement can persist over a long time, maintaining stability in the adoption of plural forms, although not with the same agents.

3. Brief History of the Sector

In the 1990s, the models driving Brazilian economic policy favored changing the role of the state from producer to regulator. In this context, the fuel distribution sector was affected by laws that overthrew the State monopoly on production and distribution, and allowed the entry of new competitors in the industry. (Marjotta-Maistro, 2002).

The fuel market in Brazil became regulated by Law 9.478/97, which relaxed the monopoly in the oil and natural gas sector hitherto exercised by Petrobras, allowed imports of gasoline and set a rural price for farmers in January 2002, and ended the fuel price-fixing policy.

The main objective of the deregulation process was to increase competition in the industry based on two fundamental changes: the end of exclusive supply to service stations by allowing the existence of stations without distributor supply contracts; and the entry of new distributors and importers in the market.

The law that regulates the industry today further established that the wholesale market (upstream) would be restricted to distributors, while the retail market (downstream) would be limited to retail service stations. In other words, the law prohibited service stations from purchasing directly from plants, refineries, formulators, petrochemical companies, or importers, and also prohibited distributors of liquid petroleum, ethanol, and other automotive fuels to sell at retail.

Additionally, ANP Ordinance No. 116/2000 established that service stations can only buy fuel from distributors with which they maintain supply and brand contracts, except for "white flag" stations, which can buy from any distributor. The owner of the service station can choose either to be linked to a distributor brand with which he negotiates exclusively, or to be unconnected and negotiate with any distributor.

By prohibiting vertical integration and introducing mandatory negotiation exclusivity for branded service stations, the existing regulatory apparatus defined the existence of organizational forms with and without contracts, creating exclusive trading arrangements. In this context, changes in the legal environment made the relationships between retailers and distributors increasingly complex . (Mahoney, 1992; Lal, 1992)

As a result of these legal requirements, there are now basically three types of distributors in the market:

- Dominant Distributors: Traditional distributors, already operating in the market before the deregulation process, with a high domestic market share (above 15%) and nationwide franchise brands.
- Regional Distributors: Distributors that entered the national market when deregulation occurred in 1997, with a low national market share (below 7%) and franchise brands at a regional level.
- Independent Distributors: Distributors which entered the national market when deregulation occurred in 1997, with a very low share of the domestic market (below 2%) and no franchise brand.

Through contracted arrangements, distributors maintain exclusive sales channels and assign their brands as well as specific physical assets such as layout, tanks, and pumps under a free-lease agreement. According to Hart and Moore (1990), by loaning these assets, the distributors obtain the residual right of decision or control, which are rights to decide on future contingencies not covered by the contracts.

As for arrangements without contracts, investment in the business is made exclusively by the retail service station. On the one hand, it has full freedom to negotiate with different suppliers and conduct business, but on the other hand is not able to rely on brand appeal to its customers.

In general, and in arrangements with or without a contract, all these changes in the configuration of the industry resulted in a deterioration of the relationship between distributors and fuel retailers. According to Moraes (2004), the turbulence caused by deregulation could be perceived by both actors. For the distributors, deregulation meant the end of their oligopoly, while for service stations the end of the concession scheme for opening service stations meant increased competition, as well as falling resale margins resulting from the proliferation of adulterated and fraudulent products.

On one hand, distribution companies blamed their service stations for the drop in sales, accusing them of infidelity by acquiring products from other distributors; of inefficiency in making consumers aware of the value of their brands (which should be enough to offset the premium charged over unbranded stations); and of inefficiency in managing the stations with a smaller margin and therefore optimizing their costs. On the other hand, service stations blamed distributors for lack of competitiveness in relation to the irregular market; for the premium charged to their service station network; for lack of influence on the bodies responsible for monitoring the sector; and for lack of flexibility to meet credit emergencies.

