

Efficacy of Performance: Administrative Metrics in the Brazilian Judiciary

Eficácia do Desempenho: Métricas Administrativas no Poder Judiciário Brasileiro

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ABSTRACT

The objective of this work was to understand the relationship between the administrative metrics of the State Courts of Justice of Brazil, with the efficacy (relationship between goals achieved and planned) of these courts between 2009 and 2016. The National Justice Council (CNJ) is the organization responsible for manage the Judiciary in Brazil and annually establishes a set of targets for the Brazilian courts. In addition, it prepares the “Justice in Numbers” report, published annually, containing, in addition to the achieved percentage of established goals, administrative data that can be analyzed. With the use of the Multiple Linear Regression method, we obtained as results that nineteen variables were statistically significant. The estimated model and its identified variables account for 39.68 percent of the variations that occur to the explanatory variable (efficacy). The results suggest that the Judiciary is liable to administrative actions to improve the procedural speed of its proceedings.

Keywords: judicial governance, celerity, courts of justice, CNJ

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RESUMO

O objetivo do trabalho foi perceber qual a relação entre as métricas administrativas dos Tribunais de Justiça Estaduais e do Distrito Federal do Brasil com a eficácia (relação entre metas alcançadas e planejadas) desses tribunais, entre 2009 e 2016. O Conselho Nacional de Justiça (CNJ) é o órgão responsável pela administração do poder judiciário no Brasil e estabelece anualmente um conjunto de metas para os tribunais brasileiros. Além disso, elabora o relatório Justiça em números, divulgado anualmente, contendo a porcentagem alcançada das metas estabelecidas e dados administrativos passíveis de análise. Com o uso do método de regressão linear múltipla, obteve-se como resultados que dezenove variáveis foram estatisticamente significativas. O modelo estimado e suas variáveis identificadas respondem por 39,68 por cento das variações que ocorrem à variável explicativa (eficácia). Os resultados sugerem que o poder judiciário é passível de ações administrativas para melhorar a celeridade processual de seus trâmites.

Palavras-chave: governança judicial, celeridade, tribunais de justiça, CNJ

1. Introduction

The division of State powers, as proposed by Montesquieu and adapted in the Modern State, contains within itself the intersection between the fields of action and competence of those powers. The executive, legislative and judicial authorities act on matters that pertain solely to their specific *raison d' être*, but also on other aspects within the scope of the other authorities (Pinheiro, Vieira & Motta, 2011). The interaction between them can be observed at various levels, shaping various relationships between them. Due to this mutual interaction, it is necessary to proceed synaesthetically in order to identify procedural anomalies in the administrative field, in order to achieve efficiency and effectiveness in processes, exploring the whole administrative structure that exists in the State authorities.

The purpose of administration as an applied social science is to use resources efficiently in order to achieve specific goals in an effective manner. Constitutional Amendment (EC) no. 19 of 1998 is regarded as a milestone in the reform of the State, insofar as it set rules on efficiency as an integral part of the principles governing the Public Administrative Authorities (EC, 1998). It represents an attempt to improve procedures and to make better use of those resources in order to achieve the targets set (efficacy).

In this context, the Judicial Authorities act so as to administer justice in society, to guarantee compliance with legal rules and to apply penalties to those who deviate from those rules (Akutsu & Guimarães, 2012). The function of the judicial branch is to ensure that the rights of citizens are observed and complied with, and also to resolve disputes that may arise in interaction between social actors and to promote justice in these situations (Akutsu & Guimarães, 2015). In order to consolidate this function, access by citizens to the Judicial Authorities needs to be simple and direct.

Difficulty of access to the Judicial Authorities and lengthy delays in proceedings have consequences for society (Sadek, 2004) and undermine the democratic rule of law, where the State is duty bound to guarantee civil liberties and human rights and to promote the fundamental guarantees of citizens, which guarantees are established in Article 5 of the Federal Constitution of 1988. Violation of those guarantees undermines the practical workings and application of the democratic rule of law, for which the constitutional powers include the assurance of social justice, based on the fundamental principles of human dignity, of democratic forms and the sovereignty of the people.

Sadek (2004) found that the greatest difficulties experienced by Brazilian citizens seeking access in one form or another to the Judicial Authorities are lengthy delays in the system, low levels of efficacy and difficulty of access by persons in situations of social risk.

Inefficacy, lengthy delays and the lack of transparency, characteristics of the Judicial Authorities, are the result of shortcomings in administration actions (Pineiro, 2003; Renault, 2005). The judicial branch was accordingly the institutional sector of the State that evolved least in the post-reform period (Renault, 2005).

