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Effects of Performance History on the Contracting of Suppliers in the Brazilian Federal Public Administration

ABSTRACT

Objective: To analyze the influence that the past performance of suppliers has on the current ability to obtain new contracts in the Brazilian public sphere.

Method: An innovative approach was adopted in the literature when analyzing the persistence of supplier performance through multivariate dynamic models. To carry out the quantitative analyses, estimation with the Negative Binomial distribution and the classic regression model by Ordinary Least Squares were used.

Results: It was found that the greater the number of past contracts won, the better the supplier's performance in public procurement. In addition, it was observed that this influence varies according to the complexity of the market and the modality of the purchase process.

Originality/Relevance: The study innovates by pointing out indications that the use of past performance evaluation of bidders has the potential to be adapted for the public sector, which can influence the increase in the quality of the service provided or material acquired by the government.

Theoretical/Methodological contributions: The study corroborates the assumption by the Theory of Contracts by pointing out that suppliers with better performance tend to be reused, minimizing the risks of contractual breaches, but one should seek to improve the mechanisms so that the impact of past performance is higher in contracts that are more complex and require long-term relationships.

Social/Management contributions: The development of performance indicators that can be applied to supplier selection processes can stimulate the creation of new public policies to improve the management of public contracts.

Keywords: Public procurement. Supplier selection. Performance.

Gabriella da Silva Gomes
Universidade Federal Rural do Rio de Janeiro (UFRRJ) - Programa de Pós-graduação em Gestão e Estratégia da UFRRJ, Rio de Janeiro, Brasil
gabriellasgms@gmail.com

Caio Peixoto Chain
Universidade Federal Rural do Rio de Janeiro (UFRRJ), Rio de Janeiro, Brasil
caiochain.ufrrj@gmail.com

Eryka Fernanda Miranda Sobral
Universidade de Pernambuco (UPE), Pernambuco, Brasil
eryka.sobral@upe.br

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1 INTRODUCTION

It is the responsibility of the public sector to adapt secure techniques from the private sphere or to develop other mechanisms that can be applied in public management, aiming at increasing the effectiveness and efficiency of the use of government funds and improving the provision of services, such as information technology, management of processes, and electronic commerce (Tridapalli, Fernandes & Machado, 2011).

There is a growing literature on the advantages and challenges of using electronic public purchasing platforms, but the behavior of bidders and ex post performance indicators in the electronic bidding process is little explored (De Freitas & Maldonado, 2013; Doherty, McConnell & Ellis-Chadwick, 2013; Fernandes, 2005; Menezes, Silva & Linhares, 2007; Reis & Cabral, 2015, 2018).

According to Reis and Cabral (2018), studies generally emphasize the acquisition price in order to assess the effectiveness and economy of public purchases. However, knowledge about other performance measures related to hiring, such as quality and speed, is scarce. In this sense, one of the notable dimensions of purchasing management lies in the determinants of the supplier selection process and its direct impact on the effectiveness of these acquisitions (Çebi & Bayraktar, 2003; Flynn & Davis, 2017; Gosling, Purvis & Naim, 2010; Huang & Keskar, 2007; Khorramshahgol, 2012; Mamavi, Nagati, Pache & Wehrle, 2015).

Considering that the past performance of a supplier shows evidence of its future ability to fully cover the contractual requirements that meet the level of service contracted by the public sector (Mamavi *et al*., 2015; Reis & Cabral, 2018; Sarkar & Mohapatra, 2006; Watt, Kayis & Willey, 2010), the more years of supply, the greater the probability of a good performance and the lower the probability of some type of breach of contract or sanction. This assessment of a supplier then demonstrates its level of previous experience with the public sector, or even its persistence as a supplier.

Thus, the use of ex post evaluation mechanisms of supplier performance in contractual processes can improve governance and reduce opportunism in purchasing operations (Spagnolo, 2012). Past supplier performance is an important criterion for identifying and retaining the best suppliers, whether in the private or public sector (Mamavi *et al*., 2015; Snider & Walkner, 2009; Spagnolo, 2012; Watt *et al*., 2010).

In the private sector, past performance indicators have an impact on supplier selection, as buyers may prefer suppliers that have a good track record. In public contracts, this type of criterion is limited due to the need to guarantee equality, prevent favoritism, and corruption (Spagnolo, 2012). In Brazil, Law No. 13,303 (2016) - known as the State-owned Companies Law - also already provides in its article 55, item II, for the use of "evaluation of the prior contractual performance of bidders, provided that there is an objective evaluation system in place" as one of the tie-breaking criteria between two supply proposals for state-owned companies.

In the Brazilian context, the use of supplier performance indicators measured by past performance, is not an explored subject. In this way, the interest arose in investigating the relationship between current hiring and the past performance of suppliers in government purchasing processes in Brazil, since these procurements occur in an isonomic environment.

Therefore, we seek to answer the following question:

Does the performance history of suppliers influence the acquisition of new supply contracts for the public sector in Brazil?

To answer this question, we sought to delineate the relationship between variables based on the Theory of Contracts, in which the lack of information and transparency between

supplier and government tends to generate an unpredictable relationship and difficulties in control and inspection. As an empirical strategy, an innovative approach was adopted in the literature when analyzing the persistence of supplier performance through multivariate dynamic statistical models.

In addition to this introduction, the present study is structured into five further sections. The second section discusses the theory and hypotheses that underlie the proposed investigation. The third section presents the methodological procedure adopted, including data, variables, and estimation methods. The fourth section exposes the results found, the fifth section comprises the discussion of the results obtained in the research. Finally, the sixth section presents the final considerations.

2 THEORY AND HYPOTHESES

According to the Incomplete Contract Theory, contractual clauses present some omission, whether voluntarily or involuntarily. Real markets do not portray perfect competition models, a scenario in which contractual instruments would be prepared to anticipate all possible contingencies and states of nature. Therefore, there are situations in which there may be gaps in the contract established by the parties in relation to some purpose (Faganello, 2017).

The assessment of a supplier's reputation can be based on its performance history at the institution that hired it or based on information from third parties. This assessment represents its current ability to satisfactorily fulfill a contract (Reis & Cabral, 2018). Therefore, considering reputation as measured by past performance can offer advantages, such as reducing transaction costs, efficient trade coordination, and managing contractual completeness (Hart & Moore, 1999; Kachour, Mamavi & Nagati, 2016; Tirole, 1999; Yukins, 2008).

Reputation aspects are important in private purchases, even if they are subjective or formalized through feedback mechanisms or supplier rating systems (Banerjee & Duflo, 2000; Spagnolo & Dini, 2005). It is prudent to think of reputation as a competitive advantage over other companies, which can undermine equal treatment among competitors. However, it may be interesting for buyers to use it as a selection criterion when awarding public contracts with the aim of inhibiting the opportunistic behavior of some suppliers and minimizing contracting risks (Kacour *et al*., 2016).