As a result, deregulation redefined the competitive basis of the sector, being perceived as a drop in the performance both of distributors and service stations, which has only been compensated for by an increase in sales. To this end, new strategies and business models have been adopted. (Moraes, 2004; Nunes & Gomes, 2005; Medeiros 2007; Soares & Paulillo, 2011).

3. Institutional Environment

After the sector’s deregulation, the institutional environment changed drastically. The petroleum law of 1997 created the National Agency of Petroleum, Natural Gas, and Biofuels (ANP). The ANP is a special authority under the Ministry of Mines and Energy charged with promoting the regulation and supervision of the petroleum, natural gas, and biofuel industries, encouraging free competition and national development with a focus on the public interest and environmental preservation.

The ambit of the agency has gradually expanded, especially in matters of regulating the sector. Especially in the retail distributor link, the performance of the agency has become more evident in inspections related to fuel quality and its conformity to the law; in examining prices and marketing margins to prevent of cartel practices; and also in inspections related to the service station’s adherence to its exclusive dealer arrangement. These also include greater oversight of distribution firms as well as ethanol plants, which are prohibited from providing fuel directly to service stations.

In fact, permitting the entry of new firms in the market and the lack of a regulatory institutional apparatus led the domestic market to lose control over quality standards and fiscal responsibility of firms in the segment. A series of scandals and allegations of fuel adulteration, smuggling, tax evasion, and illegal practices of all kinds flooded the market.

In response to these developments, from the normative point of view, major changes were made in the sector, with particular emphasis on: a) adding markers to solvents to facilitate the identification of gasoline adulteration; b) adding markers to anhydrous ethanol for easy identification of tampered ethanol; c) increasing supervision of ethanol plants, which reduced the irregular trade of ethanol from 35 % in the early 2000s to 12% in 2013 (ethanol sold directly from plants to service stations without going through a distributor); d) initial monitoring in the upstream link (distributors and biofuel plants) with regards to quality; and e) initial monitoring of service stations' fidelity and enforcement of exclusive arrangements of negotiation and origin of fuel.

Furthermore, Federal Revenue Department inspections, especially in the state of São Paulo, along with the creation of specific programs to combat illegality in the sector and programs of the Department of Finance, have also contributed to discipline and enforcement of the rules defined in the deregulation process.

From a competitive standpoint, although the public policy of deregulation had as its main objective increased competition in the industry, what happened was exactly the opposite: a significant increase in the concentration of the distributor market. Between the years 2005 and 2013, the concentration indices in the gasoline and ethanol market increased from 50.6 and 41.52 to 65.8 and 56.9 in the observation of CR3, and from 0.115 and 0.074 to 0.157 and 0.114 of the HHi in the same period for both fuels, respectively.

Over 20% of the distribution firms entering the national distribution market in the late 1990s left the market or were absorbed by larger ones between 2003 and 2013, reinforcing the trend towards concentration of this market and also the impact of disciplinary policies on the market, which forced the exit of firms with irregular practices.

Increased market concentration was also observed in the retail seller sector. In the early 2000s, the total of service stations in the state of São Paulo for each 10,000 vehicles was greater than 7, and there are currently in the market just over 3 service stations per 10,000 vehicles in the state. Considering that in the same period the fleet of vehicles more than doubled in size, an increase of only 10% in the number of retail fuel units contributed to the increase in sales per unit of resale, maintaining the same pattern of competition. As it could not be otherwise, the sales volume of the service stations almost doubled in the last ten years, as shown in Table 1 below.

Table 1: Sales volume – service stations: gasoline, diesel, ethanol and natural gas (in billion liters)

Type of service station	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Variation in the period
Dominant	34.7	37.3	37.5	38.9	43.7	47.5	48.9	52.7	55.7	59.7	+72.0%
Unbranded	13.1	14.4	14.3	15.0	16.0	18.0	19.6	21.4	21.5	23.0	+75.6%
Total	47.8	51.7	51.8	53.9	59.6	65.5	68.5	74.1	77.2	82.7	+73.0%

Source: Sindicom, 2013

The profile of branded service stations also changed substantially, with a progressive increase in the number of unbranded ones and a drop in the number of dominant and regional stations, according to data in Table 2. This event reinforces the hypothesis of this article that plural forms can function as a growth strategy of distribution firms, especially in the recapture of their previous number of resale units and later market expansion, since a sharp drop in the number of resale units between 2000 and 2003 was observed, followed by a less vigorous movement of recovery as of 2004.