The reform of the Judicial Authorities was instituted in EC no. 45 de 2004, allowing for procedures to be redesigned, along with the administrative-organizational structure in the various spheres of the public authorities. In addition, EC no. 45/04 established celerity as a governing principle for the judicial branch. This amendment added item LXXVIII to Article 5, with the following provisions: “in judicial and administrative proceedings, all persons are assured of the reasonable duration of those proceedings and of the means that ensure the celerity thereof” (EC, 2004), in an endeavor ensure that legal proceedings are effective. Of the various reforms proposed in EC no. 45/04, special attention may be drawn to the creation of the National Justice Council (CNJ), which is tasked with oversight and administration of the country’s judicial bodies, corroborating the new philosophy of effective public administration.

According to Sena (2014), administrative activities are overseen through implementation of measures designed to achieve transparency in the exercise of jurisdiction, to prepare the judiciary and court staff for administrative management of the courts, to computerize judicial services and also to set targets which are to be assessed for the subsequent year.

In setting targets for Brazilian courts, the CNJ has provided a mechanism for assessing and measuring different aspects of administrative performance. This strategy seeks to instill a planning and management culture, geared to efficiency and efficacy. This fact makes it possible for managers to design and apply strategic management policies and also to assess the demands on them, in order to help

create positions and actions focused on improving the administrative and organizational structure of the courts (Sena, 2014).

Research into the judicial authorities is scarce (Ng, 2011; Akutsu & Guimarães, 2012), making this a territory relatively unexplored by public administration. This study took as its starting point the research and findings of Van Montfort, Jong, Herweijer and Marseille (2005), Schneider (2005), Beer (2006), Veronese (2007), Ribeiro (2008), Rosales-López (2008), Mascarenhas (2009) and Akutsu and Guimarães (2014) who, among other findings, highlight the following as indicative of the performance of the judicial authorities; the backlog of cases, the academic training of judges, the level of wealth production, distance between the court and the citizen's place of residence, number of judges per inhabitant, application of out-of-court dispute resolution systems such as negotiation mediation, conciliation and arbitration, the duration of proceedings, the relationship between the number of judges and the demand for judicial services and population, physical size of the court, additional staffing (outsourcing), budget allocations and the legal skills of court officials.

This study has therefore set out to assess the following question: How do the administrative variables relate to the efficacy of the State and Federal District Courts of Justice? The general aim was accordingly to identify and analyze the relationship between the administrative metrics of the Brazilian State and Federal District Courts of Justice and performance, assessed as the relationship between targets planned and achieved for that court (efficacy).

This study is important because it contributes to the debate concerning standpoints for analyses of the performance of the Brazilian judicial authorities in relation to their efficacy. With regard to the State and Federal District Courts of Justice, it offers an analytical model which can be replicated for other national courts, and makes it possible to identify which variables contributed directly and effectively to consolidating the courts' performance, helping in the administrative decisions to be taken and/or improved. As regards assessment of the quality of the acts of the judiciary, the difficulty of measuring this is generally regarded as an obstacle to proposing a model for assessing that which can be measured (Abramo, 2010). This research therefore sets out to analyze the efficacy of the State and Federal District Courts of Justice, and also to establish in quantitative terms the relationship between the different characteristics that may affect their performance.

2. Bibliographic Background

For Pinheiro, Vieira and Motta (2011), the division between the functions of legislating, executing and judging is the legacy left by Montesquieu, who sought to avoid the establishment of any form of tyranny by conceiving a system where

each branch is endowed with authority for the matters exclusive to its sphere of competence. This model of the division of power has been adopted, adapted and incorporated by the modern state, where each branch has its fundamental function, although participation and action on matters which, *a priori*, are entrusted to other branches, is not actually prohibited. Accordingly, the legislative, executive and judicial branches interact, in order to ensure that the supremacy of the public interest is observed in the acts and deeds of its public actors.

Seeking to respect the public interest and guarantee the democratic rule of law, Constitutional Amendment (EC) no.19 was promulgated on June 4, 1998, with provisions on the principles and rules governing the public administrative authorities (EC, 1998). In Article 3, this amendment adds the principle of efficiency to Article 37 of the Federal Constitution. Efficiency, regulated as an intrinsic principle of public authority, joined legality, impartiality, morality and publicity to form a set of principles to guide actions taken in the public sphere. This fact reveals the search for legitimation in the effective reiteration of the legal rules supporting the founding of policies and actions in establishing effective public governance. Public governance can be defined as a set of mechanisms and tools which combine leadership, strategy and oversight (TCU, 2014). These actions, when applied in public practice, make it possible to assess, monitor and steer management towards efficient forms of conduct that benefit society. Accordingly, public governance extends to all sphere of public authority, including the judicial authorities.