2.1 The influence of past performance

There is great concern about the use of incentive mechanisms based on past performance, considering that they can be an obstacle, thus acting as a barrier to the entry of new suppliers. Faced with this theme, the work of Butler, Carbone, Conzo and Spagnolo (2020) has a field experiment to assess the impact of this type of mechanism on the results and the entry of suppliers. The results found that using a mechanism based on past data, as long as the data is properly designed, increases input and quality supply without increasing costs. Research by Kachour *et al*. (2016) also found that a supplier's strong reputation significantly affects its ability to obtain public contracts and does not act as a barrier to entry for other companies in the French public market.

The study by Mamavi *et al*. (2015) points out the importance of the supplier selection process linked to the performance provided by them previously in the context of the French public sector. In addition to the classic criteria present in the literature to assist the decision-making process of companies, the research of these authors detected that there is a logic of

reinforcement in which the number of previous contracts generates an increase in the probability of winning future contracts. However, this influence varies according to the type and complexity of the market in which the supplier operates.

Brunjes (2020) also conjectured and confirmed that the existence of a previous relationship between supplier and government positively influences the execution of contracts, more than competition between suppliers, in an assessment applied to the United States. Thus, there is an assumption that the supplier's past performance, represented in this study by the number of contracts won by a company, influences its ability to enter into new contracts. Thus:

H1: the greater the number of past contracts won, the better the supplier's performance in public procurement.

In contrast, it is necessary to observe in which type of public purchasing market the object is framed, since both the markets and the different types of bidding can vary in complexity, considering that theoretically, the greater the complexity of the contract, the greater the demand for a long-term relationship between suppliers and government (Bertelli & Smith, 2010; Brown, Potoski & Van Slyke, 2013, Brunjes, 2020). Therefore, the complexity will be treated here under these two aspects: market and bidding modality.

2.2 Past performance and market complexity

Two specific characteristics can be used to assess market complexity: the elusiveness of future contingencies and the unverifiable constraint. The first characteristic refers to the fact that the market has future contingencies that cannot be predicted a priori. The second characteristic aims to analyze the extent to which the restriction of transparency of procedures occurs caused by asymmetric information between the parties to the contract. Thus, the longer the contract and the more asymmetric the information, the more unforeseen events may arise and the more difficult it will be to control the procedure (Hart & Moore, 1999; Mamavi *et al*., 2015; Maskin & Tirole, 1999).

In this context, we disaggregated the types of contractual objects into works, goods, and services to assess the complexity of these different markets, following the strategy proposed by Mamavi *et al*. (2015). We consider the acquisition of goods as the simplest object, in view of the ease in describing and defining the material in an objective and standardized way. Another advantage of working with bidding for goods is the fact that this type of bidding, in most cases, allows for the requirement of samples for classification purposes.

Unlike products, services are consumed at the same time they are produced. Some specificities of the services denote that their result is considered to be of an unstable nature. This is due to the fact that normally the services are interactive, given the participation of the provider and the consumer. Thus, there is also a variance of the resulting service in each execution, considering the change of consumer and provider (Junior, 2012; Kon, 1999). Furthermore, in relation to the provision of services, it is more difficult to measure costs due to their intangible nature (Peter, Pessoa, de Araújo & Peter, 2002).

Law No. 10,520 of 2002 (2002) provides in its sole paragraph of article 1, that common goods and services are those whose performance and quality standards can be objectively defined by public notice, through usual market specifications. Common goods and services are characterized according to their standardization, which means that they can be

replaced by other goods and services that have the same quality and efficiency standard (Meirelles, 2016).

Civil construction, in turn, is a sector that has peculiarities in relation to the others (Colpo, 2016). There is difficulty in completing the works within the given deadline and in keeping the cost within the value stipulated in the planning phase, which has generated many studies aimed at identifying the reasons for the delay and the increase in expenses in the work processes in several countries. In Brazil, based on a recent study on contractual amendments for public works in universities, federal institutes, and federal university hospitals, developed by Alvarenga (2019), it was found that inconclusions and/or modifications of projects and additions of services are the main factors that affect the time and cost of the works.

Therefore, the representation of market complexity will be made according to the type of object contracted and it is expected that the impact of the performance history will vary significantly between them. Comparing in terms of complexity, the construction market is considered to be the most complex, followed by the service and goods markets, respectively. Therefore:

H2a: the greater the complexity of the market, the greater the influence of the number of past contracts won on the supplier's performance.

2.3 Past performance and modality complexity

Still on the complexity of the purchasing processes, another factor related to the legal contracting instrument was raised. It deals with the different bidding modalities related to past performance. Regulation by Law nº 8.666 of 1993 (1993), the bidding is a legal instrument for the execution of contracts of works, services and purchases in Public Administration. Except in cases of waiver or unenforceability, the bidding is used to select the most advantageous proposal for the acquisition of goods and services through an equal dispute between competitors (Da Silva Mascarenhas, Gomes & Lopes, 2019).

Decree 10,024 of 2019 (2019) establishes new rules for conducting an electronic auction. It provides for mandatory use by states and municipalities that receive funds through voluntary transfers from the Federation. The use of an electronic auction for common engineering services, a practice already adopted by Executive entities, based on Precedent 257 of the Federal Court of Auditors, is one more requirement among others brought by this decree. In this way, its relevance as a means of effecting public purchases is perceived and its use is expected to be even greater in the coming years.

The auction was instituted as a bidding modality in 2002, by Law No. 10,520 (2002), to complement the other existing bidding modalities. For the purposes of the study, only the modalities of competition, pricing, invitation, tender, and auction are considered as bidding, thus excluding the auction session. In other words, there was a differentiation between bidding, representing the aforementioned modalities, and the electronic auction.

The auction is the simplest form of bidding, both in operational legal procedure and by legal definition, for the acquisition of simple goods and services compared to the others. Consequently, other contracts not carried out by auction are considered more complex and are assumed to have greater influence from past contracts. According to Squeff (2014), there is a hypothesis that suppliers with the structure to meet the high levels of formality of government tenders tend to be more prepared for several new contracts, and not just for the provision of one or a few contracts. Thus:

H2b: the greater the complexity of the modality, the greater the influence of the number of past contracts won on the supplier's performance.

3 METHODOLOGICAL PROCEDURES

3.1 Data

The data set used in this research was formed by the totality of contracts signed by the federal public sector in Brazil, between January 2014 and December 2019, originating from purchases through bidding procedures. Purchases made through waiver and unenforceability were disregarded, as they do not fit into the hypotheses of the present study. The time series chosen represents the period in which the Brazilian economy went through a crisis and, as a consequence, the purchasing power available to the government could be considered relatively homogeneous. The year 2020, in turn, was disregarded due to the atypical pattern of purchases caused by the COVID-19 health pandemic.