Table 2: Number of service stations in the state of São Paulo, per type – selected years

Type of service station	2000	2003	2006	2009	2010	2011	Variation in the period
Dominant	5.586	3.504	3.922	4.134	4.257	4.276	-23.5%
Regional	1.466	1.237	536	554	639	642	-56.2%
Unbranded	826	3.195	3.946	4.129	3.863	3.880	+369.7%
Total	7.878	7.936	8.404	8.817	8.759	8.798	+11.7%

Source: ANP, 2012

Continuing with the institutional question, it is worth noting the construction of resellers' reputation. Given the profound changes in this market in a short time, from the perspective of consumers two specific segments were institutionalized: (i) the dominant service station, in which the distributors maintain a significant advertising investment to appreciate their brand assets, and which end up gaining more trust from the consumer; and (ii) the unbranded stations, known for maintaining lower prices but with questionable quality (Smith, 2011). Among these, one must not forget regional service stations, which continue to seek consolidation of their brands in the market, but are generally not recognized by the consumer market as reputable franchises, a recognition which resembles that attributed to unbranded stations.

In this matter of brand appeal, it is important to remember that fuel is, according to the classification proposed by Barzel (1982), a "belief good", for which relevant information about the transaction is not obtained even after consumption of the product. The characteristics of these products are not directly observable, so measurement of attributes is difficult even after consumption. In transactions involving these products, information asymmetry becomes a costly and insoluble problem and brand becomes an important reference able to synthesize important information in a purchase decision.

On the one hand, the major brand distributors built and maintained a high brand asset, but on the other, the institutional post-deregulation instability contributed to the perception that fuel irregularities were common in this market, and the unbranded segment was more susceptible to such issues. Despite the significant increase in inspections and falling rates of non-compliance of fuels across the reseller segment, the memory persists that low quality fuel is sold in unbranded service stations.

Chart 1 summarizes the main changes in the institutional environment and their impact on organizational forms.

Chart 1
Changes in the institutional environment of fuel distribution

Prior to deregulation

Distribution	Governance Structures permitted by law	Retail Reseller	Institutional Environment
Large Distributors	- Contracts	Always contractual mode (Franchise)	- Fixed prices - Closed economy - Little or no Competition - Brand appeal: Little or no difference between the distributors - Inspections: None

After deregulation

Large Distributors Smaller Distributors	- Contracts - Market - Plural: Contracts and Market	- contractual mode (Franchise) - Unbranded stations (without contracts)	- Free prices - Open economy - Competition - Brand appeal: Great difference between distributors - Inspection present

Source: Created by the author

4. Empirical Evidence

To address the empirical evidence about plural forms, this section will be divided into: sample characterization; a brief description of the characteristics of the transactions and governance structures found;[1] and a final specific topic about the plural forms observed.

4.1- Sample characterization

Considering the differences in size between the distribution companies, the survey data studied was tabulated by framing the distribution firms according to the classification adopted in this article:

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[1] For greater detail about the characteristics of transactions and governance structures in the industry, see Smith (2012)

- Dominant Distributors: Traditional distributors, already operating in the market before the deregulation process, which hold brands nationwide (i.e. at least one branded service station in every Brazilian state) and have a high domestic market share (above 15%);
- Regional Distributors: Distributors who entered the national market after deregulation in 1997, which hold brands at a regional level (i.e. concentrated in some regions of the country), and have low national market share (below 7%);
- Independent Distributors: Distributors who entered the national market after deregulation in 1997, do not have branded stations, and exhibit a very low share in the domestic market (below 2%).

