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Law and Economics and the Choice of Judges: constitutional incentives for disrespecting the remuneration ceiling

Análise Econômica do Direito e a Escolha dos Juízes: incentivos constitucionais para o desrespeito ao teto remuneratório

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RESUMO

O presente artigo analisa as regras constitucionais pertinentes à remuneração dos juízes brasileiros. O trabalho busca investigar as razões que conduziram à criação de verbas adicionais – com destaque para o auxílio moradia – descaracterizando a previsão constitucional de pagamento por meio de subsídio em parcela única. Neste sentido, uma breve revisão da teoria dos contratos será efetuada, especialmente no que tange às relações de trabalho. Proposições relativas à teoria do agente-principal e da função de utilidade dos magistrados são levadas em consideração. Tais conceitos estão formalizados em um problema teórico de controle ótimo, o qual indica os incentivos concedidos pelas previsões da Constituição que resultaram no congelamento dos subsídios e na instituição de verbas adicionais. Por fim, os resultados obtidos conduzem a sugestões de alterações normativas buscando evitar tais consequências indesejadas.

Palavras-chave: análise econômica do direito constitucional; contratos; agente-principal; remuneração dos juízes.

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ABSTRACT

This paper studies the constitutional rules regarding the remuneration of Brazilian judges. The work aims to investigate the reasons that led to the establishment of remuneratory perks – the most infamous being the housing aid – disregarding the provision of the lump sum compensation pay defined in the constitution. In order to do so, a brief revision on contract theory is presented, especially pertaining to labor relations. Propositions related to principal-agent theory and the utility function of magistrates are considered. These remarks are rendered in an optimum control theoretical model, which indicate the incentives given by the constitutional provisions that eventually resulted in the freezing of the compensation and the institution of additional pays. Finally, the results obtained through the model conduct to policy recommendations intending to avoid the undesired consequences.

Keywords: constitutional law and economics; contracts; principal-agent; remuneration of judges.

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1. Introduction

The role played by institutions³ and its transformations on the development of nations have gained great recognition in the economic science in the past decades (NORTH, 1992). Amongst the most relevant institutional features of modern societies, the constitutions stand out as one of – if not – the most impacting set of formal rules pertaining to both explain and influence individual and collective decision. Therefore, the legal commandments affect the economic and social results of any given country.

Aiming to assess which channels may take legal institutions to positively or negatively influence economic growth, Law and Economics has emerged as a pertinent field of study in the matter (COOTER and ULSEN, 2012). Inside this field of work, however, there are yet only a few studies on the impact of specific constitutional arrangements on public services and general welfare (WEIGEL, 2006).

As stated by Cooter (2000), it is important to note that constitutions, located at the highest hierarchy of legal rules, tend to be more generic and harder to change. Hence, amendments usually lead to several debates regarding different areas of science – for instance, law, history, philosophy, politics, sociology and economics – as they may produce profound impacts in the society. Consequently, it becomes crucial to comprehend how constitutional rules and proposed alterations can potentially affect the general welfare.

Brazilian constitution, albeit theoretically classified as rigid, presented several alterations since its proclamation in 1988 (BARROSO, 2009). As it contains detailed rules pertaining to specific subjects, alterations in society tend to demand constitutional reforms in order to approximate the general needs and desires from the formal prescriptions of the legal system.

When analyzing the constitutional reforms, arguably the most relevant in regard to administrative rules and civil service is the amendment 19 of 1998 (BRASIL, 2013, pp. 198-208). Among several relevant rules introduced by this act, we can highlight the provision of paragraph 4 in article 39 (BRASIL, 2013, p. 37), which fixated that judges, prosecutors, and all members of the governmental highest branches (president, governors, and mayors) ought to be paid *exclusively through lump sum compensation*, explicitly prohibiting additional perks, bonuses, or any other type of pays. Such compensation can only be stipulated and altered through specific law. Additionally, article 37, item XI (BRASIL, 2013, p. 35), states that no civil servant in the country can earn wages higher than the compensation paid to Supreme Court members⁴.