The compatibility of the totality of contracts published until December 31, 2019 available on the Transparency Portal, of the Comptroller General's Office, with the information on the profile of suppliers made available in the Internal Revenue Service of Brazil, generated a single data set that enables generalizations about performance in public purchasing contracts in Brazil. For the composition of the mentioned empirical data, three steps were followed:

1st - Collection on the Federal Government's Transparency Portal - Contract details. Variables: number of contracts published by supplier, value of contracts (in R$), supplier's market (type of contract object) and type of bidding. (Portal da transparência, 2021a).

2nd - Collection on the Federal Government's Transparency Portal - National Register of Disreputable and Suspended Companies. Variables: number of sanctions suffered by supplier. (Portal da Transparência, 2021b).

3rd - Mining based on the Internal Revenue Service of Brazil - Open data by CNPJ. Variables: year of foundation (age), size and main economic activity (code CNAE). (Receita Federal, 2018).

The database initially had 49,032 contracts. Of these, 1,143 contracts from confidential suppliers, 102 from international suppliers, and 365 from individuals were excluded due to the impossibility of matching all variables, in addition to 2,432 contracts with inconsistencies in the definition of the contracted object. In the end, 44,990 contracts were recorded, distributed among 15,749 supplier companies which, in six years, totaled 94,494 observations.

It should also be considered that the 1,315 companies in the treated database, responsible for 7,305 contracts, provided more than one type of object (goods and services, for example). These companies had their contracts allocated to a single object classification (good or service, for example), according to their respective main economic activity informed in the Internal Revenue Service database, through the CNAE code. This made it possible to answer Hypothesis 2a without excluding the corresponding observations.

3.2 Variables

The effect on current performance was analyzed by the influence of the variable “performance history” (number of contracts in the previous year (T-1)) on the “number of contracts” in the current year (dependent variable), respectively, in order to answer Hypothesis H1. The first variable indicates the influence of past contraction on a supplier's new contracts, that is, it reveals for each contract that the supplier wins in one year, how many

contracts it tends to win in the following year. The second variable indicates the number of contracts signed by each supplier annually. The strategy of measuring the performance of public sector suppliers through the number of contracts won can also be seen in the studies by Mamavi *et al*. (2015), Flynn and Davis (2017) and Saastamoinen, Reijonen and Tammi (2021).

The effect of complexity was investigated by the explanatory variables "modality" and "market". The variable "market" (type of object) is composed of a dummy for each group of contracted objects, separated into works and goods, while the services market was not included to be used as a reference. For the "bidding" variable, a dummy equal to 1 was used for suppliers that used only the modalities of Law nº 8.666/93 (1993) and 0 for the others (auction modality). Similar variables were also adopted by Squeff (2014), Mamavi *et al*. (2015), and Reis and Cabral (2018).

To disaggregate the effect of the performance history between the modalities and between the markets, the interaction (multiplication of variables) between the number of lagged contracts (T-1) and the respective dummy variables of the effects of complexity was used. In this case, the coefficient of number of contracts (T-1) is now interpreted as the coefficient of the variables that remained as a reference (services market and auction modality) in the respective regressions. The purpose of this interaction was to answer both Hypothesis H2a and Hypothesis H2b.

In addition, four control variables were used. The amount of sanction obtained each year by suppliers is represented by the variable "sanction history", the variable "value" is measured by the contracted value (R$). The variable "size", in turn, represents the size of the company (dummy equal to 1 for Micro and Small Businesses (MSB) and zero for the others). Finally, the variable "accumulated capacity" indicates how long the company has been operating in the market since its opening date (age). These control variables were widely used in Squeff (2014), Flynn and Davis (2017), Cabral (2017), Reis and Cabral (2018), and Saastamoinen *et al*. (2021).

Finally, time fixed effects were introduced through dummy variables referring to the year of procurement. Although the database used is robust in terms of degrees of freedom, the objective of controlling for fixed time effects was to reduce endogeneity problems, as suggested by Bonelli and Cabral (2018).

Table 1, below, presents a summary of the variables used in the study.

Table 1

Description and reference of variables

Variable	Definition	Reference
Number of contracts	Indicates the number of contracts signed by each supplier annually.	Cabral, Reis & Sampaio (2015), Flynn & Davis (2017) Mamavi *et al*. (2015), Reis & Cabral (2015) and Saastamoinen, Reijonen & Tammi (2021).
Performance history	Points out the influence of past contracts on a supplier's new contracts.	
Complexity/Modality	Distinguishes the type of bidding modality between electronic auction and the others.	Mamavi *et al*. (2015), Reis & Cabral (2018) and Squeff (2014).
Complexity/Market	Represents the type of object bid (goods, service or works).	
Sanction history	Indicates the amount of sanction obtained each year by suppliers.	Cabral (2017), Flynn & Davis (2017), Reis & Cabral (2018), Squeff (2014) and Saastamoinen *et al*. (2021).
Value	Measured by the contracted value (R$).	
Size	Represents the size of the company.	
Accumulated capacity	Indicates how long the company has been in the market since its opening date.	

3.3 Estimation methods

Two statistical models were applied to process the data and to carry out the quantitative analyses. Initially, the classic regression model by Ordinary Least Squares (OLS) was used. As the independent variable is represented by a count of occurrences of the number of contracts, estimation was used with the Negative Binomial distribution (NegBin), specific for these cases, in order to corroborate the results obtained. The significance of the "alpha" parameter of the negative binomial model was used to confirm the overdispersion of the response variable. This model is a general case of Poisson regression, since there is an additional parameter "alpha" that absorbs the heterogeneity between the observations (Greene, 2003).

The estimated final equation was:

$$Y_{i,t} = \alpha + \beta Y_{i,t-1} + \delta X_{n,i,t} + \rho Z_t + e_{i,t}$$

Where:

Y is the number of contracts; the i and t indexes represent the suppliers and the years analyzed, respectively. Y(t-1) is the number of contracts in the previous year; X are the n explanatory and control variables; Z are the fixed time effects; and e is the random error. The regression coefficients were represented by α, β, δ, and ρ.

For purposes of comparison with the OLS, the coefficients of the NegBin models were transformed into marginal effects in relation to the model constant. The estimation made by this econometric model provides consistent and asymptotically efficient estimators of the variance parameters (Greene, 2003). Gretl software was used to estimate model parameters. The levels of statistical significance considered in this study are 1 % and 5 %.

Collinearity was verified by the analysis of Variance Inflation Factors, or VIF, which did not indicate problems (VIF < 10). Heteroscedastic and serial autocorrelation robust standard errors were also estimated to overcome the respective problems.

4 RESULTS

Table 2 presents an exploratory analysis with descriptive statistics of the variables used in the study.