We interviewed 3 Dominant, 12 Regional, and 10 Independent distributors. The set of companies surveyed account for 72% of domestic sales of ethanol and 80% of national sales of gasoline. The interviews were conducted in 2010.

4.2 – Characteristics of transactions and governance structures

As previously described, two basic types of transactions are possible: with a contract and through the market.

For purposes of theoretical considerations, the **frequency** at which transactions are negotiated are taken into account. In market transactions every negotiation is a transaction, and these occur daily or every 2 days. As for transactions with contracts, the negotiation is made under the terms of the contract, so the frequency of the transactions refers to the terms on which they are renewed, on average 5 to 10 years.

The issue of **uncertainty** was reported by respondents as being very similar in both arrangements (contracts and market). The main risk (ex-post) refers to fuel adulteration during transportation or resale. In transactions via contract, in addition to uncertainty due to the risk of fuel adulteration, there are also uncertainties specifically related to the protection of brand assets and protection of assets specific to the transaction;

The main attribute that defines the governance structure is **asset specificity**, which is present in transactions via contract and absent in those occurring through the market. To further clarify the unit of analysis of specific asset transactions, the concepts used for each specificity are presented:

a) Locational: Cases when the service station enjoys advantages with distributors because they are in prime locations in regard to the flow of vehicles. It is a fact that location *per se* is an intrinsic characteristic in the fuel sales business. We therefore emphasize that the existence of specific locational assets in the transaction refers to cases where the reseller offers such a privileged location in terms of sales that it becomes a target of interest from distributors, in which case the location constitutes a specific asset to performing the transaction.
b) Physical: The existence of transaction-specific investments, such as suitability of equipment, machinery, layout, among others required in the transaction with the distributor.
c) Human: Where there is involvement of human capital specifically for the activity, such as guidance offered to stations by the distributors, primarily in the form of technical, administrative, legal, financial, environmental, or normative support .

d) Dedicated: When there is transaction-specific investment with a dependency relation that implies infeasibility of future use due to the cessation of the transactions. This case encompasses additional investments in routine activities of the service stations, such as integrated information systems, integrated stock control systems, and other joint benefits that can minimize operating costs and that are unique to that business relationship.
e) Brand: Intangible asset that differentiates branded and unbranded service stations.

The observation of different combinations between asset specificities allows the identification of various types of service stations, differentiated by the specificities that make up their transactions.

Based on the analysis of asset specificities, our results suggest that the dominant distributors maintain a majority of transactions structured by contracts, counting 2 or 3 specific assets, and a minimal number of transactions with a low degree of specificity, structured through the market, with unbranded service stations.

Regional distributors more commonly maintain a contractual form with low asset specificity with their branded service stations, and a high share of transactions with no asset specificity with unbranded stations, within a market governance structure.

For independent distributors, transactions are governed through the market in their unbranded stations, with no asset specificity.

4.3 – Plural Forms observed

For the three types of distributors in the market, we found the following configuration of the share of different governance structures in the business, shown in Table 3:

Table 3 – Governance Structures used by distribution firms

Distributor Type	Governance used (% of billing)		Classification
	Contracts	Market	
Dominant	between 80% and 95%	between 5% and 20%	Plural
Regional	between 2% to 5%	between 95% and 98%	Plural
Independent	-	100%	Singular

Source: Created by the author

We can see that the groups of agents which act in a plural form have virtually opposite positions with regard to the two existing governance structures, market and contracts. The observation of this market indicates that large firms (Dominant) move their sales to contract transactions, while smaller distributors (Regional) act mostly via market sales. The retail overview in Table 4 confirms this behavior.