Such provisions intend to give transparency to the remuneration of civil servants at top hierarch positions, as well as to avoid unilateral definition of wages by the beneficiaries themselves. However, the formal rules were not enough to avoid the creation of different perks through infra-legal norms, disregarding the explicit commandments of Brazilian constitution.

The majority of the additional pays take the form of indemnities, given that paragraph 11 of article 37 exclude such pays from the remuneration ceiling provisioned in the same article. Nonetheless, not only many of these pays were created by normative acts other than laws, but some are self-denominated indemnities although their nature is clearly remuneratory.

³ The definition of institution follows the proposition made by North (1991, p. 97): Institutions are the humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights).

⁴ Amendment 41 (Brasil, 2013, pp. 253-258) later stipulated lower state and local limits.

Currently in Brazil the most infamous example of such practice is the *housing aid* for members of the judiciary branch. In September 2014, Supreme Court judge Luiz Fux proclaimed three monocratic decisions guaranteeing a monthly pay of approximately US\$ 1,300 for every judge and prosecutor in the country to allegedly compensate their expenses with housing. Nevertheless, no proof of actual expenditure with rent or similar costs is demanded from the beneficiaries. Therefore, such perks represent in fact an increase in the monthly income of judges.

Apart from legal questions, the matter also produces fiscal impacts. Considering the expenditure of federal and state governments, US\$ 1,53 billion were allocated for the payment of the *housing aid* from 2014 until the year 2017, according to estimations⁵.

Given the previous facts, the current study aims to analyze the indicated form to establish the remuneration of judges in Brazil, as well as what may have avoided the implementation of current rules. To do so, we will present a brief review of the work developed by Ricketts (1986) on labor contracts theory, considering the propositions made by Posner (1993). Later, a theoretical model on the decision-making variables that led to the institution of the *housing aid* will be introduced. The model leads to the concluding section where we will propose modifications that could contribute to avoid the undesired incentives currently observed in Brazil.

2. Contract Theory And Remuneration Of Judges

The current segment will briefly explore what economic theory suggests as the indicated way to fix the remuneration of Brazilian judges. In order to do so, the adaptation of contract theory based on principle-agent relation presented in Ricketts (1986) will be utilized. Those insights will be combined with ideas proposed by Posner (1993), especially regarding to the utility function of judges.

Ricketts (1986) proposes a different use for the Edgeworth Box – originally used in general equilibrium analyses – to demonstrate how risk susceptibility by the agents and principals influences the design of optimum risk sharing contracts.

Principal-agent problems are characterized by presenting agents with utility functions negatively affected by the level of effort implemented. Considering that working relations are constituted of an employer (principal) offering a contract for an employee (agent) to act on the behalf of the later, the author proposes that this approach can be applied when studying labor contracts.

In order to utilize these propositions for the case of judges, we will accept the ideas presented in Posner (1993). In this study, the author advocates a change of paradigm regarding the idea that magistrates would not respond to incentives. Conversely, although the product of their job holds peculiar characteristics, the work concludes that the utility function of judges is similar to those of any other individual. This means, among other features, that the function will be positively affected by pecuniary retributions and leisure, as well as negatively influenced by the effort and number of hours of work⁶.

⁵ <http://www1.folha.uol.com.br/internacional/en/brazil/2018/03/1960692-lava-jato-judges-do-not-follow-strike.shtml>, visited in 28th of March, 2018.

⁶ Additionally, Posner (1993, pp. 20-21) proposes other variables relating to reputation, popularity, and avoiding reversal in superior courts.

In the words of Posner (1993, p. 25):

Rational judges pursue instrumental and consumption goals of the same general kind and in the same general way that private persons do. There is no mystery as to what they maximize. They maximize a utility function whose principal components are readily observable in the behavior of such familiar participants in the social enterprise as nonprofit firms, voters, and theatergoers.

Pertaining to the form of the pecuniary retribution, Posner (1993) indicates that it would be treacherous to offer a pay for judges according to the number of sentences produced. That would happen once the result of the work of judges cannot be quantified by the number of judicial decisions themselves, but needs to be qualified on the basis of the overall *justice* resulted from the decisions. Therefore, these incentives could harm the final product handed to the principal (society).