Public governance in the judicial authorities, or more simply, judicial governance, is understood as:

A set of policies, administrative processes, actions, behaviors and decisions necessary for the exercise of Justice. This concept starts out from the assumption that judicial governance is based on institutions, i.e. on rules, norms, socially constructed and legitimized patterns of conducts, and is manifest in practices, actions and behaviors from the different actors in the judicial authorities (Akutsu & Guimarães 2015, p. 942).

Judicial governance presents itself as a set of administrative and legal observations and practices, which are intended to optimize administrative processes for the exercise of justice in an effective manner.

Concerning performance in the public domain, Torres (2004) states the efficacy represents the standard achieved in the outcomes which were planned by the public administrative authorities, without considering economy and feasibility in the use of resources and instruments. According to Souza (2008), efficacy is the relationship between targets achieved and those planned. This study takes efficacy

as the relationship, expressed as a percentage, between targets achieved and targets planned for a given court in a given year.

In reformulating the administrative and organizational structure and the processes of the judicial authorities, EC no. 45/04 sought to achieve efficacy in administrative processes by eliminating waste and operational obstacles, with the aim of guaranteeing fairness, effectiveness and efficacy by providing for celerity in the processes of the judicial authorities. Provided for in EC no. 45/04, the creation of the National Justice Council (CNJ) was consistent with the new vision of more efficient and effective public administrative authorities, based on EC no. 19/98 and regulated by EC no. 45/04. The creation of the CNJ therefore constituted a national endeavor to instill efficacy in the judicial authorities.

The CNJ is an organ of the judicial authorities, based in Brasilia, in the Federal District, but with nationwide powers. The Council is a public institution whose mission is to improve the work of the Brazilian judicial system, to develop administrative and procedural policies, to promote effective and unified justice, to strive for excellence in strategic planning, to consolidate governance and to promote effective judicial management which can be replicated within the Brazilian judicial authorities.

The powers of the CNJ can be divided into two main areas, one of which is correlative in nature, and the other administrative. In the first, the CNJ has powers to hear complaints, petitions and representations against the members and bodies of the judiciary, to decide disciplinary proceedings, to order disbarment and apply administrative penalties, and by so doing to assure the autonomy of the judicial branch. Under its administrative responsibilities, the CNJ is required to plan, organize and standardize the structures of the judicial authorities nationwide, in order to improve legal practices and the speed of proceedings. The CNJ is also responsible for strategic planning, establish programs for institutional appraisal of the judicial authorities, to draw up and publish the plan of targets and the statistical reports relating to jurisdictional activities.

The CNJ's institutional management responsibilities entail primarily the setting of a targets plan for the judiciary. The purpose of this is to set targets that represent and reflect the commitment of Brazilian courts to improving the quality of judicial performance, in order to provide a rapid, efficient, effective and quality service.

3. Methodological Procedures

The targets for the judicial authorities, set by the CNJ, form a structure for control and oversight of the workings of the Brazilian judicial system. In addition, the targets contribute to the planning of the Courts of Justice, in the search for and

development of mechanisms that help comply with the targets and measure the outcomes of the Courts of Justice in objective terms.

Each year, the bodies of the judicial authorities meet at the National Judicial Authorities Meeting (ENPJ), organized by the CNJ, where the presiding judges of all Brazilian courts meet to set the targets and strategic priorities for the next year, in line with the modelling of the process for formulating the national targets (Figure 1). National targets were set for the first time in 2009, in order to improve the performance of the Brazilian justice system, to clear the backlog of undecided cases and to reduce the rate of congestion in the courts.

At the end of the year, the courts' performance is determined and, using the data collected, a report entitled *Justice in Numbers* is drawn up and published, providing information on the efficacy (dependent variable) of the courts in attaining the targets set in the previous year. This report provides administrative metrics for that court in the year in question, such as the staffing level, number of computers, total of direct appointments, and other data. Information is given on the targets planned and attained, and on transparency of administrative data relating to the country's courts, and this data forms the basis for the dependent and independent variables, respectively, used in this study, which sets out to identify which administrative metrics affect the efficacy (performance) of the judicial authorities.