Table 2
Descriptive statistics

Variables	Description	Mean	Standard Deviation	Minimum	Maximum
Performance					
Contracts	Number of contracts won by the supplier.	0.476	1.507	0.000	121.00
Complexity					
Works	*Dummy* equal to 1 for works contracts and zero for others.	0.146	0.353	0.000	1.000
Goods	*Dummy* equal to 1 for goods contracts and zero for others.	0.173	0.378	0.000	1.000
Bidding	*Dummy* equal to 1 for contracts that only used Law No. 8,666/93 and zero for the others.	0.143	0.350	0.000	1.000
Controls					
Sanction history	Number of sanctions obtained by suppliers.	0.007	0.109	0.000	7.000
Accumulated capacity	Time in the market, in years.	16.321	10.207	0.301	90.233
Size	*Dummy* equal to 1 for micro and small businesses and zero for the others.	0.751	0.432	0.000	1.000
Value	Total contracted value, in R$	9.01E+09	1,.3E+11	0.000	1,.5E+13

Table 3 presents the results obtained through the regressions performed by the OLS and NegBin models.

Table 3

Effect of performance history on supplier contracting

	Independent variable: Performance (Number of contracts)					
	Model 1 OLS	Model 2 NegBin	Model 3 OLS	Model 4 NegBin	Model 5 OLS	Model 6 NegBin
H1: the greater the number of past contracts won, the better the supplier's performance in public procurement						
No of contracts (T-1)	0.590***	0.110***	-	-	-	-
	(0.075)	(0.003)	-	-	-	-
H2a: the greater the complexity of the market, the greater the influence of the number of past contracts won on the supplier's performance						
No of contracts (T-1)	-	-	0.630***	0.109***	-	-
	-	-	(0.077)	(0.004)	-	-
No of contracts (T-1) x works	-	-	−0.345***	0.005	-	-
	-	-	(0.083)	(0.007)	-	-
No of contracts (T-1) x goods	-		−0.198***	0.050***	-	-
	-	-	(0.094)	(0.008)	-	-
H2b: the greater the complexity of the modality, the greater the influence of the number of past contracts won on the supplier's performance						
No of contracts (T-1)	-	-	-	-	0.606***	0.114***
			-	-	(0.073)	(0.003)
No of contracts (T-1) x Bidding	-	-	-	-	-0.503***	-0.025**
	-	-	-	-	(0.075)	(0.010)
Complexity						
Works market	0.078***	0.174***	0.187***	0.032***	-	-
	(0.023)	(0.012)	(0.037)	(0.008)	-	-
Goods market	−0.031***	-0.024**	0.069	-0.033***	-	-
	(0.008)	(0.010)	(0.039)	(0.007)	-	-
Bidding modality (Lei n.8.666/93)	−0.152***	-0.267***	-	-	0.062	-0.124***
	(0.024)	(0.013)	-	-	(0.035)	(0.008)
Controls						
No of sanctions	−0.178***	-0.156***	−0.165***	-0.148***	-0.174***	-0.154***
	(0.030)	(0.033)	(0.030)	(0.033)	(0.030)	(0.033)
Accumulated capacity (years)	−0.001***	-0.001***	−0.001***	-0.001***	-0.001**	-0.001***
	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)
Size	−0.055***	-0.014**	−0.049***	-0.019**	-0.051***	-0.013***
	(0.013)	(0.007)	(0.014)	(0.009)	(0.013)	(0.008)
Contract value (R$)	1.16E-03***	1.41E-00***	1.27E-03***	1.55E01***	1.15E-03***	1.55E01***
	(0.000)	(2.46E-01)	(2.95E-04)	(2.56E01)	(2.65E-04)	(2.55E-01)
Constant	0.185***	-	0.159***	-	0.187***	-
	(0.049)	-	(0.046)	-	(0.047)	-
Alpha	-	1.525***	-	1.575***	-	1.563***
	-	(0.035)	-	(0.035)	-	(0.035)
Adjustment criteria						
R^2 / Pseudo R^2	0.418	0.254	0.429	0.251	0.427	0.252
AIC	241.922	127.922	240.513	128.521	240.803	128.223
MSE	1.263	0.244	1.241	0.242	1.246	0.241

Note. Robust standard errors in parentheses; *** p<0.01, ** p<0.05. Source: Search results. AIC: Akaike criterion, MSE: Mean Squared Error

5 DISCUSSION

The greatest positive correlation was identified between the bidding and construction variables, since most of the works contracts were executed by companies that supplied only through the bidding modalities in force in Law 8.666/93.

Regarding the current performance, it was observed that the average number of contracts per supplier is 0.5 contracts. The maximum amount is 121 contracts from a cellular mobile phone provider, signed in 2016 by a medium or large company with more than 26 years of experience in the market. Regarding complexity, the contracting of works represents 14.6 % of the total contracts signed over these six years, between 2014 and 2019, followed by the acquisition of goods (17.3 %) and services, the object most contracted in this period (68.1 %). It is also observed that on average, only 14.3 % of the contracts come from bidding processes, whose modality is governed by Law No. 8,666/93 (1993). Therefore, 85 % of the total contracts in this period were signed through an auction session.

Regarding the control variables, it is noted that the maximum amount of sanction obtained per supplier is 7 per year, obtained in 2019 by a micro-company that supplies instruments and materials for hospital and laboratory use. As for the accumulated capacity, the company that has the most experience in the market, considering its opening date, has been providing life insurance services for over 90 years. The most recent company, in turn, is also a service provider, but in the engineering area, and was opened in September 2019.

In terms of size, it appears that 75 % of the companies are classified as micro and small businesses, whose representativeness can be caused by two factors. The first refers to the growth of entrepreneurship, while the second refers to some recent incentive measures established by the government in recent years, such as the differentiated treatment for micro and small businesses established by Complementary Law nº 123 of 2006 (2006). In terms of value, the average value of the contracts is R$ 901,000.00.

Regarding the econometric analysis, when comparing the two models it can be seen that both are well adjusted, providing robust results. It is interesting to note that the reputation effect is less than 1 in all results, that is, one contract does not generate more than one new contract.

The estimated results indicate a better fit of the NegBin model by the Akaike criterion (AIC) and by the Mean Squared Error (MSE) in all comparisons. Regarding the R2 criterion, the results indicate that the models are reasonably well adjusted, although the OLS R2 and the NegBin Pseudo R2 are not strictly comparable with each other. It was possible to notice an overestimation of the coefficients of interest “No. of contracts (T-1)” in the OLS model, although both are less than one.

As can be seen, past performance has a positive and significant persistence effect on the current ability of suppliers to acquire new contracts. For each contract won in the current year, there is a tendency for approximately 0.59 new contracts to be signed in the following year, according to the OLS model coefficient, and approximately 0.11 new contracts, according to the NegBin coefficient. Therefore, the first hypothesis (H1) is supported.

In the Brazilian context, the analyzes by Fiuza (2009) illustrate limitations for the government to obtain the so-called “non-contractable quality” and mention possible incentives, among which there is the “post-contractual” group. In this group of incentives, specifically, there is a greater probability of contract renewal or favoring companies that have a good record of performance in future bids.