Through analogy, Posner (1993, pp. 5-9) compares the service provided by magistrates to public services which are better executed by non-profit organizations. When the output of an assignment is of great interest for the society, but the product itself cannot be promptly evaluated, it becomes necessary not to produce incentives which could lead a provider to relegate quality in exchange for quantity. In the case of judiciary, a big number of *unjust* sentences can represent the same – or even a worse – result for the society than no decisions.

Posner (1993, p. 8) recognizes that offering the same payment for judges disregarding the level of production makes them less likely to work harder than their peers, but that should not be necessarily a problem. Once leisure time can be regarded as a form of remuneration, it enables competent individuals to be attracted to judging careers at comparably lower wages than equally competent lawyers would demand.

Following the analytical method proposed by Ricketts (1986), the society – principal – must offer a contract for the judges – agents – so that the later would act on the interest of the former. Hence, the form of monetary compensation should induce the judges to produce *fair* decisions. On the other hand, in order to guarantee a reasonable efficiency, different forms of control can be used. These can be *ex ante* – such as pre-hiring screening – or *ex post* procedures – the disclosure of statics on sentences delivered, for instance.

That would also enable the judging careers to attract risk averse individuals, a desirable quality for magistrates. Considering the reasonable proposition that the society is also risk averse pertaining to justice production, it falls in the situation depicted by Ricketts (1986, pp. 237-238). When both principal and agent are risk averse, there is no possible contract that will share risks efficiently. In other words, the solution will never be first-best.

Therefore, the second-best solution of offering a contract that does not induce the agent to implement maximum effort may, nevertheless, be the efficient solution to the problem, given the circumstances aforementioned. In that case, the society would present the judges with a contract provisioning fixed compensation as salary, even if that could induce some level of shirking. Once the quality of the final product cannot be properly evaluated, giving incentives to increase the quantity of sentences would lead to less desirable decisions, a risk the principal is not willing to take.

Based on the ideas presented in the current segment, it is possible to conclude that the prescription made by Brazilian constitution regarding paying judges through lump sum compensation is in accordance with theoretical propositions on the matter. However, the legal provisions failed to deliver the expected results. The next section intends to propose a theoretical

indication of some reasons within the rules themselves which may have led to the observed consequences.

3. Economic Model For The Choice Of Judges

Following the ideas presented in the former segment, the current section intends to investigate the institutional reasons that led to the disrespect of Brazilian constitutional rules regarding the remuneration of judges and equivalent civil servants.

The proposed optimum control model is based upon the premise that judges act in a similar way as any economic agent: they maximize their expected utility in regard to the budgetary constraints. However, only the monetary aspects will be considered. We assume that this simplification will not impair the results, at the same time as it allows for clearer insights on the subject.

Another implicit idea of the model is that judges have power to influence on the value and characteristics of their own wages. This fact can be seen in Brazil, as judges and prosecutors recently performed a one day strike to defend their right to receive extra monthly perks – especially the aforementioned *housing aid* – which are regarded as privileges by the general society and are currently being criticized by the media⁷.

Therefore, the utility function of the judges would be as follows:

$$u[s(t), i(t), v(t, s(t)), t] = s + \theta i + (1 - \theta)v$$

In which $u(\cdot)$ is the *von Neumann-Morgenstern* utility of the judge twice continually differentiable; $s(t)$ indicates the amount received as compensation; $i(t)$ is the *indemnities* additional pays; θ represents the *institutional turbulence* variable as perceived by the judges; $v[t, s(t)]$ is the average earnings of the other civil servants.

This calls for the first proposed definition:

Definition 1. $\theta \in (0,1)$, where values close to 0 indicate that judges recognize the regular functioning of institutions and those close to 1 mean institutional turbulence that can be capitalized by judges.

Given the constitutional rules regarding remuneration in Brazilian civil service, the following definition can be made.