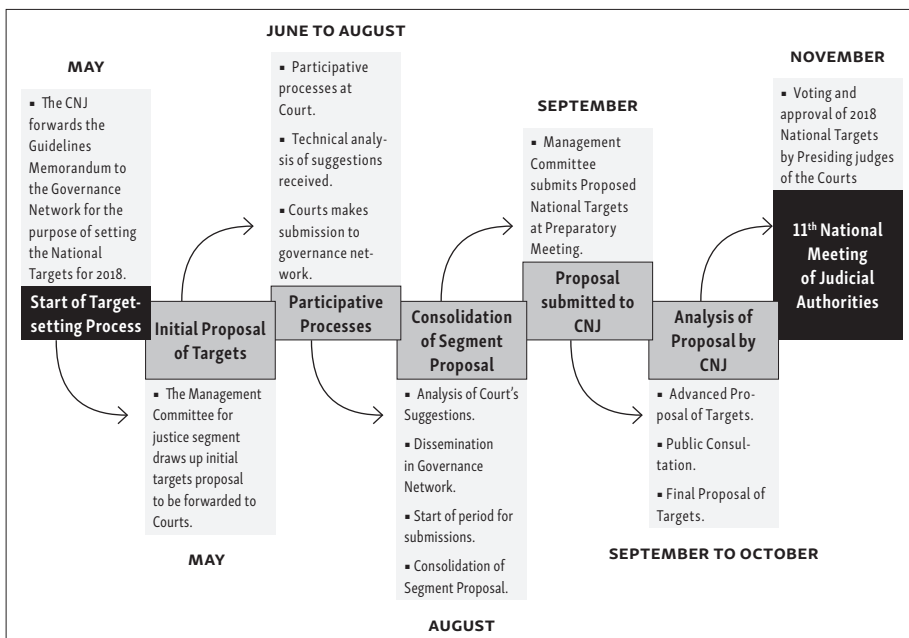


FIGURE 1. Formulation of national targets for 2018: process model. CNJ

Sulbrandt (1993) proposes combining the performance assessment targets in public programs and policies in order to determine their efficacy, and then relating the variables associated with the performance of the program under analysis. This study combines the relationship between the targets achieved and the targets planned by the CNJ (as a percentage) with the administrative metrics in the *Justice in Numbers* report on the State and Federal District Courts of Justice, in the period 2009 to 2016, organized in a panel, in order to estimate an equation offering a statistical representation of the relationship between those variables. In seeking to determine the relationship between a dependent variable and countless independent variables, the statistical technique used is multiple linear regression. This estimates a mathematical function that predicts the behavior of the dependent variable on the basis of the values of the independent variables.

3.1 Regression analysis

Multiple linear regression analysis is a multivariate statistical technique, used to examine the relationship between a dependent variable and a set of independent variables (Cunha & Coelho, 2014). The flexibility of the model means it can be applied in almost all dependency relationships. Its wide applicability has been exploited mainly in two major types of research problem: prediction and explanation. Prediction is about how far a statistical regression variable (one or more independent variables) can predict the behavior of the dependent variable. Explanation examines regression coefficients (their magnitude, sign and statistical significance) for each independent variable to develop a substantive or theoretical reason for the effects of the independent variables on the dependent variable (Hair, Black, Babin, Anderson & Tatham, 2009).

The linear combination of independent variables which, together, help to predict the dependent variable is called the equation or regression model. For this study, considering stacked data for each state i and for each of the years t between 2009 and 2016, it is represented as:

$$\widehat{efic}_{it} = a + b_1 gT_{it} + b_2 nS_{it} + b_3 pib_{it} \dots + b_n VI_{it} + \varepsilon_{it}$$

Where:

\widehat{efic}_{it} – is the dependent variable efficient for each individual i , in time t ;

gT_{it} ; nS_{it} ; pib_{it} and VI_{it} – are the independent variables (gT_{it} – total expenditure, nS_{it} – number of court officials, pib_{it} – gross domestic product and VI_{it} – independent variable; all observed for each individual i in time t);

a , b_1 , b_2 , b_3 , ..., b_n – are the regression coefficients;

ε_{it} – is the representation of the residual or regression error.

Term a is the intercept, or linear coefficient, representing where the straight line intercepts axis Y, in other words, where the values of the independent variables are equal to zero. The terms $b_1, b_2, b_3 \dots, b_n$ are the angular coefficients, which represent the gradient of the line, in other words, they measure the increase or reduction in the dependent variable for each unit increase or reduction in the independent variables. Each of these coefficients is estimated here using the Ordinary Least Squares method (OLS).

Independent variables

The scarcity of studies that assess the performance of the judicial authorities (Ng, 2011; Akutsu & Guimarães, 2012) makes it hard to establish and recognize patterns of variables which are closely connected to the efficacy of the Brazilian judiciary. The challenge has to do with the absence of defined and established indicators and variables that reveal the performance of the Brazilian courts. In response to this, Lemos (2009) argues that a consensus about appraisal should be based on indicators that help to represent public management aims. However, the scarcity of studies presents itself as an opportunity for this research to propose what the administrative metrics are and how they relate with efficacy. This study therefore used the stepwise command in the STATA® software, which specifies the significance level of the term which will be included in the model, excluding all terms which do not present the significance level established in the model, given that there were more than three hundred administrative variables. The independent variables are accordingly selected by the software, eliminating the subjective choice of variables for analysis. A significance level of ten per cent was therefore used in the command, in other words, a confidence interval of ninety per cent.