A survey carried out in the French federal government by Mamavi *et al.* (2015), confirmed that the number of past contracts of a supplier positively influences the acquisition

of new contracts (coefficient of 0.64), even after the legal amendment that excluded the performance history as a selection criterion. However, the impact of the number of contracts won is different and specific to each market. In the case of France, only the works market showed a positive reinforcement in the obtaining of between 5 and 12 new contracts. Therefore, this interval was considered as an implicit selection mechanism in choosing the most efficient and least risky suppliers.

In the models proposed in the present study, the impact of the performance history also differs between markets, but the result contradicts the order of effect of the proposed complexity on the theoretical expectation. It was expected that the greater the complexity of the market, the greater the influence of past contracts won on supplier performance, but there is an inverse effect. The impact of the interaction between market complexity and historical performance was greatest in services (0.63) by the OLS model, followed by goods (0.43) and then works (0.28). In the NegBin model, the impact of past performance on the goods market is significantly greater than in the others (coefficient of 0.159). There was no significant difference between the services and works markets.

The result for the goods market is supported by what was verified by Squeff (2014) in Brazil. This study shows that there is a persistence effect of 0.39, also estimated by an OLS model, of industrial goods companies recurrently contracted by the government to supply goods to federal government agencies between 2001 and 2010. According to the author, the results confirmed that firms that provide more complex contracts (innovative, exporting and/or with technological efforts) have a lower participation in government purchases.

The impact of historical performance according to the complexity of markets is greatest in the services market, followed by goods, and finally works. Therefore, H2a is rejected. A possible explanation for the result found may lie in a more in-depth analysis of the suppliers' competencies. In this sense, the accumulated experience of public service providers can facilitate the understanding of the peculiar needs of public managers. In addition, in practice, these companies can offer proposals according to certain specifications, which are competitive and have high added value (Bonelli & Cabral, 2018; Cabral, 2017; Reis & Cabral, 2018).

Regarding the interaction between modality complexity and past performance, the results indicate that contracts signed exclusively through bidding (0.10 by OLS and 0.08 by NegBin) have less persistence in relation to contracts that were signed at some point through the application of other modalities not governed by Law 8666/93 (1993) (coefficients 0.61 by the OLS and 0.11 by the NegBin). Therefore, the H2b hypothesis is rejected. The model estimated by Squeff (2014) found that public contracts in Brazil are more recurrent when they occur predominantly via bidding in relation to exemption and unenforceability, when analyzing industrial goods. However, the same does not seem to be true when considering goods, services, and works.

A plausible explanation for this result may be the fact that the bidding process, exclusively regulated by Law No. 8,666/93, is used in more specific cases while the other modalities, of a simpler nature, are widely used more frequently. In view of this, suppliers, in general can choose to give preference to this type of event, being attentive to deadlines, launching of public notices and registration of proposals, being favorable to negotiation with the objective of remaining in future contracts. Therefore, it is inferred that what is determining performance are administrative procedures and not the client-supplier relationship.

Considering the contemporary effect of the complexity of markets and modalities on the performance of suppliers, it is observed that suppliers in the works market tend to present a superior performance, with an average number of contracts greater than those of service

providers. Goods suppliers, in turn, have a lower performance trend. Regarding the modality, suppliers that had contracts signed through bidding have a lower propensity to perform contemporaneously than those that signed contracts by auction at some point, that is, a lower average number of contracts.

All control variables, except the contract value (R$), reflected a negative effect on supplier performance. Therefore, the greater the number of sanctions obtained, the accumulated capacity (age) and the size of the company, the lower the tendency of this supplier to be successful in new procurements. In contrast, the value of the contracts generates a positive influence on the current performance of the potential contracted.

Reis and Cabral (2018) consider that, as there is no expectation of future gain as a result of a reliable reputation, the application of sanctions has been shown to be incapable of directing the behavior of suppliers, since the suppliers who received sanctions in previous contracts were those whose deadline for delivery of the object of the contract was longer. However, even in the absence of reputation mechanisms, it is noted that the sanction negatively affects the acquisition of new contracts by suppliers.

One possible reason for the negative impact of supplier age is that more experienced suppliers are likely to opt out of bids where the estimated price is undervalued. Thus, more consolidated suppliers in the market may be less likely to be involved in disputes with aggressively lower bids (Reis & Cabral, 2018; Tadelis, 2012), consequently obtaining a smaller number of contracts.

Companies with better liquidity ratios, generally medium and large, tend to prepare proposals in line with their costs. Therefore, they tend to deal with sustainable execution proposals with what was previously agreed upon. In this way, they are more likely to maintain the value of their bids, accepting the risk of not winning the bid (Bonelli & Cabral, 2018; Tadelis, 2012). Although there is a possibility that this reduction in the level of competition will benefit micro and small businesses in some way, the models of this study demonstrate that if the company is classified as an MSB, its performance is negatively affected, so it will sign fewer contracts.

This result is in agreement with the study carried out by Cabral, Reis and Sampaio (2015) on the changes promoted by the General Law on MSBs. The study demonstrates that this new incentive measure contributed significantly to the increase in the participation of micro and small businesses in bids through electronic auction. However, the probability of success of these companies in public tenders did not change. Research results by these authors support the view that the success of MSBs in public purchasing can be hampered by limited resources and low supply capacity (Cabral *et al*., 2015; Carpineti, Piga & Zanza, 2006; Karjalainen & Kemppainen, 2008).

It should also be noted that the higher the value of the contract, the more management capacity the company to be hired must have. The fact that the supplier signs a large contract, that is, of high value, demonstrates that they are able to acquire several other contracts of lesser value. Similarly, the result of the "value" variable has a positive and significant impact on supplier performance.

Figure 1 presents the main results and possible justifications about the results in relation to the tested hypotheses.

Hypotheses	Result	Possible explanations
H1: the greater the number of past contracts won, the better the supplier's performance in public procurement.	Confirmed	Suppliers that have been previously hired are able to better understand the process and the needs of the contracting party. Thus, they can prepare a competitive proposal and better adjusted to the requested specifications.
H2a: the greater the complexity of the market, the greater the influence of the number of past contracts won on the supplier's performance.	Rejected	Despite the complexity of the markets interfering with the performance of suppliers, this influence has not been proven in the expected order. The greatest influence is perceived in the service market, possibly due to the understanding of the public agency's needs generated by the accumulated experience of service providers. In the works market, unforeseen events greater than those foreseen in the planning phase may occur, making work difficult and inhibiting suppliers, unlike what happens in the goods market.
H2b: the greater the complexity of the modality, the greater the influence of the number of past contracts won on the supplier's performance.	Rejected	The acquisition of new contracts may be being influenced by administrative procedures rather than the client-supplier relationship.

Figure 1. Synthesis of the results of the hypotheses

6 CONCLUSION

The present study aimed to analyze whether the performance history of suppliers influences the obtaining of new supply contracts for the public sector in Brazil. Through the analyzes carried out, it was found that although a past contract signed by the supplier does not generate more than one (1.0) new future contract, past performance does have a positive and significant persistence effect on the capacity of suppliers to acquire new contracts for both models tested.