Definition 2. The average earning of other careers in civil services $v[t, s(t)]$ varies according to $\partial v(\cdot) / \partial t = f(s) + f(t)$.

⁷ <http://www1.folha.uol.com.br/internacional/en/brazil/2018/03/1960874-brazilian-judges-claim-their-strike-was-not-solely-about-housing-benefits.shtml>, visited in 27th of March, 2018.

This leads to the subsequent definitions:

Definition 3. Once $s(t)$ also represents the remuneratory ceiling for civil servants of all governmental careers, it must be true that $v[t, s(t)] \leq s(t), \forall t$.

Definition 4. Considering definition 2 and the fact that some civil servants have their wages limited at $s(t)$, increases in the compensation paid to judges automatically raises the wages of high level civil servants, but at decreasing rates. So in definition 2 we also have $f'(s) > 0, f''(s) < 0, \forall t$.

Definition 5. There is no restriction for $f'(t)$ in $\partial v(\cdot) / \partial t$, once other careers in civil service could receive extra salary increases, additional pays, and perks which are prohibited for judges, or $v(\cdot)$ could lose value in time if inflation is higher than replacement rates.

Gathering the definitions aforementioned, the problem of the judges is presented as follows:

$$\max_{s^*, i^*} \int_0^{\infty} [s + \theta i + (1 - \theta)v] e^{-\delta t} dt \tag{1}$$

$$\text{subject to: } s + i + v = b(t); v' = f(s) + f(t) \tag{2}$$

$$\text{and: } s, \dot{s}, i, v, \delta \geq 0 \forall t; s(0) = s_0; v(0) = v_0; i(0) = 0$$

Considering $t = 0, 1, \dots, T$; δ as an intertemporal discount rate; $b(t)$ as the available governmental budget used to pay civil servants; and $b(t) = B \forall t$, in order to simplify the analysis.

This implies that the problem faced by judges would be choosing the monetary amount of their wages, divided between compensation and indemnities, constrained by the governmental fiscal budget channeled to civil service wages.

A pair of propositions is already possible:

Proposition 1. If $\theta = 0$, the judges do not extract utility from proposing indemnities as part of their monthly salary.

Proof. The demonstration is straightforward. If $\theta = 0, \partial u(\cdot) / \partial i = 0, \forall i, t$.

Proposition 2. Judges do not reduce their utility from increases in the wages of other civil servants. In other words, there is no *envy* on the behalf of the judges in relation to monetary gains for other careers in civil service.

Proof. Once again, the proof is simple and direct. It stands that $\partial u(\cdot) / \partial v \geq 0, \forall v, \theta, t$.

From proposition 1, it is possible to suppose that a society with functioning democratic institutions would use means to avert such proposals, possibly exposing the judges to some level of public embarrassment that would offset the monetary gains represented by the perks.

In regard to the second proposition, it shows that the decisions on the remuneratory patterns of the judges do not benefit from reducing the salaries of other careers. On the contrary, if the unrealistic absolute institutional chaos represented by $\theta = 1$ is disregarded, the higher the

wages of those around them, the higher the resulting utility for the judges. Even if $\theta=1$, there will be no direct gains from reductions in the earnings of other civil servants.

Now, in order to investigate further implications of the model, let us simplify the initial problem.

Firstly, we isolate i in (2):

$$i = B - s - v \tag{3}$$

Then, substituting (3) in (1) leaves the problem with only one control variable,

$$\max_{s^*} \int_0^{\infty} [s + \theta(B - s - v) + (1 - \theta)v] e^{-\delta t} dt \tag{4}$$

Isolating each variable and considering the temporal limit $t \in (0, T)$ the problem is left with only one control variable and is no longer subject to the budgetary constraint.

$$\max_{s^*} \int_0^T [(1 - \theta)s + (1 - 2\theta)v + \theta B] e^{-\delta t} dt \tag{5}$$

$$\text{subject to: } \dot{v} = f(s) + f(t); f'(s) > 0, \forall t \tag{6}$$

$$\text{and: } s, v, \dot{p} \geq 0 \forall t; s(0) = s_0; v(0) = v_0$$

It is possible to evaluate the necessary conditions in order to achieve a stable solution, for which would be required that $s' = 0$ e $v' = 0$.