Data from the *Justice in Numbers* reports from 2009 to 2016 were accordingly analyzed using STATA® in order to estimate a statistical model representing the relationship between the dependent variable and the independent variables. By determining the correlation coefficient between these, this study may be able to point to those which directly affect the efficacy of the State and Federal District Courts of Justice, in order to increase the reliability of the planned model.

4. Findings and Discussion

The targets established by the CNJ assist the courts in their planning, making the CNJ an active agent in improving administrative practices in the judicial authorities. In setting these targets, the CNJ promotes a metric for assessing efficacy and measuring performance in the judicial authorities. The disclosure of these targets is in line with Judicial Governance practices, creating accountability as a means whereby this study set out to achieve its objective,

The data relate to all the Courts of Justice of second instance in the twenty-six States of the Union and of the Federal District Court of Justice, from 2009 to 2016, organized in a panel, making a total of 216 observations. The *Justice in Numbers* report published by CNJ presents data omissions in certain years, but this fact did not compromise analysis of the model, insofar as even with these occasional omissions, most of the data was usable in the study, as confirmed by the p-value presented by the explanatory variables and supported by the result provided by the stepwise command used.

In the preliminary findings, certain variables were not statistically significant, and so are not examined in the chapter on results, such as the dummy variables for geographical region from the Brazilian Institute of Geography and Statistics (IBGE), which show that geographical regions has no influence on the performance of Courts of Justice.

The data base consisted of more than three hundred variables provided and published by the CMJ in its *Justice in Numbers* report. With this quantity of data, different correlations between variables are expected, including a high rate of multicollinearity. This factor is perceived and eliminated by the stepwise command aligned with observation and consideration of the model's adjusted R^2 . These filters allowed the study to identify nineteen variables which explain the performance of the judicial authorities in relation to the State and Federal District Courts of Justice (Table 1).

Attainment of the targets set by CNJ stands at an average of 93.53 percent, showing that targets are not being achieved in full. In addition, the large variation between minimum (14.8 percent) and maximum (125.96 percent) values observed suggests that there is no standard level of performance in Brazilian second instance Courts of Justice, revealing another shortcoming of the CNJ in its mission to standardize processes within the judicial authorities.

The multiple linear regression statistical model revealed by processing of the research data is set out in Table 2, presenting the variables and the respective estimated coefficients, as well as the estimated standard error and statistical significance.

In relation to the coefficient of determination of the explanatory variables, also assuming the existence of multicollinearity and in order to reduce bias, R^2_{adjusted} was adopted as determining the relationship between the independent variables and the variable dependent. For this purpose, the estimated model offers a R^2_{adjusted} of 0.3968, i.e. 39.68 percent of the variations that occur in the efficacy of Brazilian Courts of Justice are explained by the independent variables identified by the regression model. As regard the statistical representativeness of the model, the equation is significant as a whole, at 1 percent significance.

TABLE 1. Descriptive statistics for variables

VARIABLE	MEDIUM	STANDARD DEVIATION	MIN	MAX
metascnj _{it}	93.53364	14.9241	14.8	125.96
LNpibpc _{it}	9.810684	0.5038736	8.707994	11.18274
magaj _{it}	509.9065	2601.484	0	18036
cn _{it}	673645.6	1100154	33903	5811195
tc _{it}	0.684782	0.1030908	0.3741379	0.8793322
scoreacp _{it}	2.22e+08	8.08e+08	-0.7018586	4.33e+09
LNreceitas _{it}	18.18627	2.640489	7.328437	22.5656
serv _{it}	6248.611	8481.54	677	46291
mage _{it}	574,662	651.6542	50	3563
LNdpe _{it}	20.1856	0.9740668	17.89283	22.77747
LNdpea _{it}	20.06237	0.9629269	17.86702	22.63238
LNdk _{it}	16.80534	1.476263	11.44637	20.30866
g1 _{it}	0.011584	0.0091298	0.0039192	0.0650649
cc _{it}	1336.455	2141.857	167	13354
LNdpjio _{it}	20.29121	0.9636777	18.0958	22,989
dm _{it}	0.6053861	0.2495568	0.0216231	1
i _{it}	0.2173056	0.1609495	0.0066715	0.8361876
tfault _{it}	1360.244	1884.047	0	10125
ts _{it}	9654.185	12446.05	985	69263
tpefet _{it}	5549.925	8177.158	521	44016