The persistence of suppliers was observed, even in an isonomic environment. Therefore, in view of the results obtained, it is concluded that the past performance of suppliers, measured by the number of past contracts won, influences the acquisition of new contracts in the Brazilian context of public purchasing. This finding is in line with that pointed out by Fiuza (2009) and Mamavi *et al*. (2015).

It is also noteworthy that the influence of past performance history has a distinction between market types. However, this does not occur according to the order of complexity predicted by the study. Therefore open questions remain, which opens precedents for further studies. Among the main limitations, it should be mentioned that the sample used in the present study includes data referring to contracts made by the Government, but there is no information peculiar to the bidding process, such as the number of suppliers participating in each bidding and the level of competitiveness between them.

In this sense, it would be relevant to analyze the independence of the different groups interacting the variables with each other to bring new information. Checking, for example, whether the interaction between size and complexity interferes with the probability of generating new contracts for the supplier can reveal valuable information, based on a theoretical framework relevant to the subject. Furthermore, it is suggested that information on the use of additives, contractual termination, savings generated, and experience in the public sector be included as variables to improve future research.

From a theoretical perspective, the research contributed to corroborate what the Theory of Contracts presupposes, by noting that suppliers with better performance tend to be reused, minimizing the risk of contractual breaches. From a practical point of view, the use of

the evaluation of previous contractual performance of the bidders as a tiebreaker showed signs that it can be adapted for the public sector as in the case of mixed capital companies, which is already provided for by law.

However, efforts should be made to improve the mechanisms so that the impact of past performance is greater in more complex contracts that demand long-term relationships, contrary to what the results indicate to occur in Brazil. In summary, the recurrence of suppliers is concentrated in goods and services, acquired via the auction. Regarding the formulation of government policies, the development of other performance indicators that can be widely used in the supplier selection processes is suggested.

Finally, it is believed that the present work contributes significantly to the knowledge of the area of public purchasing, by looking at the relationship between contractor and contracted in order to generate the improvement and optimization of purchases.

REFERENCES

Alvarenga, F. C. (2019). *Análise das causas de aditivos de custo e de prazo em obras públicas de instituições federais de ensino* (Dissertação de Mestrado). Universidade Federal do Pará, Belém, PA, Brasil. Recuperado em 20 Dezembro, 2021, de http://repositorio.ufpa.br/jspui/bitstream/2011/11129/1/Dissertacao_Analisecausasaditivos.pdf

Banerjee, A. V., & Duflo, E. (2000). Reputation effects and the limits of contracting: A study of the Indian software industry. *The Quarterly Journal of Economics*, 115(3), 989-1017. Retrieved in December 20, 2021, from https://economics.mit.edu/files/724

Bertelli, A. M., & Smith, C. R. (2010). Relational contracting and network management. *Journal of Public Administration Research and Theory*, 20(suppl.1), i21-i40. https://doi.org/10.1093/jopart/mup033

Bonelli, F., & Cabral, S. (2018). Efeitos das competências no desempenho de contratos de serviços no setor público. *Revista de Administração Contemporânea*, *22*(4), 487-509. https://doi.org/10.1590/1982-7849rac2018170152

Brown, T. L., Potoski, M., & Van Slyke, D. M. (2013). *Complex contracting: Government contracting in the wake of the U.S. Coast Guard's Deepwater Program.* Cambridge, UK: Cambridge University Press.

Brunjes, B. M. (2020). Competition and federal contractor performance. *Journal of Public Administration Research and Theory*, 30(2), 202-219. https://doi.org/10.1093/jopart/muz027

Butler, J. V., Carbone, E., Conzo, P., & Spagnolo, G. (2020). Past performance and entry in procurement: An experimental investigation. *Journal of Economic Behavior & Organization, 173*, 179-195. https://doi.org/10.1016/j.jebo.2020.02.019

Cabral, S. (2017). Reconciling conflicting policy objectives in public contracting: The enabling role of capabilities. *Journal of Management Studies*, *54*(6), 823-853. https://doi.org/10.1111/joms.12269

Cabral, S., Reis, P. R. D. C., & Sampaio, A. D. H. (2015). Determinantes da participação e sucesso das micro e pequenas empresas em compras públicas: uma análise empírica. *Revista de Administração da USP*, *50*(4), 477-491. Recuperado em 20 Dezembro, 2021, de https://www.scielo.br/j/rausp/a/RDHJJzfgCRcBYjxt3wc993N/?format=pdf&lang=pt

Carpineti, L., Piga, G., & Zanza, M. (2006). The variety of procurement practice: evidence from public procurement. In Dimitri, N., Piga, G., & Spagnolo G. (Ed.), *Handbook of procurement.* Cambridge, UK: Cambridge University Press. Retrieved in December 20, 2021, from http://ssrn.com/abstract=896748

Çebi, F., & Bayraktar, D. (2003). An integrated approach for supplier selection. *Logistics Information Management*, *16*(6), 395-400. https://doi.org/10.1108/09576050310503376

Colpo, I. (2016). *Comportamento dos custos da construção civil na Universidade Federal de Santa Maria* (Dissertação de Mestrado). Universidade Federal de Santa Maria, Santa Maria, RS, Brasil. Recuperado em 20 Dezembro, 2021, de https://repositorio.ufsm.br/handle/1/8389

da Silva Mascarenhas, K. V., Gomes, N. B., & Lopes, A. C. V. (2019). Licitação pública: Modelo de compras da Prefeitura Municipal de Dourados-MS. *Encontro Internacional de Gestão, Desenvolvimento e Inovação (EIGEDIN)*, *3*(1). Recuperado em 20 Dezembro, 2021, de https://periodicos.ufms.br/index.php/EIGEDIN/article/view/8661/pdf_201

de Freitas, M., & Maldonado, J. M. S. V. (2013). O pregão eletrônico e as contratações de serviços contínuos. *Revista de Administração Pública*, *47*(5), 1265-1281. https://doi.org/10.1590/S0034-76122013000500009

Decreto n. 10,024, de 20 de setembro de 2019. (2019). Regulamenta a licitação, na modalidade pregão, na forma eletrônica, para a aquisição de bens e a contratação de serviços comuns, incluídos os serviços comuns de engenharia, e dispõe sobre o uso da dispensa eletrônica, no âmbito da administração pública federal. Recuperado em 20 Dezembro, 2021, de http://www.planalto.gov.br/ccivil_03/_Ato2019-2022/2019/Decreto/D10024.htm

Doherty, N. F., McConnell, D. J., & Ellis-Chadwick, F. (2013). Institutional responses to electronic procurement in the public sector. *International Journal of Public Sector Management*, *26*(6), 495-515. https://doi.org/10.1108/IJPSM-04-2012-0048

Faganello, T. (2017). *Contratos empresariais de longa duração e incompletude contratual* (Dissertação de Mestrado). Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, RS, Brasil. Recuperado em 20 Dezembro, 2021, de http://tede2.pucrs.br/tede2/handle/tede/7596