Table 4 - Overview of automobile fuel retail, Brazil 2010

<table>
<tr><th colspan="2">GASOLINE market</th><th colspan="2">ETHANOL market</th></tr>
<tr><th>SUPPLIERS</th><th>FUEL SERVICE STATION</th><th>SUPPLIERS</th><th>FUEL SERVICE STATION</th></tr>
<tr><td>BR (8.7%)</td><td rowspan="5">UNBRANDED
(32.9% of national fuel sales)

Average sale per service station
:
590.9 m^3/year</td><td>BR (3.8%)</td><td rowspan="5">UNBRANDED
(48.1% of national fuel Sales)
Average sale per service station
:

436.3 m^3/year</td></tr>
<tr><td>Ipiranga (6.3%)</td><td>Ipiranga (3.0%)</td></tr>
<tr><td>Shell (2.9%)</td><td>Shell (1.0%)</td></tr>
<tr><td>Cosan (3.6%)</td><td>Cosan (1.5%)</td></tr>
<tr><td>Other (78.5%)</td><td>Other (90.7%)</td></tr>
<tr><td>Distributors that require branding (100%)</td><td>BRANDED
(67.1% of national fuel sales)
Average Sales per service station :

955.6 m^3/ano</td><td>Distributors that require branding (100%)</td><td>BRANDED
(51.9% of national fuel sales)
Average Sales per service station :
:

373.34 m^3/year</td></tr>
</table>

Source: Author, based on Boletim Abastecimento em números (Supply Bulletin in numbers), ANP, 2011

The single distributors that operate only under the market governance form, here called Independent, have a large portfolio of regular customers and a very low market share. Among the companies surveyed, 90% said they have no interest in maintaining transactions via contracts, through the franchising of reseller stations.

The main cause of disinterest among Independent distributors in the contract governance structure was the high investment required and the low return, given the lack of loyalty in purchases by the franchised stations and low enforcement power of these firms to address such contractual breaches.

The institutional environment, in turn, also fails its disciplinary role in the market: the slow pace of the Brazilian justice system fosters opportunistic behaviors, especially those related to making purchases outside the exclusive trading arrangement, even despite the increased surveillance in recent years.

The secondary industry data confirms this expectation, as rates of lack of loyalty in purchases[2] still remain high, ranging from 30% to 50%. An aggravating factor is the significant persistence of an irregular trade of ethanol. Currently, over 15% of all ethanol sold in the country is irregular.[3] Thus, the maintenance of a contractual governance structure does not guarantee long-term benefits to the franchisor, given the high uncertainty after major investments in specific assets.

In observing the firms that use plural forms, we have two specific segments: the Dominant firms, which maintain most transactions via contracts, and the Regional ones, which conduct a majority of transactions through the market.

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[2] Percentage of samples collected for quality analysis, or consulted while surveying prices, of which no invoice proving origin is presented. Breach of section III of Article 3 of ANP No 202 of August 15, 2000, which may result in cancellation of authorization from ANP to retail service station.

[3] This percentage of total ethanol supply is the difference between what is declared by the production plants to MAPA (Ministry of Agriculture, Livestock, and Supply) and what is declared by the distributors to the ANP in sales to dealers and exporters. In other words, ethanol is resold at service stations directly from the plants, bypassing the distributor link, which is illegal.

Among the Regional firms, 70% indicate plans to expand their network of service stations, primarily by franchising stations already active in the market (50%) and opening new company-owned stations (50%). The franchise expansion has been slow and gradual.

For the Dominant firms, the expansion of franchises is a crucial issue, as it is evident that the companies are not interested in maintaining relationships with unbranded stations. According to the respondents, the tendency is to franchise unbranded stations with which there have frequent relations (80%) and extend the network of branded stations by opening new stations, albeit to a lesser extent (20%). For both Regional and Dominant firms, the drivers of this expansion are the strengthening and dissemination of the brand and increasing sales volume.

The data collected in the field admits a certain persistence of these plural forms, though in the midst of instability. For the Dominant firms, the main reason given for maintaining a portion of transactions through the market is to turn the current unbranded service stations into franchisees in the short run. The maintenance of plural forms thus presents itself as a growth strategy of the distribution firm.