Source: Prepared by the authors

Note: **metascnj_{it}**: efficacy; **magaj_{it}**: number of judges removed; **LNpibpc_{it}**: Log of *per capita* GDP (Gross Domestic Product); **cn_{it}**: new cases; **tc_{it}**: case congestion rate; **scoreacp_{it}**: CNJ ranking score; **LNreceitas_{it}**: Log of total revenues; **serv_{it}**: total number of court officials; **mage_{it}**: total existing judge positions; **LNdpe_{it}**: Log of personnel expenditure and charges; **LNdk_{it}**: Log of capital expenses; **LNdpea_{it}**: Log of personnel expenses and charges for active employees; **g1_{it}**: total justice spending in relation to GDP; **cc_{it}**: total spending on direct appointments; **LNdpjio_{it}**: Log of total spending (except spending on non-active staff and works); **dm_{it}**: usable area in relation to total area (in square meters); **i_{it}**: charges collected over total justice spending; **tfault_{it}**: total auxiliary workforce: outsourced; **ts_{it}**: total court officials; **tpefet_{it}**: total permanent staff.

TABLE 2. Estimate of explanatory mathematical statistical model for performance in State and Federal District Courts of Justice

VARIABLE	ESTIMATED COEFFICIENT	ESTIMATED STANDARD ERROR	
magajit	-0.486749	(0.1738261) ***	
LNpibpcit	16.43155	(4.304308) ***	
cnit	0.0000221	(7.68e-06) ***	
tcit	41.76704	(15.75063) **	
scoreacpit	-1.41e-08	(6.81e-09) **	
LNreceitasit	13.23567	(4.630967) ***	
servit	0.0247422	(0.0052629) ***	
mageit	-0.0293443	(0.0114871) **	
LNdpeit	-25.82333	(14.17605) *	
LNdkit	3.352894	(1.333207) **	
LNdpeait	41.1165	(23.19094) *	
gjit	1064.11	(587.7789) *	
ccit	-0.0073203	(0.0021656) ***	
LNdpjioit	-45.16839	(21.32334) **	
dmit	-16.55873	(7.142684) **	
iit	-63.4754	(28.95786) **	
tfauxtit	0.0103896	(0.0027802) ***	
tsit	-0.0062615	(0.0024874) **	
tpfetit	-0.0147515	(0.0044626) ***	
constant	217.3309	(87.57651) **	
NUMBER OF OBS.	R²ADJUSTED	F(19,68)	PROB > F
216	0.3968	4.01	0.0000

Source: Prepared by the authors

Note: *, **, *** correspond to statistical significance at levels of 10 percent, 5 percent and 1 percent, respectively.

4.1 Negative relationship between administrative metrics and efficacy

As a general equation, the study indicates the relationship of the independent variables with efficacy in the Courts of Justice. We can see that the following have an inverse effect on attaining efficacy: (a) the number of judges removed, (b) the

score in the CNJ ranking, (c) the number of positions for judges, (d) personnel expenditure and charges, (e) the number of direct appointments, (f) total expenditure incurred, (g) usable area in relation to total area, (h) the relationship between charges and total justice expenditure (i) total staff numbers.

The high index for judges removed entails a larger workload for the judges actually working the system. This excessive workload jeopardizes the effective processing of cases within the Court of Justice, resulting in delays in judicial proceedings, and consequently in administrative processes, as the judge also acts as manager. The score in the CNJ ranking grades courts, so as to highlight those which are more effective within the CNJ parameters. The ranking of the Courts of Justice can generate complacency and inertia in relation to efforts to improve their status, as there is no direct reward associated with such a change. This means that a Court with a good score will do little to innovate to achieve improvements and better use of the resources provided to it.

Quantity is not the same as quality, as is shown by the relationship between the number of positions for judges and the efficacy achieved by the Courts of Justice. This inversion in the relationship is inconsistent with the research by Beer (2006) which found that the number of judges by number of inhabitants acts as a positive factor on performance in the judicial authorities. Accordingly, this author's finding does not apply to the reality of the Brazilian courts under study here. The same is true of personal expenditure and charges, pointing to an old problem in the public administrative authorities, largely with regard to the executive branch, but here visible in the judicial branch: an overblown public machine, weighed down by excessive expenditure, which ends up having a negative influence on the performance of the judicial authorities.

The existence of direct appointments opens the way for staff being contracted without concern for their technical skills or expertise. This factor was also identified in the study by Schneider (2005), which concluded that academic training is a crucial factor in judicial performance, corroborating the view that a management body with a high standard of academic training contributes to better management of resources. In addition, direct appointments open the door to staff being hired for political ends. In relation to the total expenses incurred, we again see the situation identified in the research by Rosales-López (2008), which showed that courts are able to increase their productivity using the same resources as currently available, endorsing that author's conclusion.