Fernandes, C. C. C. (2005). Abrangência, inserção e impacto transformador dos sistemas de compras eletrônicas na administração pública: análise do Siasg/Comprasnet. *Revista do Serviço Público*, *56*(2), 195. Recuperado em 20 Dezembro, 2021, de http://www.spell.org.br/documentos/ver/35847/abrangencia--insercao-e-impacto-transformador-dos-sistemas-de-compras-eletronicas-na-administracao-publica-----analise-do-siasg-comprasnet/i/pt-br

Fiuza, E. P. S. (2009). Licitações e governança de contratos: a visão dos economistas. In Salgado, L. H.; Fiuza, E. P. S. (Orgs.). *Marcos regulatórios no Brasil: é tempo de rever regras?* (Vol. 2, Cap. 8, pp. 239-274). Brasília: Ipea. Recuperado em 20 Dezembro, 2021, de http://www.ipea.gov.br/portal/images/stories/15_Livro_completo.pdf

Flynn, A., & Davis, P. (2017). Explaining SME participation and success in public procurement using a capability-based model of tendering. *Journal of Public Procurement*, 17(3). Retrieved in December 20, 2021, from https://www.researchgate.net/publication/307935827_Explaining_sme_participation_and_success_in_public_procurement_using_a_capability-based_model_of_tendering

Gosling, J., Purvis, L., & Naim, M. M. (2010). Supply chain flexibility as a determinant of supplier selection. *International Journal of Production Economics*, *128*(1), 11-21. https://doi.org/10.1016/j.ijpe.2009.08.029

Greene, W. H. (2003). *Econometric analysis* (5th ed). Pearson Education: India.

Hart, O., & Moore, J. (1999). Foundations of incomplete contracts. *The Review of Economic Studies*, *66*(1), 115-138. Retrieved in December 20, 2021, from https://www.jstor.org/stable/2566951

Huang, S. H., & Keskar, H. (2007). Comprehensive and configurable metrics for supplier selection. *International journal of production economics*, *105*(2), 510-523. Retrieved in December 20, 2021, from https://www.researchgate.net/publication/223369564_Comprehensive_and_Configurable_Metrics_for_Supplier_Selection

Junior, P. C. R. (2012). *Orientação para inovação em organizações públicas de serviços de alto desempenho: uma análise comparativa entre Brasil e Portugal* (Tese de Doutorado). Universidade de Brasília e Universidade Técnica de Lisboa, Brasília, DF, Brasil. Recuperado em 20 Dezembro, 2021, de https://repositorio.unb.br/handle/10482/11161

Kachour, M., Mamavi, O., & Nagati, H. (2016). The Role of Reputation in Market Entry: Evidence from French Public Procurement. *Journal of Applied Business Research (JABR)*, *32*(3), 805-814. https://doi.org/10.19030/jabr.v32i3.9658

Karjalainen, K., & Kemppainen, K. (2008). The involvement of small-and medium-sized enterprises in public procurement: Impact of resource perceptions, electronic systems and enterprise size. *Journal of Purchasing and Supply Management*, *14*(4), 230-240. https://doi.org/10.1016/j.pursup.2008.08.003

Khorramshahgol, R. (2012). An integrated strategic approach to supplier evaluation and selection. *International Journal of Information Technology & Decision Making*, *11*(01), 55-76. https://doi.org/10.1142/S0219622012500034

Kon, A. (1999). Sobre as atividades de serviço: revendo conceitos e tipologias. *Revista de Economia Política*, *19*(2), 64-83. Recuperado em 20 Dezembro, 2021, de https://centrodeeconomiapolitica.org.br/repojs/index.php/journal/article/view/1057

Lei complementar nº 123, de 14 de dezembro de 2006. (2006). Institui o Estatuto Nacional da Microempresa e da Empresa de Pequeno Porte; altera dispositivos das Leis no 8.212 e 8.213, ambas de 24 de julho de 1991, da Consolidação das Leis do Trabalho - CLT, aprovada pelo Decreto-Lei no 5.452, de 1o de maio de 1943, da Lei no 10.189, de 14 de fevereiro de 2001, da Lei Complementar no 63, de 11 de janeiro de 1990; e revoga as Leis no 9.317, de 5 de dezembro de 1996, e 9.841, de 5 de outubro de 1999. Brasília, DF. Recuperado em 20 Dezembro, 2021, de http://www.planalto.gov.br/ccivil_03/leis/lcp/lcp123.htm

Lei n. 8.666, de 21 de junho de 1993. (1993). Regulamenta o art. 37, inciso XXI, da Constituição Federal, institui normas para licitações e contratos da Administração Pública e dá outras providências. Brasília, DF. Recuperado em 20 Dezembro, 2021, de http://www.planalto.gov.br/ccivil_03/leis/l8666cons.htm

Lei n. 10.520, de 17 de julho de 2002. (2002). Institui, no âmbito da União, Estados e Distrito Federal e Municípios, nos termos do art. 37, inciso XXI, da Constituição Federal, modalidade de licitação denominada pregão, para aquisição de bens e serviços comuns, e dá outras providências. Brasília, DF. Recuperado em 20 Dezembro, 2021, de http://www.planalto.gov.br/ccivil_03/leis/2002/l10520.htm

Lei n. 13.303, de 30 de junho de 2016. (2016). Dispõe sobre o estatuto jurídico da empresa pública, da sociedade de economia mista e de suas subsidiárias, no âmbito da União, dos Estados, do Distrito Federal e dos Municípios. Brasília, DF. Recuperado em 20 Dezembro, 2021, de http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2016/lei/l13303.htm

Mamavi, O., Nagati, H., Pache, G., & Wehrle, F. T. (2015). How does performance history impact supplier selection in public sector*?*. *Industrial Management & Data Systems*, *115*(1), 107-128. https://doi.org/10.1108/IMDS-07-2014-0222

Maskin, E., & Tirole, J. (1999). Unforeseen contingencies and incomplete contracts. *The Review of Economic Studies*, *66*(1), 83-114. https://doi.org/10.1111/1467-937X.00079

Meirelles, H. L. (2016). *Direito Administrativo Brasileiro* (42a ed. atualizada até a Emenda Constitucional 90). São Paulo: Malheiros Editores.