Initially, let us define the *hamiltonian* function:

$$\mathfrak{H} = [z + \theta(B - z - v) + (1 - \theta)v] e^{-\delta t} + \lambda [f(z) + f(t)] \tag{7}$$

Reallocating the terms in (7), we can write:

$$\mathcal{H} = [(1 - \theta)s + (1 - 2\theta)v + \theta B] e^{-\delta t} + \lambda [f(s) + f(t)] \tag{8}$$

The first order conditions are as follows:

$$\frac{\partial \mathcal{H}}{\partial s} = 0 \therefore (1 - \theta)e^{-\delta t} + \lambda f'(s) = 0 \tag{9}$$

$$-\frac{\partial \mathcal{H}}{\partial v} = \dot{\lambda} \therefore (2\theta - 1)e^{-\delta t} = \dot{\lambda} \tag{10}$$

$$\frac{\partial \mathcal{H}}{\partial \lambda} = \dot{v} \therefore f(s) + f(t) = \dot{v} \tag{11}$$

The first order conditions indicate the next proposition.

Proposition 3. In order to get $v' = 0$, it is necessary that

$$f(s) = -f(t), \quad (12)$$

which means that the wages in civil service will only be in equilibrium if the impact of the *cascade effect* on higher salaries (resulting from increases in remuneration ceiling) is offset by other reductions.

Proof. From (11), $v' = 0$ implies $f(s) + f(t) = 0$, or $f(s) = -f(t)$.

Intending to verify the conditions for stability in the compensation of judges, we need to find an equation for s' . isolating h in (9) results as follows:

$$\lambda = \frac{(\theta - 1)e^{-\delta t}}{f'(s)} \quad (13)$$

Differentiating (13) in relation to t , lead to

$$\dot{\lambda} = \frac{-\delta(\theta - 1)e^{-\delta t}}{f'(s)} + \frac{(\theta - 1)e^{-\delta t}}{f''(s)\dot{s}}$$

which can be written as

$$\dot{\lambda} = \left(\frac{-\delta}{f'(s)} + \frac{1}{f''(s)\dot{s}} \right) (\theta - 1)e^{-\delta t} \quad (14)$$

Now, (10) = (14) returns the next relation:

$$(2\theta - 1)e^{-\delta t} = \left(\frac{-\delta}{f'(s)} + \frac{1}{f''(s)\dot{s}} \right) (\theta - 1)e^{-\delta t} \quad (15)$$

Multiplying both sides of the equality in (15) by $[(\theta - 1)e^{-\delta t}]^{-1}$ results in the following:

$$\frac{(2\theta - 1)}{(\theta - 1)} = \frac{-\delta}{f'(s)} + \frac{1}{f''(s)\dot{s}}$$

Isolating \dot{s} makes it possible to write

$$\dot{s} = \left[\frac{(2\theta - 1)}{(\theta - 1)} + \frac{\delta}{f'(s)} \right]^{-1} \frac{1}{f''(s)} \quad (16)$$

Based on (16), we can see the term in parenthesis *and/or* $f''(s)$ need to equal zero in order to find $\dot{s} = 0$. Given that $f''(s) < 0$ in respect to definition 4, this will happen *if and only if*

$$\frac{(2\theta - 1)}{(\theta - 1)} = \frac{-\delta}{f'(s)} \quad (17)$$

Rearranging the terms leads to the following:

$$f'(s) = \frac{\delta(1 - \theta)}{(2\theta - 1)} \quad (18)$$

Also from definition 4, it is known that $f''(s) > 0$. Considering that $\delta \geq 0$ from (2), the following must hold true:

$$\frac{f'(s)}{\delta} = \frac{(1 - \theta)}{(2\theta - 1)} > 0, 0 \leq \theta \leq 1 \quad (19)$$

It will be shown that the inequality can only hold in the interval $0,5 < \theta < 1$, if we take in consideration that $\theta \in (0,1)$ from definition 1. That leads to the final two propositions.