The relationship between usable area and the total area of courts addresses the relationship between comfort and output. A building which is not easy for staff to move around in has an adverse effect on the court's work, as also found by Ro-

sales-López (2008) in her study, in which the physical size of courts was a relevant factor in their performance.

As for the financial aspect, the quotient between charges received and justice spending is revealed to be a factor that disrupts efficacy. This relationship is found to be linear, and offers the perception that the more is charged and the more is spent on justice, the less justice (in terms of targets) is done.

Lastly, we look at staffing numbers. Stability in civil service staff undermines efficacy; this is a clear phenomenon, not observed in the private sector labor market, that results in professional lethargy that brings down performance. This scenario is not observed in the auxiliary labor force, in the case of staff outsourced by the judicial authorities, who contribute directly and positively to the attainment of targets, corroborating the findings of Rosales-López (2008) who concluded that additional staff support contributes positively to court performance.

4.2 Positive relationship between administrative metrics and efficacy

Of the various factors that assist the Courts of Justice in achieving their targets, we may point to the *per capita* GDP ratio, which helps to explain the direct relationship between wealth production and the performance of GDP, i.e. efficacy does not reach out to citizens in situations of social risk. Kahan (2006) corroborates this finding when he shows that companies are predisposed to locate in regions where the judicial authorities are more efficient, creating a vicious circle, where companies move to regions where judicial effectiveness is to be found. This boosts the *per capita* GDP in the area where the company has established itself and, as shown by the model, *per capita* GDP has a positive influence on efficacy, creating a vicious circle between wealth creation and judicial effectiveness. It may therefore be seen that the judiciary is more frequently observed to be effective in regions that produce more wealth. These findings are consistent with those of Beer (2006), who identified poverty as an explanatory variable for the performance of the judiciary.

In the economic and financial sphere, the positive relationship identified between revenues passed on, *per capita* GDP, capital expenditure, personnel expenditure and charges for court staff and total Court spending in relation to GDP demonstrates the relationship between financial resources and efficacy in the judicial authorities. Insofar as this public body does not collect taxes, it is dependent on funds passed on from other public sector bodies. Communication and alignment between the three branches is therefore highly important in the quest for integration, in order to ensure that public interest is observed as a fundamental priority. The relationship between financial resources and performance in the judicial authorities was also identified in the research by Beer (2006) and

Akutsu and Guimarães (2012), who identified poverty and the quantity of budget resources allocated as important factors.

As regards human resources, administrative action is taken by people, and so the total staffing numbers has a positive impact on the efficacy of the courts, together with the rate of auxiliary staff. This fact reveals the importance of human resources planning for the general staff, in order to achieve efficacy, by investing in training and selection of skilled individuals for each position. As observed, the number of judges, additional staffing support, the legal training of staff, and their academic qualifications were explanatory variables in the studies of Schneider (2005), Beer (2006), Ribeiro (2008), Rosales-López (2008) and Akutsu and Guimarães (2012). Attention may also be drawn to the study by Van Montfort, Jong, Herweijer and Marseille (2005) who found that the management capabilities of the court directly influence the time taken to decide cases, meaning that control of administrative activities in the judicial authorities is highly relevant to ensuring access to justice by citizens, in an effective manner.

4.3 The implications of the study

In relation to the strong points, this study entailed a comprehensive bibliographical review, which sought to survey related research assessing the performance of the judicial authorities. The existence and availability of the CNJ data base with plentiful information is a relevant factor that lends credibility to this study, as well as an exploratory character allowing us to point out and understanding specific characteristics of the public authorities in Brazil. By corroborating the studies surveyed in the bibliographical review and introducing new variables to academic study, this research helps to broaden our understanding of the performance of the judicial authorities in Brazil. Showing that these authorities face similar challenges and limitations to those in a broad range of countries, and in refuting some of the conclusions the study is strengthened by the understanding that the Brazilian judicial authorities present particular features in their administration that seek to ensure better performance.

The methodology used to assess performance is an important issue, insofar as most of the studies assessed are qualitative in character, meaning that a quantitative study offers a fresh perspective on the performance of the judiciary as well as conferring statistical credibility on the findings, supporting our conclusions. The points which should be noted concerning this study relate to the incompleteness of the CNJ report data in the early issues, although there are very extensive data and reports in the last two years analyzed (2015 and 2016).