Menezes, R. D. A., Silva, R. B. D., & Linhares, A. (2007). Leilões eletrônicos reversos multiatributo: uma abordagem de decisão multicritério aplicada às compras públicas brasileiras. *Revista de Administração Contemporânea*, *11*(3), 11-33. https://doi.org/10.1590/S1415-65552007000300002

Peter, M. D. G. A., Pessoa, M. N. M., de Araújo, M. D. G. A., & Peter, F. A. (2002). O custeio baseado em atividade em organizações de serviços. *Anais do Congresso Brasileiro de Custos-ABC*, São Paulo, SP, Brasil, 9. Recuperado em 20 Dezembro, 2021, de https://anaiscbc.emnuvens.com.br/anais/article/view/2637

Portal da Transparência (2021a). *Detalhamento do contrato*. Recuperado em 15 de janeiro de 2021, de http://www.portaltransparencia.gov.br/contratos/consulta

Portal da Transparência (2021b). *Sanções*. Recuperado em 15 de janeiro de 2021, de https://www.portaltansparencia.gov.br/sancoes/

Receita Federal (2018). *Dados Públicos CNPJ*. Recuperado em 15 de janeiro de 2021, de https://www.gov.br/receitafederal/pt-br/assuntos/orientacao-tributaria/cadastros/consultas/dados-publicos-cnpj.

Reis, P. R., & Cabral, S. (2015). Public procurement strategy: The impacts of a preference programme for small and micro businesses. *Public Money & Management*, *35*(2), 103-110. https://doi.org/10.1080/09540962.2015.1007704

Reis, P. R. D. C., & Cabral, S. (2018). Para além dos preços contratados: fatores determinantes da celeridade nas entregas de compras públicas eletrônicas. *Revista de Administração Pública, 52*(1), 107-125. https://doi.org/10.1590/0034-7612164442

Saastamoinen, J., Reijonen, H., & Tammi, T. (2021). SMEs' market orientation toward public sector customers in public procurement. *International Journal of Public Sector Management*, *34*(1), 1-16. https://doi.org/10.1108/IJPSM-05-2020-0131

Sarkar, A., & Mohapatra, P. K. (2006). Evaluation of supplier capability and performance: A method for supply base reduction. *Journal of Purchasing and supply management*, *12*(3), 148-163. https://doi.org/10.1016/j.pursup.2006.08.003

Snider, K., & Walkner, M. (2009), Enhancing use of past performance as a source selection criterion. In Thai, K. (Ed.), *International Handbook of Public Procurement* (pp. 613-630), Flórida: CRC Press.

Spagnolo, G. (2012). Reputation, competition, and entry in procurement. *International Journal of Industrial Organization*, *30*(3), 291-296. https://doi.org/10.1016/j.ijindorg.2012.01.001

Spagnolo, G., & Dini, F. (2005). Reputation mechanisms and electronic markets: economic issues and proposals for public procurement. Challenges. In *Public Procurement: an International Perspective* (Cap. 12, pp. 227-247). Flórida: Academic Press.

Squeff, F. D. H. S. (2014). *O poder de compras governamental como instrumento de desenvolvimento tecnológico: análise do caso brasileiro* (Texto para Discussão, Nº. 1922). Brasília, DF: IPEA. Recuperado em 20 Dezembro, 2021, de https://www.ipea.gov.br/portal/index.php?option=com_content&view=article&id=21116

Súmula nº 257. (2010). O uso do pregão nas contratações de serviços comuns de engenharia encontra amparo na Lei nº 10.520/2002. TCU, Plenário. Recuperado em 20 Dezembro, 2021,de https://portal.tcu.gov.br/lumis/portal/file/fileDownload.jsp?fileId=8A8182A25753C20F0157679AA5617071&inline=1

Tadelis, S. (2012). Public procurement design: Lessons from the private sector. *International Journal of Industrial Organization*, *30*(3), 297-302. https://doi.org/10.1016/j.ijindorg.2012.02.002

Tirole, J. (1999). Incomplete contracts: Where do we stand*?*. *Econometrica*, *67*(4), 741-781. Retrieved in December 20, 2021, from https://www.jstor.org/stable/2999457

Tridapalli, J. P., Fernandes, E., & Machado, W. V. (2011). Gestão da cadeia de suprimento do setor público: uma alternativa para controle de gastos correntes no Brasil. *Revista de Administração Pública*, *45*(2), 401-433. https://doi.org/10.1590/S0034-76122011000200006

Watt, D. J., Kayis, B., & Willey, K. (2010). The relative importance of tender evaluation and contractor selection criteria. *International Journal of Project Management*, *28*(1), 51-60. https://doi.org/10.1016/j.ijproman.2009.04.003

Yukins, C. R. (2008). Editor's Note: A Response to Omer Dekel's "Legal Theory of Competitive Bidding". *Public Contract Law Journal*, *37*(2), 269-269. Retrieved in December 20, 2021, from https://heinonline.org/HOL/LandingPage?handle=hein.journals/pubclj37&div=20&id=&page=

REVISTA CONTABILIDADE, GESTÃO E GOVERNANÇA
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Efeitos do Histórico de Desempenho na Contratação de Fornecedores da Administração Pública Federal Brasileira

RESUMO

Objetivo: *analisar a influência que o desempenho passado dos fornecedores possui na capacidade atual de obter novos contratos na esfera pública brasileira.*

Método: *adotou-se uma abordagem inovadora na literatura ao analisar a persistência do desempenho dos fornecedores por meio de modelos dinâmicos multivariados. Para a realização das análises quantitativas, utilizou-se a estimação com a distribuição Binomial Negativa e o modelo clássico de regressão por Mínimos Quadrados Ordinários.*

Resultados: *constatou-se que, quanto maior a quantidade de contratos passados ganhos, melhor o desempenho do fornecedor em contratações públicas. Além disso, observou-se que essa influência varia de acordo com a complexidade do mercado e da modalidade do processo de compra.*

Originalidade/Relevância: *o estudo inova ao apontar indícios de que a utilização da avaliação de desempenho passado dos licitantes possui potencial para ser adaptada para o setor público, o que pode influenciar no aumento qualidade do serviço prestado ou material adquirido pelo governo.*

Contribuições Teóricas/Metodológicas: *o estudo corrobora com o pressuposto pela Teoria dos Contratos ao apontar que fornecedores com melhor desempenho tendem a ser reutilizados, minimizando os riscos de quebras contratuais, mas deve-se buscar aprimorar os mecanismos para que o impacto do desempenho passado seja maior em contratos que são mais complexos e que demandam relacionamentos de longo prazo.*

Contribuições Sociais/para a Gestão*: o desenvolvimento de indicadores de desempenho que possam ser aplicados aos processos de seleção de fornecedores pode estimular a criação de novas políticas públicas para aprimorar a gestão dos contratos públicos.*

Palavras-Chave: *Contratações públicas. Seleção de fornecedores. Desempenho*

Gabriella da Silva Gomes
Universidade Federal Rural do Rio de Janeiro (UFRRJ) - Programa de Pós-graduação em Gestão e Estratégia da UFRRJ, Rio de Janeiro, Brasil
gabriellasgms@gmail.com

Caio Peixoto Chain
Universidade Federal Rural do Rio de Janeiro (UFRRJ), Rio de Janeiro, Brasil
caiochain.ufrrj@gmail.com

Eryka Fernanda Miranda Sobral
Universidade de Pernambuco (UPE), Pernambuco, Brasil
eryka.sobral@upe.br

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