In fact, if the Dominant firms aim to grow and expand their franchise networks, why do they enlist partners this way (remaining plural) instead of capturing other agents that are not yet on the market and open new stations? In the case of fuel distribution in the state of São Paulo, this highlights a fundamental issue that explains the economic logic of this option. With the growth of large urban centers, legislation regarding the establishment of service stations became extremely restrictive, leaving few places where the installation of a fuel station is allowed.

Thus, an existing service station without a contract may hold a key locational asset to the business, insofar as the option of a new station may be in a much less profitable location. Moreover, it is an agent that already holds some know-how and understands the business.

Hence, it is expected that there will be a continuing instability of these plural forms, reflected in the movement to initiate transactions via the market and subsequently convert them into the long-term contracts deemed most advantageous to the distributor, since these arrangements offer greater control and exercise of authority, reducing uncertainty and guaranteeing returns associated with the brand asset of these traditional firms, as shown in Figure 1 below.

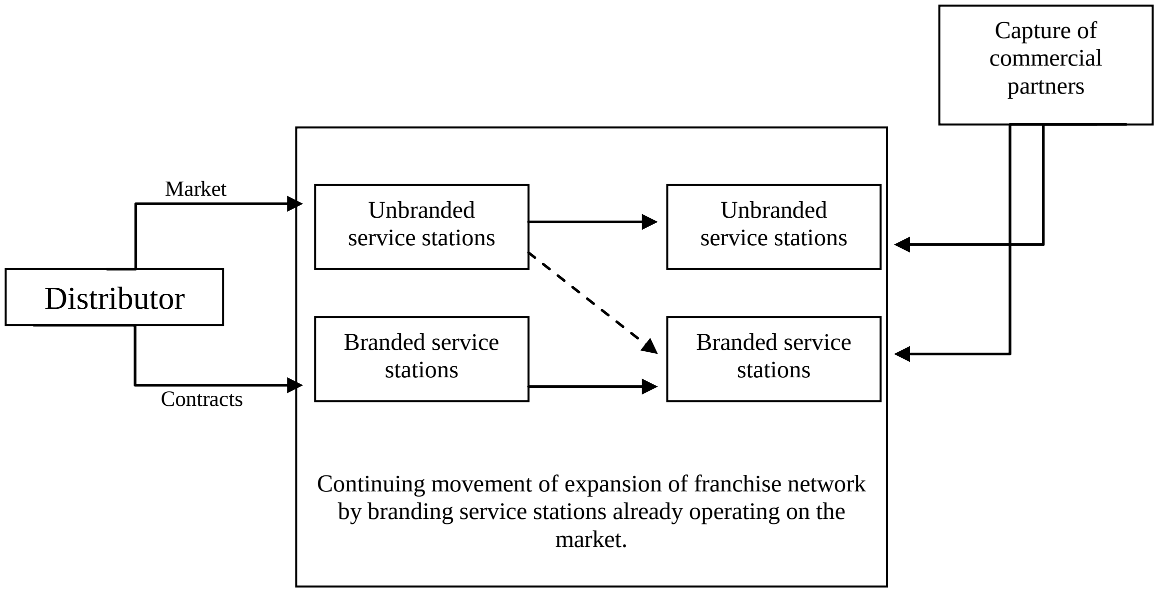

Figure 1: Expected stability for the plural form
Source: Author

It is evident that transactions via the market are not the preferred channel for distribution firms, although their persistence is maintained both by the need to attract new business partners and to hold specific business assets on the part of the retailer, which makes it a focus of interest for the distributor and helps maintain the continuity of such transactions.

Added to this matter of preference for the contractual model to the detriment of transactions through the market is the fact that there are no positive synergies between these two governance structures. In fact, they are competitors. There would be no reason for the distributors to invest in extending their transactions via the market, insofar as such action would result in depreciation of their primary sales channel, the franchise.