The construction of an estimated model that shows the performance of the State and Federal District Courts of Justice in the light of administrative variables

helps to answer questions by showing which the explanatory variables are and how they affect the variable response (performance/efficacy), providing managers with information for taking decisions and establishing programs geared to the issues revealed by the estimated model, by means of the explanation supplied by the estimated regression coefficient. In addition, it is possible to anticipate a number of scenarios, insofar as the behavior of the dependent variable is subject to the variations in the independent variables, so as to predict the behavior of performance. Faced with these possibilities of prediction and resolution of issues, the design of a model helps to identify focal points for administrative measures, in order to mitigate delays in proceedings and ineffectiveness in the judicial authorities. Accordingly, the estimated model acts as a mechanism for optimization through the relationship between the explanatory variables, which have an impact on the attainment of the targets set by the CNJ, helping to make the judicial authorities more effective in performing one of their roles: to ensure fast justice.

In future research the process of assessing the performance of the judicial authorities should be extended to other courts, in order to discover whether the same explanatory variables are reproduced in the estimated models for each court. In addition, the monitoring and identification of administrative actions that have had positive effects on the performance of the judicial authorities should be analyzed from time to time from an administrative perspective, making comparisons with the findings in this study and identifying focal points and actions in order to develop and pursue improvements to the performance of the judicial authorities. There is still a vast field to be explored, and countless possibilities will present themselves as researchers delve deeper. Academics are merely scratching the surface when it comes to study of the performance of the judicial authorities.

5. Conclusions

Considering the reasonable duration of judicial proceedings in conjunction with the principle of efficiency in public administration, this study has sought to identify which factors contribute to achieving efficacy in the work of the judicial authorities. The use of planning and target-setting for the Brazilian judiciary helps to make it possible to measure the execution and dissemination of those data, allowing researchers to monitor judicial activities in the country.

The targets set out each year in the ENPJ provide parameters to be achieved, and metrics allowing actions to be measured and controlled, so as to detect anomalies which can be investigated. These anomalies become clear when it is possible to measure and predict behavior in the face of different possible scenarios. The estimated model accordingly helps in predicting those different scenarios, considering different variables. The multiple linear regression model allows us to arrive

at a statistical estimate which is representative and that corresponds to around 49 percent of variations in efficacy as regards attainment of the targets set by the CNJ.

In the pursuit of judicial governance, the court managers can make use of the findings from this research in order to plan and guide their administrative measures in order to improve the efficacy of their court. Implementation of control measures and administrative support for judges and staff in the administrative management of the court are important in order for the bodies responsible and the court managers to be aware of the dimension consisting of the relationship between a court with a competent administrative system and effectiveness in the legal proceedings submitted to that court.

Failure to take administrative measures undermines the enforceability of the constitutional guarantee of the reasonable duration of proceedings. A strategy is therefore needed for implementing an organizational culture of planning and management in Brazilian courts so that, on the basis of the targets set by the CNJ, actions and principally indicators can be established in the courts in order to provide for monitoring of the evolution of outcomes. It is therefore necessary to map key competencies and to seek to use these so as to obtain advantages in carrying through administrative processes, improving their efficacy.

In Brazil, judicial efficacy is linked to the production of wealth, which shows the great influence still exercised by the private sector on the public sector, pointing to a very close relationship between the power of capital and the power of the State. This analysis made it possible to demonstrate that the judicial authorities present characteristics similar to those of other State authorities and that, in the judicial authorities, these similarities also represent poor management of the public apparatus.

It must be observed that the resources that exist and are used will always be scarce from an economic point of view. However, steps must be taken to apply these resources effectively, and this must extend to all and any structure in the public administrative authorities. These measures reflect the guidelines for today's public administrative authorities, which seek to do more whilst using less resources, and where economy and/or rational use of resources is conceived as a part of the State's intrinsic accountability.

The findings suggest that observation, by management in the judicial authorities, of issues such as the total number of auxiliary staff (outsourced) and the total number of staff may increase effectiveness in the State and Federal District Courts of Justice, irrespective of the IBGE region. Accordingly, as the body responsible for improving the work of the Brazilian judicial system, the CNJ should develop administrative policies to consolidate judicial governance.

The executive branch should provide tax breaks for the location of companies in less privileged areas, in order to break the vicious circle related to judicial efficacy and the production of wealth, democratizing access to justice in Brazil. The legislative authorities should approve a budget for the judicial branch that contributes to its improved effectiveness, insofar as revenue presents a positive relationship with efficacy, and the judicial authorities do not themselves generate revenues.

By proposing and estimating a model to pursue efficacy, this research provides pointers for future action by the CNJ and Court managers. This action must provide the resources for better management and reducing the gaps in administrative action within the judicial authorities, so as to improve the performance of courts and allow citizens to enjoy their constitutional right to celerity in judicial proceedings.