Proposition 4. If institutions are functioning at a *reasonable* rate, there is no stable solution for the problem, given that whenever $0 < \theta < 0,5$, $f''(s) < 0$, which disrespects definition 4.

Proposition 5. As institutional turmoil surpasses certain level (represented by the middle point $\theta = 0,5$), it is possible that judges will opt for the equilibrium solution $s^*(t) = s_0$ and $v^*(t) = v_0$, as the conditions required for $\dot{s} = 0$ and $\dot{v} = 0$ become possible.

Proof. In order to have $a/b > 0$, we need $a, b > 0$ or $a, b < 0$. Now considering $a = 1 - \theta$ and $b = 2\theta - 1$, it becomes easy to see that $a = 1 - \theta > 0$ only if $\theta < 1$, and $b = 2\theta - 1 > 0$ when $\theta > 1/2$. As $a = 1 - \theta < 0$ needs $\theta > 1$, which disrespects the definition $\theta \in (0,1)$, $a/b > 0$ will only hold true when $a, b > 0$. That will happen *if and only if* $0,5 < \theta < 1$, proofing both propositions.

From proposition 4, we can observe that, when institutions are perceived as regularly effective by the judges, there is no definition of their wages that can lead to a stable solution for the problem. Therefore, increases in the compensation or indemnities would have to be negotiated with the other governmental branches, as the constitution requires that such modifications must be made by law.

Conversely, proposition 5 indicates that institutional turbulence can give incentives for judges to avoid increases in their compensation, opting to introduce perks that will not be received by other civil servants. That can be explained as a means to avoid rises in the salaries of other high hierarch civil service careers that were limited by the constitutional ceiling, granting a bigger proportion of the governmental budget for the judiciary.

The model indicates that the solution seen in proposition 5 do not derive from a willingness to reduce the wages from other careers, as such an action would have a negative impact

in the expected utility of the judges as well. The fact that any raise in the judicial compensation will be automatically granted to other careers, presented in the model through definitions 2 and 4, seems to be the decisive component leading to the creation of the additional pays received by judges in Brazil.

4. Concluding Remarks

Law and Economics presents itself as a relevant scientific subject in order to study the ways by which the legal features of a given society influence individual actions. Therefore, this field is of great value whilst investigating the causes that makes formal rules lead to unexpected – and, on many occasions, undesired – results.

With that in mind, the current work intended to present an analytical model which proposedly indicates how Brazilian constitutional features encouraged judges to stipulate an extra monthly pay in order to circumvent the remuneratory ceiling established by the law. The model provided the following insights:

- a. the constitutional provision of a lump sum compensation as the only salary for judges was not enough to avoid the creation of other pecuniary pays;
- b. the designation of a remuneration ceiling for civil servants defined as the compensation paid for Supreme Court judges allows for automatic raises to other high level civil service careers;
- c. given that institutions are perceived as reasonably working, there are lesser incentives for judges to propose the creation of extra perks in their wages;
- d. once a certain level of institutional turmoil is overtaken, the constitutional rules give greater incentives for judges to freeze their compensation and opt to receive other perks;
- e. this last result do not depend on *envy* or *jealousy*; on the contrary, it is expected even considering that increases in the wages of other careers positively impact the utility of judges.

The results projected by the model appear to be consistent with the events observed in Brazil in the past few years. Whilst from 2014 the country was facing arguably the most severe recession of its recorded history and the president was fighting an *impeachment* process, Supreme Court judges have not proposed raises in their compensations since then. Nevertheless, that same year marked the decisions which granted every judge in Brazil an extra monthly perk – a *housing allowance* worth more than four times the minimum wage practiced in the country.

Therefore, it becomes extremely relevant to discuss legal alternatives which should modify the current set of incentives given by the constitutional rules pertaining to the subject. The authors suggest that the designation of specific monetary ceilings for different civil service careers should be a necessary first step in that direction. Such measure would modify definition 2 and eliminate definition 4, completely altering the results obtained through the model.

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