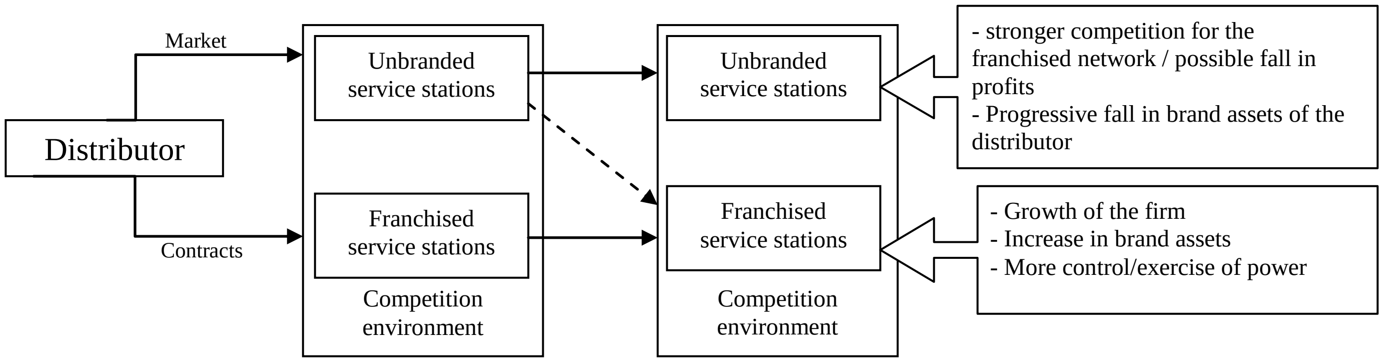

Figure 2: Results of plural forms used

The strengthening of the network of franchised service stations and of the distributor's brand assets entails a progressive reduction in the share of sales through the market, although the need to maintain a small portion of transactions through the market remains necessary as a growth strategy, as shown above.

In other words, according to the analytical scheme in Figure 2, we consider that, given the fierce competition between franchisees and unbranded stations, there is no positive synergistic effect that contributes to keeping these two channels in the long run. The decision to discontinue strengthens the governance that promotes the brand, the exercise of power, and strategic positioning across the chain.

Unlike some arrangements where there are favorable returns in maintaining the plural form, in the fuel distribution market, where franchises do not possess large areas of exclusive sales, as in traditional franchises, increasing competition by strengthening the competing channel implies future losses. This especially true given the importance of the brand in these markets, insofar as it is a good with high measurement costs, and the brand becomes a substantially strong indicator in consumer purchasing decisions.

5. Final remarks

Considering the market concentration of the set of dominant firms, we can conclude that the public policy that aimed at increasing competition in the sector in the late 1990s, by encouraging the growth of transactions via the market, has not had the desired impact. Rather, the movement of market concentration and the routing of transactions to the contractual model have been recurrent in the dominant companies.

In part, freeing up stations to operate without exclusive supply contracts in the late 1990s was meant to serve the goal of having agents offer lower prices, to the extent that they would not have the cost of franchising and would offer the same product to the market, now without the markup associated with the distributor brand. The presence of these agents would be a tool to normalize the market by reducing prices. However, it is important to note that the entry of these unbranded in the market occurred in the midst of an unregulated and loosely inspected institutional environment, along with the entry of hundreds of new distributing firms operating in many different ways and also thousands of uninspected ethanol plants.

In this new environment, many irregular practices were facilitated, from tax evasion to fuel adulteration. This instability generated in consumers'wariness towards these new stations without familiar brands. Even today consumers still believe that unbranded stations offer lower quality fuel (Paulillo & Smith, 2011). Currently, non-compliance rates in the state of São Paulo are at low levels and there is little difference between regional, dominant, or unbranded firms, but the memory of a period of extreme distrust persists, along with the consideration that the regulatory institutional environment has not yet fulfilled its role.

It is therefore possible that the competitive positioning of stations without contracts is not sufficient to attract the dominant distributors to continue to transact with them through the market. Moreover, the strengthening of this distribution channel favors increased competition for franchised stations, which could undermine the governance structure preferred by dominant firms. The strategic decision of distribution companies is to not remain plural longer than necessary.

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